



National Centre in HIV Epidemiology and Clinical Research

Australian HIV Surveillance Report

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Underreporting of AIDS in Australia, 1988 – 1997

National AIDS surveillance in Australia provides information on the pattern of advanced HIV infection and the impact of antiretroviral treatment on AIDS incidence. AIDS surveillance data also provides information for health care planning and resource allocation. The value of AIDS surveillance data in describing the pattern of advanced HIV infection and in health care planning depends on the extent to which notification of AIDS diagnoses is complete.

In Australia, information on AIDS cases and deaths following AIDS is obtained primarily through notification by the diagnosing doctor to the State/Territory health authority, who forward notifications to the National Centre in HIV Epidemiology and Clinical Research (NCHECR) for inclusion on the National AIDS Registry. Surveillance systems based on passive notification of diagnosed cases are widely recognised as providing a potentially incomplete indication of the number of cases. Incomplete notification of AIDS diagnoses has been described in Australia and in New South Wales in the early 1990s (Donovan 1991, McAnulty *et al* 1992). We have assessed the completeness of AIDS notification in Australia by linking AIDS cases notified to the National AIDS Registry to deaths following an illness associated with AIDS, registered with the National Death Index, held at the Australian Institute of Health and Welfare.

Information on family name code, given name code, sex and date of birth of AIDS cases notified to the National AIDS Registry, and date of death for cases notified as having died, was used to match to deaths following an illness associated with AIDS registered with the National Death Index. AIDS cases were matched to AIDS associated deaths using a probabilistic record linkage package (Automatch). Approval for the linkage was obtained through the University of New South Wales and the Australian Institute of Health and Welfare.

Matched pairs and non-matched AIDS cases and deaths were reviewed manually at the NCHECR to verify the match. The match on name code, sex, date of birth and date of death was reviewed for each matched pair. Duplicate matched pairs were removed from the file to obtain a list of unique matched pairs.

Matched pairs were accepted as deaths following AIDS if

- (1) the identifiers (family name code, given name code (including cases with a reversed order of family name code and given name code), sex, date of birth) and the date of death matched exactly, or
- (2) the name code matched exactly or closely (two letters, at most, were different in the matched pair), the date of birth matched exactly and the date of death registered with the National Death Index was close to the date of death notified to the National AIDS Registry (within 30 days of the date of death notified to the National AIDS Registry, or the day and month differed (for example, the day and month of death had been reversed) but the year of death was the same), or

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Announcements

National meetings

The **20th NRL Workshop on Serology** will be held at the Surfers Paradise Marriott Resort, Surfers Paradise, Queensland, on 13 – 15 August 2003. Further information may be obtained from Debra Irvine, National Serology Reference Laboratory, Australia, 4th Floor, Healy Building, 41 Victoria Parade, Fitzroy, Victoria.

Telephone: 61 3 9418 1117

Facsimile: 61 3 9418 1155

E-mail: debra@nrl.gov.au

The **Australasian Society for HIV Medicine Conference 2003 Global Crisis: Local Action** will be held in Cairns, Queensland, on 22 – 25 October 2003. Further information may be obtained from The Australasian Society for HIV Medicine, Locked Mail Bag 5057, Darlinghurst NSW 1300 Australia.

Telephone: 61 2 9368 2700

Facsimile: 61 2 9380 9528

E-mail: ashm@ashm.org.au

Website: www.ashm.org.au

The **Eleventh National Symposium on hepatitis B and C** will be held at St Vincent's Hospital, Melbourne, VIC, on Saturday 22 November 2003. Further information may be obtained from Ms Eleanor Belot, Meeting Administrator.

Telephone: 03 9288 3580

Facsimile: 03 9288 3590

E-mail: belote@svhm.org.au

International meeting

The **11th International Symposium on Viral Hepatitis and Liver Disease** will be held in Sydney, New South Wales, on 6 – 10 April 2003. Further information may be obtained from ISVHLD 2003, Tour Hosts Pty Limited GPO Box 128 Sydney NSW 2001 Australia.

Telephone: (61) 2 9248 0800

Facsimile: (61) 2 9248 0894

E-mail: isvhld@tourhosts.com.au

- (3) the identifiers matched exactly and the year of death notified to the National AIDS Registry was the same as or within one year of the estimated year of death registered with the National Death Index, or
- (4) the name code, sex and date of death matched exactly, and the year of birth notified to the National AIDS Registry was the same as or within one year of the estimated year of birth of the AIDS associated death registered with the National Death Index.

