

Australian HIV Surveillance Report

National Centre in HIV Epidemiology and Clinical Research

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Monitoring occupational exposure to blood borne viruses in health care workers in Australia

By the end of 1997, ninety five cases of HIV infection among health care workers following a specific occupational exposure to blood or body fluids had been documented globally, including five cases in Australia (PHLS 1998). The risk of HIV transmission following a single percutaneous exposure to HIV was estimated as 0.32% (95% confidence interval 0.18%, 0.45%) whereas the risk of HIV transmission following mucocutaneous exposure was estimated to be 0.03% (95% confidence interval 0.006%, 0.19%)(PHLS 1998). The estimated risk of hepatitis C transmission was substantially higher than the risk of HIV transmission following percutaneous exposure to infected blood; in cases where the source patient had detectable hepatitis C viraemia, the risk of transmission was 6.1% (95% confidence interval 2.2%, 10.0%) (Dore *et al* 1997).

National monitoring of occupational exposure to HIV, hepatitis B and hepatitis C infection among health care workers commenced in Australia in 1995. The first results from the national monitoring programme, on cases of occupational exposure reported in the six months July to December 1995, were published in 1996 (MacDonald 1996). Here we provide an update on cases of occupational exposure to HIV, hepatitis B and hepatitis C, reported by the end of 1997. Detailed information on cases of occupational exposure to blood borne viruses reported in 1995 – 1997 is available in *HIV/AIDS and related diseases in Australia Annual Surveillance Report 1998* (NCHECR 1998).

continued on page 3...

IN THIS ISSUE

■ Special Report

Monitoring occupational exposure to blood borne viruses in health care workers in Australia

■ Announcements

■ Contents and List of Tables page 26

■ Regular Reports

National AIDS Registry

National HIV Database

Sentinel HIV surveillance in sexual health clinics

■ Report from WHO Western Pacific Region

The National Centre is funded by the Commonwealth Department of Health and Aged Care through the Australian National Council on AIDS and Related Diseases (ANCARD), and is affiliated with the Faculty of Medicine, University of New South Wales

ANNOUNCEMENTS

National meetings

The 2nd Australasian Conference on Hepatitis C: HCV – The Evolving Epidemic, will be held in Christchurch, New Zealand, on 17 – 19 August 1999.

Further information may be obtained through the Conference Secretariat, PO Box 1370 Christchurch, New Zealand.

Telephone: 64 3 379 0390

Facsimile: 64 3 379 0460

E-mail: cindy@conference.co.nz

Website: www.cae.canterbury.ac.nz/hcv/hcv99.htm

The 11th Annual Conference of the Australasian Society for HIV Medicine will be held in Perth, Western Australia, on 2 – 5 December 1999.

Further information may be obtained from Dr Martyn French, Department of Clinical Immunology, Royal Perth Hospital, GPO Box X2213, Perth WA 6001.

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International meeting

The 5th International Congress on AIDS in Asia and the Pacific will be held in Kuala Lumpur, Malaysia, on 23 – 27 October 1999.

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... continued from page 1

A network of hospitals report routinely collected information on cases of occupational exposure to blood and body fluids in their health care workers to State/Territory and national coordinators biannually. Reporting sites contribute information either from existing records or from a database that was developed specifically for use in the project. Participation in the project is voluntary.

Information is collected on the type of occupational exposure to HIV, hepatitis B or hepatitis C (whether percutaneous or non-percutaneous) and the HIV, hepatitis B and hepatitis C infection status of the blood or body fluid of the source patient and the health care worker at the time of the exposure. The health care worker's use of prophylaxis against infection is reported as is their infection status with respect to the three viruses at three months after the occupational exposure. Information is also sought on the number of beds occupied and the number of full time equivalent (FTE) staff employed in each hospital.

Only cases reported as possible or definite exposures to blood and body fluids have been included in the analysis. Exposures reported as not contaminated with blood or body fluid, exposures occurring prior to use of the device and exposures to fluids other than blood or body fluids have been excluded from the analysis. To facilitate comparison between institutions, the occupational exposure rate was calculated by dividing the reported number of exposures by the number of hospital beds occupied per day and also by the number of full time equivalent staff employed.

Hospitals participating in the national monitoring programme included large teaching hospitals and smaller district/community hospitals. Information on the characteristics of occupational exposures to blood or body fluids was received from 13 sites for the reporting period 1 July to 31 December 1995, 27 sites in 1996 and 56 sites in 1997 (Table 1.1). One reporting site did not provide in-patients beds in 1995 and 1996 and was excluded from the calculation of the rate of occupational exposure per 100 daily occupied beds for those years. The average daily bed occupancy for reporting sites was 303 in 1995, 237 in 1996 and 253 in 1997.

Table 1.1
Number of hospitals participating in monitoring occupational exposure to blood and body fluids among health care workers by year and hospital characteristics

Hospital	Number of participating hospitals		Average daily occupied beds 1997	Average FTE staff 1997
	1996	1997		
Major teaching	6	17	545	2,473
Base/referral	7	9	194	692
District/community	6	17	96	317
Private	8	13	119	311
Total	27	56	253	1,063

The total number of occupational exposures reported in 1995 was 532 (434 (82%) percutaneous), 1,572 exposures in 1996 (1,283 (82%) percutaneous) and 3,092 exposures (2,565 (83%) percutaneous) in 1997. The rate of occupational exposure to blood or body fluids in health care workers gradually declined from around 29 exposures per 100 daily-occupied beds in 1995 to approximately 22 in 1997 (Table 1.2).

Table 1.2

Rate of occupational exposure to blood or body fluids among health care workers per 100 daily occupied beds by year and type of exposure

Type of exposure	1995 ¹ Exposures/100 daily occupied beds	1996 Exposures/100 daily occupied beds	1997 Exposures/100 daily occupied beds
Percutaneous	23.8	20.8	18.1
<i>Hollow bore needles</i>	14.2	12.9	10.6
<i>Other percutaneous</i>	9.6	7.9	7.5
Non-percutaneous	5.4	4.7	3.7
Total	29.2	25.5	21.8

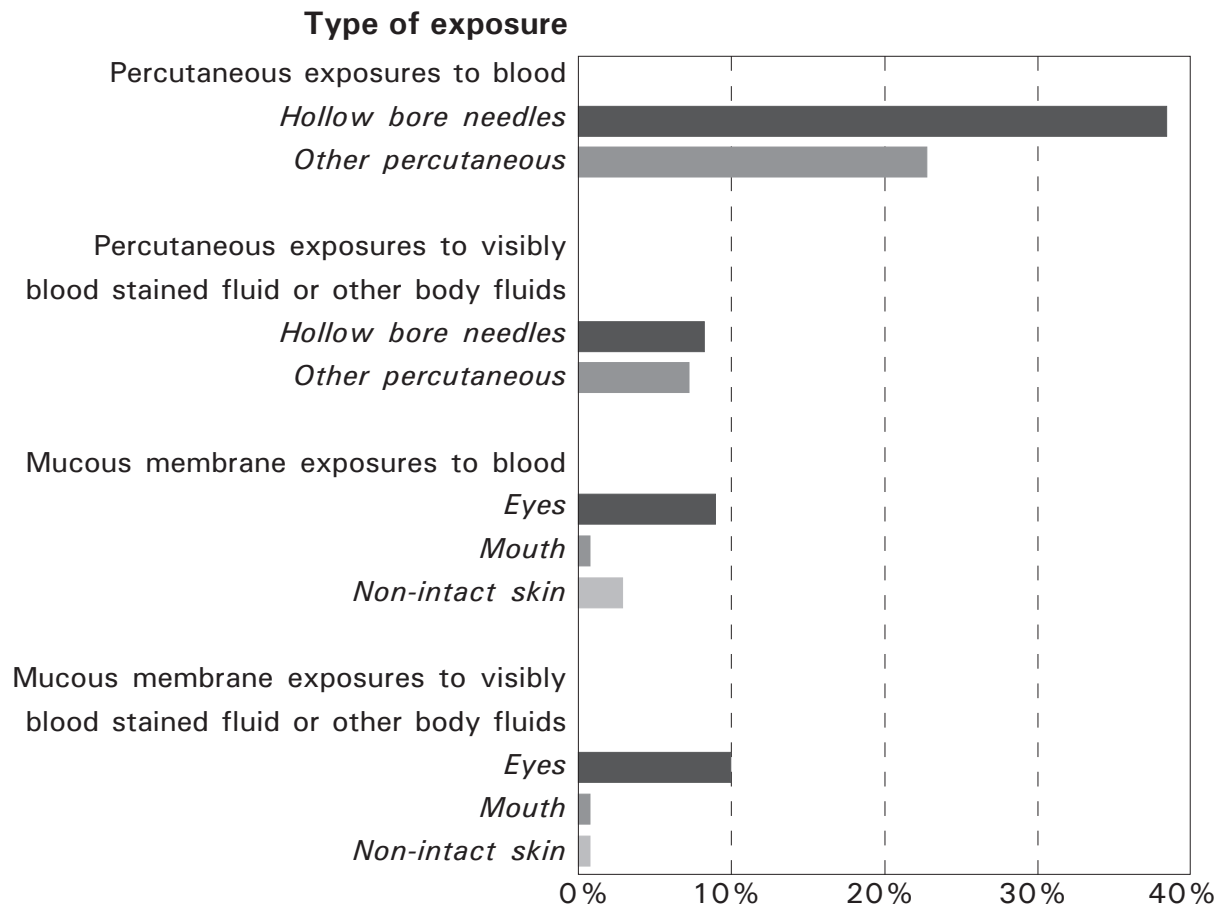
1. Rate of exposure per 100 daily occupied beds over 12 months.

In 1997 the most frequently reported occupational exposures were hollow bore (38%) and other percutaneous (22%) exposures to blood, and splash exposures to the eye (19%) (Figure 1.1). Syringe needles, including disposable syringes and needles, pre-filled syringes, unattached needles and blood gas syringes, were the most frequently reported device involved in percutaneous exposures in 1995 (40%), 1996 (45%) and 1997 (47%). In approximately one quarter of the percutaneous exposures in all reporting periods, the device causing the injury was used for intravenous or intra-arterial access.

The source patient was tested for HIV, hepatitis C and hepatitis B infection in approximately one third, one half and two thirds of exposures in 1995, 1996 and 1997, respectively. Prevalence of HIV antibody was 5%, 3% and 2%, prevalence of hepatitis C antibody was 12%, 5% and 5% and prevalence of hepatitis B surface antigen was 4%, 3%, and 2% in 1995, 1996 and 1997, respectively, among source patients tested following health care worker exposure to blood and body fluids. No cases of occupationally acquired HIV, hepatitis B or hepatitis C infection were reported among health care workers exposed to a source patient either known to have infection or whose infection status was unknown. However, test results three months after exposure for which source serology was positive or unknown were available for only 30% and 37% of health care workers exposed in 1996 and 1997, respectively.