Matched pairs for which the death had been registered with the National Death Index only were accepted as deaths following AIDS if the identifiers matched exactly and the date of death was later than the date of last contact recorded on the National AIDS Registry. In these cases, the death following AIDS was entered onto the National AIDS Registry.

Deaths were categorised as National Death Index deaths only when a match to cases notified to the National AIDS Registry could not be verified. Deaths were categorised as National AIDS Registry deaths only when the death was notified to the National AIDS Registry and a matching death could not be found on the National Death Index. AIDS cases were considered to be living with AIDS when a death had not been notified to the National AIDS Registry and a match to a National Death Index death was not verified.

By the end of 1997, 5,247 deaths following an illness associated with AIDS had been registered with the National Death Index. These AIDS associated deaths were matched to 7,005 AIDS cases, including 5,140 deaths following AIDS, occurring from 1 January 1988 to 31 December 1997 and notified to the National AIDS Registry by 31 August 1998. The matching process resulted in 4,712 matched pairs. A total of 499 AIDS associated deaths were not matched to deaths following AIDS.

Table 1.1 Number of deaths attributed to AIDS, registered with the National Death Index, which were matched to AIDS cases and deaths following AIDS notified to the National AIDS Registry, cumulative to 31 December 1997

State/ Territory of death	Matched AIDS death	Delayed notification of death	Matched AIDS Case; death not notified	National Death Index death only	National AIDS Registry death only	Living with AIDS	Total	%
ACT	54	0	3	0	0	0	57	1.2
NSW	2 537	20	69	11	2	6	2 645	57.1
NT	20	0	0	0	0	0	20	0.4
QLD	473	0	3	1	1	0	478	10.3
SA	224	0	1	0	0	0	225	4.9
TAS	24	0	1	0	0	0	25	0.5
VIC	1 114	0	1	2	1	0	1 118	24.1
WA	56	0	8	1	1	1	67	1.4
Total	4 502	20	86	15	5	7	4 635	100.0

A total of 66 AIDS cases were matched at least twice to 77 deaths. Removal of the duplicate matched pairs resulted in 4,635 unique matched pairs. Almost all deaths following AIDS notified to the National AIDS Registry (97.6%) were matched to an AIDS associated death registered with the National Death Index, including 20 delayed notifications of death, notified after August 1998 (Table 1.1). A total of 86 AIDS cases had matching identifiers with an AIDS associated death, indicating underreporting of death following AIDS. Small numbers of deaths were found only on the National Death Index or on the National AIDS Registry, suggesting very

limited underreporting of AIDS to both data sources. For 7 matched pairs, the match was not verified and the AIDS case was considered to be living with AIDS. However, these cases were diagnosed with AIDS prior to the introduction, in 1996, of combination antiretroviral therapy for HIV infection, which has the effect of delaying progression to AIDS and death following AIDS.

Of the 499 AIDS associated deaths registered with the National Death Index which were not linked to deaths following AIDS by computerised matching, a record of HIV or AIDS diagnosis could not be found following clerical review for 300 cases (Table 1.2). A matching AIDS record was found in 52 cases including 48 (92%) deaths following AIDS. These AIDS cases and deaths, matched following clerical review, were not matched by computerised linkage because another name code or a reversed name code was held on the National AIDS Registry (69% of cases), the date of death recorded on the National AIDS Registry had been estimated (19%), the death had not been notified (8%) or there was a delayed notification of the AIDS case and death (4%). A record of death following a diagnosis of HIV infection was found for 55 cases and an HIV record only was found for 92 AIDS associated deaths. Deaths following HIV infection were attributed to causes other than AIDS or to suicide or drug overdose in 56% of cases, the cause of death was not reported in 33% and was possibly due to AIDS in 11%.

Table 1.2 Number of deaths attributed to AIDS on the National Death Index which were not matched to AIDS cases, number which were matched and possibly matched following clerical review and number for which a record of HIV/AIDS diagnosis was not found, by State/Territory of death

State/Territory	Matched to AIDS death	Match/possible match to HIV record	No matching HIV/AIDS record	Total	%
ACT	1	1	7	9	1.8
NSW	30	91	194	315	63.1
NT	0	2	2	4	0.8
QLD	13	21	24	58	11.6
SA	0	3	6	9	1.8
TAS	1	1	4	6	1.2
VIC	5	21	53	79	15.8
WA	2	7	10	19	3.8
Total	52	147	300	499	100.0

The first national assessment of the completeness of AIDS, using an independent data source, indicates that notification of AIDS and death following AIDS in Australia was virtually complete for deaths occurring by the end of 1997. However, limited underreporting of death following AIDS has occurred in both data sources. The almost complete ascertainment of deaths following AIDS indicates that AIDS case surveillance accurately summarises the pattern of advanced HIV infection in Australia, and provides a reliable basis for planning purposes.