Figure 1.1

Occupational exposures reported in 1997 (n = 3,092) among health care workers by type of exposure and body fluid



Post exposure prophylaxis for HIV infection was prescribed for 1% of occupational exposures in 1996 and 1997, and for 36% and 27% of exposures, respectively, in cases where the source patient had been diagnosed with AIDS. Protease inhibitors were more likely to be prescribed in 1997 (43%) than in 1996 (7%).

References

Dore GJ, Kaldor JM and McCaughan GW. Systematic review of role of polymerase chain reaction in defining infectiousness among people infected with hepatitis C virus. *British Medical Journal* 1997; 315: 333 – 337

National Centre in HIV Epidemiology and Clinical Research (editor). *HIV/AIDS and related diseases in Australia Annual Surveillance Report 1998*. National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, Sydney, 1998. Internet address: <http://www.med.unsw.edu.au/nchechr>

MacDonald M on behalf of the participating sites. National surveillance for occupational exposure to blood borne viruses in health care workers. *Australian HIV Surveillance Report* 1996; 12: 2(2): 1 – 5

Public Health Laboratory Service (PHLS) AIDS and STD Centre, Communicable Disease Surveillance Centre and collaborators. Occupational transmission of HIV. Summary of published reports. December 1997 edition. Public Health Laboratory Service, United Kingdom. Internet address: <http://www.phls.co.uk/facts/hiv/hiv.htm>

Reported by

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for the participating sites:

Calvary, Canberra and John James Memorial hospitals, ACT

Bankstown/Lidcombe, Ballina, Bathurst, Blacktown, Bonalbo, Bloomfield (Orange), Byron Bay, Calvary (Wagga Wagga), Campbell (Coraki), Campbelltown, Casino and District, Coffs Harbour, Concord, Grafton Base, Goulburn Base, Kyogle, Lismore Base, Maclean, Mount Druitt, Murwillumbah, Northern Rivers, Nowra Community, Prince of Wales, Royal Women's, St Luke's Private, St. Vincent's Public (Darlinghurst), St Vincent's Private (Darlinghurst), St Vincent's (Lismore), Strathfield Private, Tamworth, Tweed Heads, Westmead, United Dental and Urbenville Multipurpose Centre, NSW

St Andrews (Toowoomba), Caboolture, Cairns Base, Gold Coast, Holy Spirit, Ipswich, Logan, Mater Misericordiae Public, Mt Isa, Pindara Private, Prince Charles, Princess Alexandra, Royal Brisbane, Townsville General hospitals, QLD

Flinders Medical Centre, Lyell McEwin, Royal Adelaide, Whyalla hospitals, SA

Calvary and Royal Hobart hospitals, TAS

Alexander District, Alfred, Beechworth, Beleura Private, Box Hill, Cabrini, Dandenong, Epworth Private, Freemasons, Kerang, Kyabram, Mt Alexander (Castlemaine), Mt Alvernia (Bendigo), Mansfield, Monash Medical Centre, Mornington Peninsula, Mildura Base, Royal Melbourne, St John of God (Ballarat), St Vincent's, Upper Murray, Coorong, West Gippsland, Wimmera Base, Wodonga District hospitals, VIC

Glengarry, King Edward, Mount, Mount Henry Health Service, Princess Margaret, St John of God (Murdoch), Silver Chain Community Health Care, Sir Charles Gardiner, Swan District hospitals, WA

and State/Territory coordinators:

Helen Bedford, Communicable Disease Control, ACT Health, ACT

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Ann Arthur and Frank Bowden, Communicable Diseases Centre, NT

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Acknowledgements

Development and distribution of the database for recording occupational exposures to blood borne viruses among health care workers was sponsored by Becton Dickinson Pty Ltd.

THE NATIONAL AIDS REGISTRY

Table 2.1

Cases of AIDS and deaths following AIDS by sex and State/Territory in which diagnosis of AIDS was made, cumulative to 31 December 1998, and for two previous yearly intervals.

Cases

STATE/ TERRITORY	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	%
ACT	0	0	4	1	85	8	93	1.1
NSW	174	8	144	7	4513	169	4694	58.2
NT	3	0	3	0	33	0	33	0.4
QLD	47	10	31	2	784	45	831	10.3
SA	20	0	7	1	326	20	346	4.3
TAS	2	0	1	1	43	3	46	0.6
VIC	67	6	50	1	1583	67	1657	20.5
WA	11	3	9	2	343	25	370	4.6
TOTAL[†]	324	27	249	15	7710	337	8070	100.0

Deaths

ACT	0	0	0	0	62	2	64	1.1
NSW	101	5	46	1	3082	113	3202	56.4
NT	1	0	1	0	24	0	24	0.4
QLD	26	1	19	2	543	30	575	10.1
SA	7	0	11	1	224	15	239	4.2
TAS	1	0	2	0	28	2	30	0.5
VIC	61	6	34	3	1234	47	1287	22.7
WA	12	2	2	1	244	16	261	4.6
TOTAL[†]	209	14	115	8	5441	225	5682	100.0

† Total columns in Tables 2.1 - 2.5 and 5.1 include 23 AIDS cases and 16 deaths following AIDS in people whose sex was reported as transgender.

Table 2.2**Incidence of AIDS per million current population¹ by sex and State/Territory of diagnosis for the two most recent yearly intervals.**

STATE/ TERRITORY	1 Jan 97 – 31 Dec 97			1 Jan 98 – 31 Dec 98		
	Male	Female	Total	Male	Female	Total
ACT	0.0	0.0	0.0	26.1	6.5	16.2
NSW	55.9	2.5	29.0	45.7	2.2	24.0
NT	30.5	0.0	16.1	29.9	0.0	15.8
QLD	27.6	5.9	16.8	17.9	1.2	9.5
SA	27.3	0.0	13.5	9.5	1.3	5.4
TAS	8.6	0.0	4.2	4.3	4.2	4.2
VIC	29.4	2.6	15.9	21.7	0.4	10.9
WA	12.2	3.4	7.8	9.8	2.2	6.0
TOTAL	35.2	2.9	18.9	26.7	1.6	14.1

1. Population estimates by sex, State/Territory and calendar period from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Table 2.3

Cases of AIDS and deaths following AIDS by sex and age group, cumulative to 31 December 1998, and for two previous yearly intervals.

Cases¹

AGE GROUP (years)	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	%
0 – 2	0	1	1	0	9	7	16	0.2
3 – 12	0	0	1	0	20	9	29	0.4
0 – 12	0	1	2	0	29	16	45	0.6
13 – 19	0	0	0	0	25	4	29	0.4
20 – 29	39	10	30	4	1299	90	1402	17.4
30 – 39	133	11	95	5	3244	114	3365	41.7
40 – 49	93	4	75	5	2163	55	2220	27.5
50 – 59	42	1	31	0	717	28	746	9.2
60 +	17	0	16	1	233	30	263	3.2
TOTAL[†]	324	27	249	15	7710	337	8070	100.0

Deaths²

AGE GROUP (years)	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	%
0 – 2	0	0	0	0	5	5	10	0.2
3 – 12	0	1	0	1	16	6	22	0.4
0 – 12	0	1	0	1	21	11	32	0.6
13 – 19	0	0	0	0	13	3	16	0.3
20 – 29	17	1	12	0	646	41	697	12.3
30 – 39	79	10	40	3	2191	80	2275	40.0
40 – 49	70	2	29	4	1724	41	1767	31.1
50 – 59	34	0	21	0	640	22	662	11.6
60 +	9	0	13	0	206	27	233	4.1
TOTAL[†]	209	14	115	8	5441	225	5682	100.0

1. Cases are classified by age at diagnosis.
2. Deaths are classified by age at death.

Table 2.4

Cases of AIDS by sex and exposure category, cumulative to 31 December 1998, and for two previous yearly intervals.

Adults/adolescents (13 years and older at diagnosis of AIDS)

EXPOSURE CATEGORY	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/bisexual contact	249	–	172	–	6488	–	6488	83.3
Male homosexual/bisexual contact and injecting drug use	11	–	7	–	344	–	344	4.4
Injecting drug use	10	6	13	3	153	77	230	3.0
<i>Heterosexual</i>	4	3	7	3	103	62	165	
<i>Not further specified</i>	6	3	6	0	50	15	65	
Heterosexual contact:	30	18	34	10	263	167	430	5.5
<i>Sex with injecting drug user</i>	0	2	0	1	7	16	23	
<i>Sex with bisexual male</i>	–	3	–	0	–	37	37	
<i>From high prevalence country</i>	9	5	7	5	42	28	70	
<i>Sex with person from high prevalence country</i>	7	1	5	0	36	13	49	
<i>Sex with person with medically acquired HIV</i>	0	1	0	0	2	9	11	
<i>Sex with HIV-infected person, exposure not specified</i>	2	3	1	1	27	21	48	
<i>Not further specified</i>	12	3	21	3	149	43	192	
Haemophilia/coagulation disorder	4	0	1	0	110	3	113	1.4
Receipt of blood /tissue	0	1	1	1	78	59	137	1.8
Health care setting	0	0	0	0	1	3	4	0.0
Total Adults/Adolescents[†]	304	25	228	14	7437	309	7746	99.4

Children (under 13 years at diagnosis of AIDS)

Mother with/at risk for HIV infection	0	1	2	0	13	13	26	0.3
Haemophilia/coagulation disorder	0	0	0	0	5	0	5	0.1
Receipt of blood /tissue	0	0	0	0	11	3	14	0.2
Total Children	0	1	2	0	29	16	45	0.6
Sub-total	304	26	230	14	7466	325	7791	100.0
Other/undetermined ¹	20	1	19	1	244	12	279	
TOTAL[†]	324	27	249	15	7710	337	8070	

1. The 'Other/undetermined' category includes 23 AIDS cases in people whose sex was reported as transgender. The category was excluded from the calculation of the percentage of cases attributed to each exposure category.

Table 2.5

Deaths following AIDS by sex and exposure category, cumulative to 31 December 1998, and for two previous yearly intervals.