Reported by

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References

Donovan JW. Inconsistencies in statistics of deaths from AIDS. *Med J Aust* 1991; 154: 90 – 92
McAnulty JM, Rubin GL, Rushworth RL and Kaldor J. Underreporting of AIDS, New South Wales, 1988 – 1989. *Med J Aust* 1992; 156: 452 – 455

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 30 September 2002, and for two previous yearly intervals

Cases

State/Territory	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total†	%
ACT	1	0	2	0	90	9	99	1.1
NSW	76	8	58	0	4 872	208	5 093	57.1
NT	2	0	1	0	38	0	38	0.4
QLD	30	1	29	2	909	53	964	10.8
SA	7	1	12	3	373	29	402	4.5
TAS	1	0	0	1	46	4	50	0.5
VIC	46	4	35	5	1 761	82	1 852	20.8
WA	17	2	10	2	387	31	420	4.8
Total	180	16	147	13	8 476	416	8 918	100.0

Deaths

State/Territory	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total†	%
ACT	2	0	0	0	71	4	75	1.2
NSW	38	3	32	0	3 363	122	3 494	56.3
NT	1	0	0	0	25	0	25	0.4
QLD	12	3	8	0	600	36	638	10.3
SA	8	1	5	2	246	18	264	4.3
TAS	0	0	0	0	30	2	32	0.5
VIC	21	3	11	3	1 322	57	1 386	22.4
WA	3	0	2	2	267	20	288	4.6
Total	85	10	58	7	5 924	259	6 202	100.0

† Totals include 26 AIDS cases and 19 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 Oct 2000 – 30 Sep 2001			1 Oct 2001 – 30 Sep 2002		
	Male	Female	Total	Male	Female	Total
ACT	6.3	0.0	3.1	12.5	0.0	6.2
NSW	23.3	2.4	12.7	17.6	0.0	8.9
NT	19.2	0.0	10.0	9.6	0.0	5.0
QLD	16.7	0.5	8.6	15.8	1.1	8.4
SA	9.4	1.3	5.3	16.0	3.9	9.9
TAS	4.3	0.0	2.1	0.0	4.2	2.1
VIC	19.5	1.6	10.6	14.6	2.0	8.2
WA	17.9	2.1	10.0	10.4	2.1	6.2
Total	18.7	1.6	10.1	15.1	1.3	8.2

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 30 September 2002, and for two previous yearly intervals

Cases¹

Age group (years)	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total†	%
0–2	0	0	0	1	9	9	18	0.2
2–12	0	0	0	1	20	10	30	0.3
0–12	0	0	0	2	29	19	48	0.5
13–19	0	0	0	0	27	4	31	0.3
20–29	14	2	11	1	1 370	103	1 486	16.7
30–39	69	10	50	5	3 545	154	3 708	41.6
40–49	51	3	61	2	2 395	68	2 465	27.6
50–59	29	1	20	3	834	35	871	9.8
60+	17	0	5	0	276	33	309	3.5
Total	180	16	147	13	8 476	416	8 918	100.0

Deaths²

Age group (years)	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total†	%
0–2	0	0	0	1	5	6	11	0.2
2–12	1	0	0	0	17	6	23	0.4
0–12	1	0	0	1	22	12	34	0.6
13–19	0	0	0	0	14	3	17	0.3
20–29	2	2	2	1	680	46	737	11.9
30–39	27	4	18	2	2 373	93	2 472	39.8
40–49	32	0	22	1	1 884	44	1 930	31.1
50–59	13	4	12	2	715	30	745	12.0
60+	10	0	4	0	236	31	267	4.3
Total	85	10	58	7	5 924	259	6 202	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 30 September 2002, and for two previous yearly intervals