Adults/adolescents (13 years and older at diagnosis of AIDS)

EXPOSURE CATEGORY	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/bisexual contact	168	–	87	–	4652	–	4652	84.5
Male homosexual/bisexual contact and injecting drug use	17	–	7	–	244	–	244	4.4
Injecting drug use	7	4	4	0	89	49	138	2.5
<i>Heterosexual</i>	3	3	1	0	69	42	111	
<i>Not further specified</i>	4	1	3	0	20	7	27	
Heterosexual contact:	5	8	5	5	130	103	233	4.2
<i>Sex with injecting drug user</i>	1	0	0	1	2	8	10	
<i>Sex with bisexual male</i>	–	3	–	1	–	26	26	
<i>From high prevalence country</i>	0	1	0	1	9	12	21	
<i>Sex with person from high prevalence country</i>	0	0	2	1	13	10	23	
<i>Sex with person with medically acquired HIV</i>	0	0	0	0	2	6	8	
<i>Sex with HIV-infected person, exposure not specified</i>	2	2	0	0	22	15	37	
<i>Not further specified</i>	2	2	3	1	82	26	108	
Haemophilia/coagulation disorder	4	0	0	0	84	3	87	1.6
Receipt of blood /tissue	1	0	0	1	67	50	117	2.1
Health care setting	0	0	0	0	1	2	3	0.1
Total Adults/Adolescents[†]	202	12	103	6	5267	207	5474	99.4

Children (under 13 years at diagnosis of AIDS)

Mother with/at risk for HIV infection	0	1	0	1	7	9	16	0.3
Haemophilia/coagulation disorder	0	0	0	0	3	0	3	0.1
Receipt of blood /tissue	0	0	0	0	11	2	13	0.2
Total Children	0	1	0	1	21	11	32	0.6
Sub-total	202	13	103	7	5288	218	5506	100.0
Other/undetermined ¹	7	1	12	1	153	7	176	
TOTAL[†]	209	14	115	8	5441	225	5682	

1. The 'Other/undetermined' category includes 16 deaths following AIDS in people whose sex was reported as transgender. The category was excluded from the calculation of the percentage of cases attributed to each exposure category.

THE NATIONAL HIV DATABASE

Table 3.1

Number of new diagnoses of HIV infection by sex¹ and State/Territory, cumulative to 31 December 1998, and for two previous yearly intervals.

STATE/ TERRITORY	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	Rate ²
ACT	5	3	8	3	187	23	210	68.1
NSW ³	372	27	328	41	10503	581	11363	179.2
NT	7	4	11	1	104	8	112	59.0
QLD	96	18	90	14	1867	132	2006	58.0
SA	29	6	28	6	648	57	705	47.4
TAS	0	0	2	1	77	5	82	17.4
VIC ⁴	166	13	131	8	3749	199	3985	85.5
WA	29	6	27	18	869	102	974	53.2
TOTAL⁵	704	77	625	92	18004	1107	19437⁶	103.7

- Forty two people (19 NSW, 7 QLD, 13 VIC and 3 WA) whose sex was reported as transgender are included in the total columns of Tables 3.1 – 3.3.
- Rate per one hundred thousand current population. Population estimates by sex, State/Territory and calendar interval from Australian Demographic Statistics (Australian Bureau of Statistics).
- Cumulative total for NSW includes 260 people whose sex was not reported.
- Cumulative total for VIC includes 24 people whose sex was not reported.
- Cumulative total for Australia includes 284 people whose sex was not reported.
- Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 16,720 (range 16,320 to 17,120). Reference: Law MG, McDonald AM and Kaldor JM. Estimation of cumulative HIV incidence in Australia, based on national case reporting. *Aust NZ J Public Health* 1996; 20: 215 – 217.

Table 3.2

Number of new diagnoses of HIV infection for which exposure category was reported, by sex and exposure category, cumulative to 31 December 1998 and for two previous yearly intervals.

EXPOSURE CATEGORY	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total ¹	%
Male homosexual/bisexual contact	505	–	392	–	12338	–	12338	78.9
Male homosexual/bisexual contact and injecting drug use	28	–	30	–	574	–	574	3.7
Injecting drug use	16	6	13	7	517	173	697	4.5
<i>Heterosexual</i>	14	4	7	5	167	118	286	
<i>Not further specified</i>	2	2	6	2	350	55	411	
Heterosexual contact:	69	62	80	70	797	627	1428	9.1
<i>Sex with injecting drug user</i>	2	5	4	4	25	75	101	
<i>Sex with bisexual male</i>	–	3	–	4	–	91	91	
<i>From high prevalence country</i>	12	16	26	25	101	109	211	
<i>Sex with person from high prevalence country</i>	19	12	17	8	119	66	185	
<i>Sex with person with medically acquired HIV</i>	0	0	1	0	6	13	19	
<i>Sex with HIV-infected person, exposure not specified</i>	1	14	6	13	44	86	131	
<i>Not further specified</i>	35	12	26	16	502	187	690	
Haemophilia/coagulation disorder	0	0	1	0	225	4	229	1.5
Receipt of blood /tissue	1	1	1	3	106	103	209	1.3
Health care setting²	0	0	0	0	3	8	11	0.1
Total Adults/Adolescents	619	69	517	80	14560	915	15486	99.1

Children (under 13 years at diagnosis of HIV infection)

Mother with/at risk for HIV infection	4	3	3	0	36	25	61	0.4
Haemophilia/coagulation disorder	0	0	0	0	66	0	66	0.4
Receipt of blood /tissue	0	0	0	0	13	7	20	0.1
Total Children	4	3	3	0	115	32	147	0.9
Sub-total	623	72	520	80	14675	947	15633	100.0
Other/undetermined ³	81	5	105	12	3329	160	3804	
TOTAL	704	77	625	92	18004	1107	19437⁴	

1. Total column includes people whose sex was not reported.
2. 'Health care setting' includes 5 cases of occupationally acquired HIV infection and 4 cases of HIV transmission in surgical rooms.
3. The 'Other/undetermined' category includes 3787 adults/adolescents and 17 children. Forty two people whose sex was reported as transgender were included in the 'Other/undetermined' category. The 'Other/undetermined' category was excluded from the calculation of the percentage of cases attributed to each exposure category.
4. See footnotes Table 3.1.