Exposure category	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/ bisexual contact	123	–	110	–	7 027	–	7 027	81.9
Male homosexual/bisexual contact and injecting drug use	7	–	6	–	388	–	388	4.5
Injecting drug use	4	3	9	1	190	90	280	3.3
<i>Heterosexual</i>	3	1	5	1	122	69	191	
<i>Not further specified</i>	1	2	4	0	68	21	89	
Heterosexual contact	28	13	15	7	353	220	573	6.7
<i>Sex with injecting drug user</i>	0	0	0	1	7	23	30	
<i>Sex with bisexual male</i>	–	0	–	0	–	41	41	
<i>From a high prevalence country</i>	6	8	2	1	67	48	115	
<i>Sex with person from a high prevalence country</i>	9	1	2	0	55	15	70	
<i>Sex with person with medically acquired HIV</i>	0	0	0	0	2	10	12	
<i>Sex with HIV infected person, exposure not specified</i>	1	2	5	2	35	29	64	
<i>Not further specified</i>	12	2	6	3	187	54	241	
Haemophilia/coagulation disorder	1	0	1	0	117	3	120	1.4
Receipt of blood/tissue	0	0	0	1	78	64	142	1.6
Health care setting	0	0	0	0	1	3	4	0.0
Total Adults/Adolescents	163	16	141	9	8 154	380	8 534	99.4
Children (under 13 years at AIDS diagnosis)								
Mother with/at risk for HIV infection	0	0	0	2	13	16	29	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	0	0	2	29	19	48	0.6
Sub-total	163	16	141	11	8 183	399	8 582	100.0
Other/undetermined ¹	17	0	6	2	293	17	336	
Total	180	16	147	13	8 476	416	8 918	

1 The 'Other/undetermined' exposure category includes 26 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 30 September 2002, and for two previous yearly intervals

Exposure category	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			%
	Male	Female	Male	Female	Male	Female	Total	
Male homosexual/ bisexual contact	61	–	48	–	5 025	–	5 025	83.8
Male homosexual/bisexual contact and injecting drug use	6	–	4	–	270	–	270	4.5
Injecting drug use	6	2	4	0	113	52	165	2.8
<i>Heterosexual</i>	2	1	1	0	78	43	121	
<i>Not further specified</i>	4	1	3	0	35	9	44	
Heterosexual contact	3	6	1	6	154	125	279	4.7
<i>Sex with injecting drug user</i>	0	0	0	0	4	11	15	
<i>Sex with bisexual male</i>	–	2	–	0	–	29	29	
<i>From a high prevalence country</i>	1	2	1	2	15	16	31	
<i>Sex with person from a high prevalence country</i>	0	0	0	0	18	10	28	
<i>Sex with person with medically acquired HIV</i>	0	0	0	0	2	7	9	
<i>Sex with HIV infected person, exposure not specified</i>	0	2	0	1	22	17	39	
<i>Not further specified</i>	2	0	0	3	93	35	128	
Haemophilia/coagulation disorder	3	0	1	0	93	3	96	1.6
Receipt of blood/tissue	0	2	0	0	68	54	122	2.0
Health care setting	0	0	0	0	1	2	3	0.0
Total Adults/Adolescents	79	10	58	6	5 724	236	5 960	99.4
Children (under 13 years at death following AIDS)								
Mother with/at risk for HIV infection	1	0	0	1	8	10	18	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	1	0	0	1	22	12	34	0.6
Sub-total	80	10	58	7	5 746	248	5 994	100.0
Other/undetermined ¹	5	0	0	0	178	11	208	
Total	85	10	58	7	5 924	259	6 202	

1 The 'Other/undetermined' exposure category includes 19 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 30 September 2002, and for two previous yearly intervals

State/Territory	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total	Rate ²
ACT	4	0	5	1	235	28	263	81.3
NSW ³	331	33	315	24	11 823	688	12 771	191.9
NT	3	1	4	4	115	14	129	64.6
QLD	86	14	104	10	2 227	185	2 419	65.6
SA	24	6	33	8	749	77	826	54.3
TAS	4	0	4	2	86	7	93	19.6
VIC ⁴	164	21	189	27	4 336	270	4 648	95.4
WA	39	10	24	13	1 006	144	1 156	60.1
Total⁵	655	85	678	89	20 577	1 413	22 305⁶	113.5

1 Fifty six people (25 NSW, 7 QLD, 18 VIC and 6 WA) whose sex was reported as transgender are included in the total columns of Tables 3.1 – 3.3

2 Rate per one hundred thousand current population. Population estimates by sex, State/Territory and calendar interval from *Australian Demographic Statistics* (Australian Bureau of Statistics).