Table 3.3

Number of new diagnoses of HIV infection by sex and age group, cumulative to 31 December 1998, and for two previous yearly intervals.

AGE GROUP (YEARS)	1 Jan 97 – 31 Dec 97		1 Jan 98 – 31 Dec 98		Cumulative to 31 Dec 98			
	Male	Female	Male	Female	Male	Female	Total	%
0 – 2	4	2	2	0	41	16	58	0.3
3 – 12	0	1	1	0	87	19	106	0.5
0 – 12	4	3	3	0	128	35	164	0.8
13 – 19	2	5	8	8	400	74	483	2.5
20 – 29	189	30	159	35	6256	458	6834	35.2
30 – 39	269	20	225	34	6586	294	6992	36.0
40 – 49	152	14	143	12	3111	115	3274	16.8
50 – 59	62	3	61	0	1007	47	1067	5.5
60 +	21	2	25	3	330	54	386	2.0
Unknown	5	0	1	0	186	30	237	1.2
TOTAL¹	704	77	625	92	18004	1107	19437	100.0

1. See footnotes Table 3.1.

Table 3.4

Number of new diagnoses of HIV infection in the year 1 January 1998 to 31 December 1998 for which an HIV seroconversion illness was diagnosed or the date of a prior negative test was within one year of diagnosis of HIV infection, by sex and State/Territory and for two six month intervals of HIV diagnosis.

STATE/ TERRITORY	1 Jan 98 –30 Jun 98		1 Jul 98 –31 Dec 98		1 Jan 98 – 31 Dec 98		
	Male	Female	Male	Female	Male	Female	Total
ACT	3	0	0	0	3	0	3
NSW	39	0	22	0	61	0	61
NT	0	0	2	0	2	0	2
QLD	8	0	11	1	19	1	20
SA	4	0	2	0	6	0	6
TAS	0	0	0	0	0	0	0
VIC	19	0	18	0	37	0	37
WA	5	0	3	2	8	2	10
TOTAL	78	0	58	3	136	3	139

Table 3.5

Number of new diagnoses of HIV infection in the year 1 January 1998 to 31 December 1998 for which an HIV seroconversion illness was diagnosed or the date of a prior negative test was within one year of diagnosis of HIV infection, by sex and exposure category, and for two six month intervals of HIV diagnosis.

EXPOSURE CATEGORY	1 Jan 98 – 30 Jun 98		1 Jul 98 – 31 Dec 98		1 Jan 98 – 31 Dec 98		
	Male	Female	Male	Female	Male	Female	Total
Male homosexual/bisexual contact	65	–	46	–	111	–	111
Male homosexual/bisexual contact and injecting drug use	3	–	7	–	10	–	10
Injecting drug use (female and heterosexual male)	1	0	0	2	1	2	3
Heterosexual contact	4	0	3	1	7	1	8
Health care setting	0	0	0	0	0	0	0
Other/undetermined	5	0	2	0	7	0	7
TOTAL	78	0	58	3	136	3	139

Table 3.6

Number of new diagnoses of HIV infection in the year 1 January 1998 to 31 December 1998 for which an HIV seroconversion illness was diagnosed or the date of a prior negative test was within one year of diagnosis of HIV infection, by sex and age group and for two six month intervals of HIV diagnosis.

AGEGROUP (YEARS)	1 Jan 98 – 31 Jun 98		1 Jul 98 – 31 Dec 98		1 Jan 98 – 31 Dec 98		
	Male	Female	Male	Female	Male	Female	Total
13 – 19	0	0	2	1	2	1	3
20 – 29	34	0	27	2	61	2	63
30 – 39	28	0	18	0	46	0	46
40 – 49	6	0	9	0	15	0	15
50 – 59	8	0	1	0	9	0	9
60+	2	0	1	0	3	0	3
TOTAL	78	0	58	3	136	3	139

SENTINEL SURVEILLANCE OF HIV INFECTION IN SEXUAL HEALTH CLINICS

Table 4.1

Number of people seen, number of people tested for HIV antibody and number of people newly diagnosed with HIV infection by sex and sexual health clinic, during the quarter 1 October 1998 to 31 December 1998.

Sexual Health Clinic	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total
Sydney Sexual Health Centre, NSW	1276	870	431	248	2	2	4
Brisbane Sexual Health Clinic, QLD	856	562	260	138	1	0	1
Gold Coast Sexual Health Clinic, QLD	368	546	167	256	1	0	1
Clinic 275, Adelaide, SA	1080	713	753	456	0	1	1
Melbourne Sexual Health Centre, VIC	2042	1540	1153	1035	6	0	6
TOTAL	5622	4231	2764	2133	10	3	13

Table 4.2

Number of people seen who had a *previous negative HIV antibody test*, percent retested for HIV antibody, and number (percent) newly diagnosed with HIV infection, by sex and exposure category, during the quarter 1 October 1998 to 31 December 1998.