3 Cumulative total for NSW includes 235 people whose sex was not reported.

4 Cumulative total for VIC includes 24 people whose sex was not reported.

5 Cumulative total for Australia includes 259 people whose sex was not reported.

6 Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 19 400 (range 18 950 to 19 850). 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 30 September 2002, and for two previous yearly intervals

Exposure category	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			%
	Male	Female	Male	Female	Male	Female	Total ¹	
Male homosexual/ bisexual contact	434	–	508	–	14 345	–	14 345	77.5
Male homosexual/bisexual contact and injecting drug use	32	–	21	–	737	–	737	4.0
Injecting drug use	30	9	16	2	619	190	817	4.4
<i>Heterosexual</i>	20	8	11	2	243	139	383	
<i>Not further specified</i>	10	1	5	0	376	51	434	
Heterosexual contact	83	70	63	80	1 089	917	2 009	10.8
<i>Sex with injecting drug user</i>	1	2	3	5	31	96	127	
<i>Sex with bisexual male</i>	–	6	–	6	–	121	121	
<i>From a high prevalence country</i>	28	36	19	34	222	249	472	
<i>Sex with person from a high prevalence country</i>	23	11	12	10	187	101	288	
<i>Sex with person with medically acquired HIV</i>	0	0	0	0	5	17	22	
<i>Sex with HIV infected person, exposure not specified</i>	6	8	3	12	62	133	196	
<i>Not further specified</i>	25	7	26	13	582	200	783	
Haemophilia/coagulation disorder	0	0	1	0	221	4	225	1.2
Receipt of blood/tissue	0	0	0	0	105	102	207	1.1
Health care setting ²	0	0	0	1	3	9	12	0.1
Total Adults/Adolescents¹	579	79	609	83	17 119	1 222	18 352	99.1
Children (under 13 years at HIV diagnosis)								
Mother with/at risk for HIV infection ³	1	1	0	3	39	31	70	0.4
Haemophilia/coagulation disorder	0	0	0	0	66	0	66	0.4
Receipt of blood/tissue	0	0	0	0	13	8	21	0.1
Total children	1	1	0	3	118	39	157	0.9
Sub-total	580	80	609	86	17 237	1 261	18 509	100.0
Other/undetermined ⁴	75	5	69	3	3 340	152	3 796	
Total¹	655	85	678	89	20 577	1 413	22 305⁵	

1 Total column includes people whose sex was not reported.

2 'Health care setting' includes 6 cases of occupationally acquired HIV infection and 4 cases of HIV transmission in surgical rooms.

3 A total of 274 children were notified as having been born to women with HIV infection, cumulative to 30 September 2002.

4 The 'Other/undetermined' exposure category includes 3 778 adults/adolescents and 18 children. Fifty six 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.

5 See footnote Table 3.1

Table 3.3 Number of new diagnoses of HIV infection by sex and age group, cumulative to 30 September 2002, and for two previous yearly intervals

Age group (years)	1 Oct 00 – 30 Sep 01		1 Oct 01 – 30 Sep 02		Cumulative to 30 Sep 02			
	Male	Female	Male	Female	Male	Female	Total ¹	%
0–2	1	1	0	1	43	20	64	0.3
3–12	0	0	0	2	90	21	111	0.5
0–12	1	1	0	3	133	41	175	0.8
13–19	7	4	7	5	428	91	528	2.4
20–29	144	41	167	28	6 889	579	7 590	34.0
30–39	263	21	285	39	7 659	401	8 163	36.6
40–49	148	11	138	8	3 647	150	3 840	17.2
50–59	57	2	61	3	1 238	54	1 305	5.9
60+	24	3	17	3	403	63	468	2.1
Not reported	11	2	3	0	180	34	236	1.0
Total¹	655	85	678	89	20 577	1 413	22 305	100.0

1 See footnotes Table 3.2

Table 3.4 Number of new diagnoses of HIV infection in the year 1 October 2001 to 30 September 2002 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 Oct 01 – 31 Mar 02		1 Apr 02 – 30 Sep 02		1 Oct 01 – 30 Sep 02		
	Male	Female	Male	Female	Male	Female	Total ¹
ACT	0	0	1	0	1	0	1
NSW ¹	45	1	48	0	93	1	95
NT	2	0	0	0	2	0	2
QLD	11	2	15	0	26	2	28
SA	5	0	4	0	9	0	9
TAS	1	0	1	0	2	0	2
VIC ¹	33	1	30	0	63	1	65
WA	1	3	2	2	3	5	8
Total¹	98	7	101	2	199	9	210