EXPOSURE CATEGORY	Previous negative HIV antibody test		% Retested for HIV antibody		Newly diagnosed with HIV infection			
	Male	Female	Male	Female	Male	Female	Total	%
Homosexual/bisexual contact	703	–	58.9	–	3	–	3	0.7
Homosexual/bisexual contact and injecting drug use	71	–	67.6	–	0	–	0	0.0
Injecting drug use (female and heterosexual male)	213	184	53.5	53.3	0	0	0	0.0
Heterosexual contact	1794	1679	54.6	51.7	0	0	0	0.0
<i>outside Australia</i>	222	167	48.2	39.5	0	0	0	0.0
<i>within Australia only</i>	1572	1512	55.5	57.7	0	0	0	0.0
Sex worker	–	231	–	70.1	–	0	0	0.0
Sex worker and injecting drug use	–	17	–	70.6	–	0	0	0.0
Other/undetermined	86	144	90.7	77.8	1	0	1	0.5
TOTAL	2867	2255	57.0	55.5	4	0	4	0.1

Table 4.3

Number of people seen with *no previous HIV antibody test*, percent tested for HIV antibody for the first time, and number (percent) newly diagnosed with HIV infection, by sex and exposure category, during the quarter 1 October 1998 to 31 December 1998.

EXPOSURE CATEGORY	No previous HIV antibody test		% Tested for HIV antibody		Newly diagnosed with HIV infection			
	Male	Female	Male	Female	Male	Female	Total	%
Homosexual/bisexual contact	369	–	42.5	–	3	–	3	1.9
Homosexual/bisexual contact and injecting drug use	26	–	61.5	–	1	–	1	6.3
Injecting drug use (female and heterosexual male)	106	74	77.4	83.8	0	0	0	0.0
Heterosexual contact	1574	1399	49.9	46.9	0	2	2	0.1
<i>outside Australia</i>	126	95	57.1	41.1	0	1	1	0.9
<i>within Australia only</i>	1448	1304	49.3	47.3	0	1	1	0.08
Sex worker	–	60	–	70.0	–	0	0	0.0
Sex worker and injecting drug use	–	3	–	100.0	–	0	0	0.0
Other/undetermined	415	409	21.4	28.9	2	1	3	1.4
TOTAL	2490	1945	45.4	45.3	6	3	9	0.4

Table 4.4

Number of people seen, number of people tested for HIV antibody and number of people newly diagnosed with HIV infection, by sex and age group, during the quarter 1 October 1998 to 31 December 1998.

AGE GROUP (YEARS)	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total
13 - 19	186	478	111	189	0	0	0
20 - 29	2329	2265	1261	1161	2	2	4
30 - 39	1803	978	848	529	4	1	5
40 - 49	806	380	335	205	3	0	3
50 - 59	348	100	147	43	0	0	0
60 +	150	29	62	6	1	0	1
Not reported	0	1	0	0	0	0	0
TOTAL	5622	4231	2764	2133	10	3	13

Table 4.5

Number of people diagnosed with specific STD¹, other than HIV, by sex, exposure category and whether or not they were tested for HIV antibody² during the quarter 1 October 1998 to 31 December 1998.

EXPOSURE CATEGORY	Tested for HIV antibody		Not tested for HIV antibody	
	Male	Female	Male	Female
Homosexual/bisexual contact	23	–	41	–
Homosexual/bisexual contact and injecting drug use	5	–	2	–
Injecting drug use (female and heterosexual male)	7	1	4	1
Heterosexual contact	55	40	52	38
<i>outside Australia</i>	12	5	9	8
<i>within Australia only</i>	43	35	43	30
Sex worker	–	3	–	1
Sex worker and injecting drug use	–	1	–	0
Other/undetermined	2	2	2	2
TOTAL	92	47	101	42

1. Specific STD are gonorrhoea, syphilis and chlamydia.
2. Includes people who may have been previously tested for HIV antibody and excludes people previously known to have HIV infection.

REPORT FROM WHO WESTERN PACIFIC REGION

Dr G Pomerol, Regional Advisor, WHO Regional Office, Manila.

Table 5.1

AIDS and HIV in the WHO Western Pacific Region by country; based on reports available at 31 December 1998.

COUNTRY/ AREA	CUMULATIVE AIDS CASES				AIDS Rate ¹	Cumulative Diagnoses HIV
	Male	Female	Children < 13 Years	Total		
American Samoa	0	0	0	0	0	0
Australia [†]	7710	337	45	8070	43.0	19437
Brunei	11	1	0	12	3.1	475
Cambodia	108	23	122	1379	4.2	14670
China ²	269	18	0	301	0.0	10676
Cook Islands	0	0	0	0	0	0
Fed. S. Micronesia	2	0	0	2	1.8	2
Fiji	2	1	0	8	1.0	43
French Polynesia	4	0	0	54	24.9	174
Guam	45	4	0	49	29.6	108
Hong Kong	314	35	5	349	4.2	1066
Japan	1007	162	10	1897	1.2	5388
Kiribati	3	1	0	4	2.6	20
Laos	42	29	2	91	0.7	288
Macao	11	2	0	13	2.2	173
Malaysia	1696	108	19	1804	3.0	26549
Marshall Islands	1	1	0	2	3.8	9
Mongolia	0	0	0	0	0	3
Nauru	0	0	0	0	0	1
New Caledonia	52	14	1	66	26.9	169
New Zealand	626	30	4	656	18.9	1285
Niue	0	0	0	0	0	0
N. Mariana Islands	5	1	0	8	10.4	15
Palau	1	0	0	1	5.8	1
Papua New Guinea	215	196	9	417	5.4	1213
Philippines	219	123	7	343	0.5	1099
Rep. of Korea	104	11	0	115	0.1	811
Samoa	4	2	2	6	3.7	9
Singapore	389	30	1	419	9.2	831
Solomon Islands	0	0	0	0	0	1
Tokelau	0	0	0	0	0	0
Tonga	10	2	0	14	6.1	19
Tuvalu	0	0	0	0	0	1
Vanuatu	0	0	0	0	0	0
Vietnam	1008	157	4	1819	1.0	10118
Wallis and Futuna	1	0	0	1	7.1	2
TOTAL[†]	13859	1288	231	17900	0.8	94656

1. AIDS cases per 100,000 total current population.

CONTENTS

Monitoring occupational exposure to blood borne viruses in health care workers in Australia	1
Announcements	2
The National AIDS Registry	7
The National HIV Database	12
Sentinel surveillance of HIV infection in sexual health clinics	19
Report from WHO Western Pacific Region	25
Notes	28

LIST OF TABLES AND FIGURES

Figure 1.1	Percentage of exposures according to type of exposure and body fluid	4
Table 1.1	Number of hospitals participating in monitoring occupational exposure to blood and body fluids	3
Table 1.2	Rate of occupational exposure to blood or body fluids among health care workers per 100 daily occupied beds	4
Table 2.1	AIDS cases and deaths by sex and State/Territory	7
Table 2.2	Incidence of AIDS by sex and State/Territory	8
Table 2.3	AIDS cases and deaths by sex and age at diagnosis	9
Table 2.4	AIDS cases by sex and exposure category	10
Table 2.5	AIDS deaths by sex and exposure category	11
Table 3.1	New diagnoses of HIV infection by sex and State/Territory	12
Table 3.2	New diagnoses of HIV infection by sex and exposure category	13
Table 3.3	New diagnoses of HIV infection by sex and age group	16
Table 3.4	Cases of recent HIV infection by sex and State/Territory	16
Table 3.5	Cases of recent HIV infection by sex and exposure category	17
Table 3.6	Cases of recent HIV infection by sex and age group	17
Table 4.1	People seen, tested for HIV antibody and diagnosed with HIV infection, by sex and sexual health clinic	19
Table 4.2	People seen, retested for HIV antibody and diagnosed with HIV infection, by sex and exposure category	20
Table 4.3	People seen, tested for HIV antibody for the first time and diagnosed with HIV infection, by sex and exposure category	21
Table 4.4	People seen, tested for HIV antibody and diagnosed with HIV infection, by sex and age group	22
Table 4.5	People diagnosed with specific STD, other than HIV, by sex, exposure category and whether or not they were tested for HIV antibody	23
Table 5.1	AIDS and HIV in the WHO Western Pacific Region by country	25

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NOTES

The National AIDS Registry is maintained by NCHECR on behalf of the National HIV Surveillance Committee, which consists of representatives from NCHECR, and the Health Departments of each State and Territory and the Commonwealth of Australia. The Registry is based on reports from doctors who diagnose AIDS, made to the Health Department in the State/Territory of diagnosis. Date of birth and a name code (first two letters of first and last name) are used to minimise duplicate registration, while maintaining confidentiality.

The National HIV Database is maintained by NCHECR on behalf of the National HIV Surveillance Committee. It is based on reports of new diagnoses of HIV infection from HIV Reference Laboratories (ACT, NSW, TAS, VIC), or from a combination of Reference Laboratory and diagnosing doctors (NT, QLD, SA, WA). In order to avoid counting the same case more than once, only diagnoses which are determined to be new by the diagnosing laboratory or doctor are reported for the purposes of national surveillance.

Sentinel surveillance is carried out by six sexual health clinics in five Australian cities, which send quarterly reports on HIV antibody testing to NCHECR. Tabulations from the National AIDS Registry, the National HIV Database and Sentinel HIV Surveillance in sexual health clinics are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information.

HIV antibody testing is carried out at Public Health Laboratories and Blood Transfusion Services, and summary information on testing is sent on a four-weekly basis to the National Serology Reference Laboratory Australia, which produces quarterly tabulations for publication in the Australian HIV Surveillance Report.

Abbreviations: HIV is the human immunodeficiency virus, and unless otherwise specified, refers to HIV-1 only. AIDS is the acquired immunodeficiency syndrome and STD stands for sexually transmissible disease. Specified countries are those of sub-Saharan Africa and the Caribbean, where transmission of HIV is believed to be predominantly heterosexual. The Australian States and Territories are: Australian Capital Territory (ACT), New South Wales (NSW), Northern Territory (NT), Queensland (QLD), South Australia (SA), Tasmania (TAS), Victoria (VIC) and Western Australia (WA). NCHECR is the National Centre in HIV Epidemiology and Clinical Research.

All data in this report are provisional and subject to future revision.

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