1 Totals includes people whose sex was reported as transgender.

Table 3.5 Number of new diagnoses of HIV infection in the year 1 October 2001 to 30 September 2002 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 Oct 01 – 31 Mar 02		1 Apr 02 – 30 Sep 02		1 Oct 01– 30 Sep 02		
	Male	Female	Male	Female	Male	Female	Total ¹
Male homosexual/bisexual contact	87	–	96	–	183	–	183
Male homosexual/bisexual contact and injecting drug use	4	–	2	–	6	–	6
Injecting drug use (female and heterosexual male)	1	0	0	0	1	0	1
Heterosexual contact	5	7	0	1	5	8	13
Health care setting	0	0	0	1	0	1	1
Other/undetermined ¹	1	0	3	0	4	0	6
Total¹	98	7	101	2	199	9	210

¹ Totals includes people whose sex was reported as transgender.

Table 3.6 Number of new diagnoses of HIV infection in the year 1 October 2001 to 30 September 2002 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

Age group (years)	1 Oct 01 – 31 Mar 02		1 Apr 02 – 30 Sep 02		1 Oct 01 – 30 Sep 02		
	Male	Female	Male	Female	Male	Female	Total ¹
13–19	3	1	0	0	3	1	4
20–29	29	1	27	0	56	1	57
30–39 ¹	47	5	47	1	94	6	102
40–49	12	0	20	0	32	0	32
50–59	6	0	6	1	12	1	13
60+	1	0	1	0	2	0	2
Total¹	98	7	101	2	199	9	210

¹ Totals include two people whose sex was reported as transgender.

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 July to 30 September 2002

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	1 401	960	644	364	5	0	5
Livingstone Road Sexual Health Centre, Marrickville, NSW	343	454	153	169	0	1	1
Brisbane Sexual Health Clinic, QLD	911	822	353	292	3	0	3
Gold Coast Sexual Health Clinic, QLD	471	636	154	248	0	0	0
Clinic 275, Adelaide, SA	1 070	761	803	507	3	0	3
Melbourne Sexual Health Centre, VIC	1 746	1 565	794	669	4	0	4
Total	5 942	5 198	2 901	2 249	15	1	16

Table 4.2 Number of people seen¹ 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 July to 30 September 2002

Exposure category	Previous negative HIV antibody test		% retested for HIV antibody		Newly diagnosed with HIV infection			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/ bisexual contact	704	–	63.5	–	10	–	10	2.2
Male homosexual/bisexual contact and injecting drug use	61	–	52.5	–	0	–	0	0.0
Injecting drug use (female and heterosexual male)	134	94	59.7	48.9	0	0	0	0.0
Heterosexual contact	1 290	1 360	45.0	39.4	1	0	1	0.1
<i>outside Australia</i>	166	112	58.4	55.4	1	0	1	0.6
<i>within Australia only</i>	1 124	1 248	43.1	38.0	0	0	0	0.0
Sex worker	–	273	–	54.9	–	0	0	0.0
Sex worker and injecting drug use	–	39	–	56.4	–	0	0	0.0
Other/undetermined	38	48	42.1	50.0	0	0	0	0.0
Total	2 227	1 814	51.9	42.9	11	0	11	0.6

1 Data from the Melbourne Sexual Health Centre, VIC, not available for this quarter.

Table 4.3 Number of people seen¹ 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 July to 30 September 2002

Exposure category	No previous HIV antibody test		% tested for HIV antibody		Newly diagnosed with HIV infection			%
	Male	Female	Male	Female	Male	Female	Total	
Male homosexual/bisexual contact	311	–	61.7	–	0	–	0	0.0
Male homosexual/bisexual contact and injecting drug use	25	–	60.0	–	0	–	0	0.0
Injecting drug use (female and heterosexual male)	43	47	76.7	72.3	0	0	0	0.0
Heterosexual contact	1 246	1 467	55.9	42.7	0	1	1	0.1
<i>outside Australia</i>	155	140	71.0	63.6	0	1	1	0.5
<i>within Australia only</i>	1 091	1 327	53.8	40.5	0	0	0	0.0
Sex worker	–	119	–	74.0	–	0	0	0.0
Sex worker and injecting drug use	–	26	–	50.0	–	0	0	0.0
Other/undetermined	127	130	11.0	30.8	0	0	0	0.0
Total	1 752	1 789	54.3	44.8	0	1	1	0.1

¹ Data from the Melbourne Sexual Health Centre, VIC, not available for this quarter.

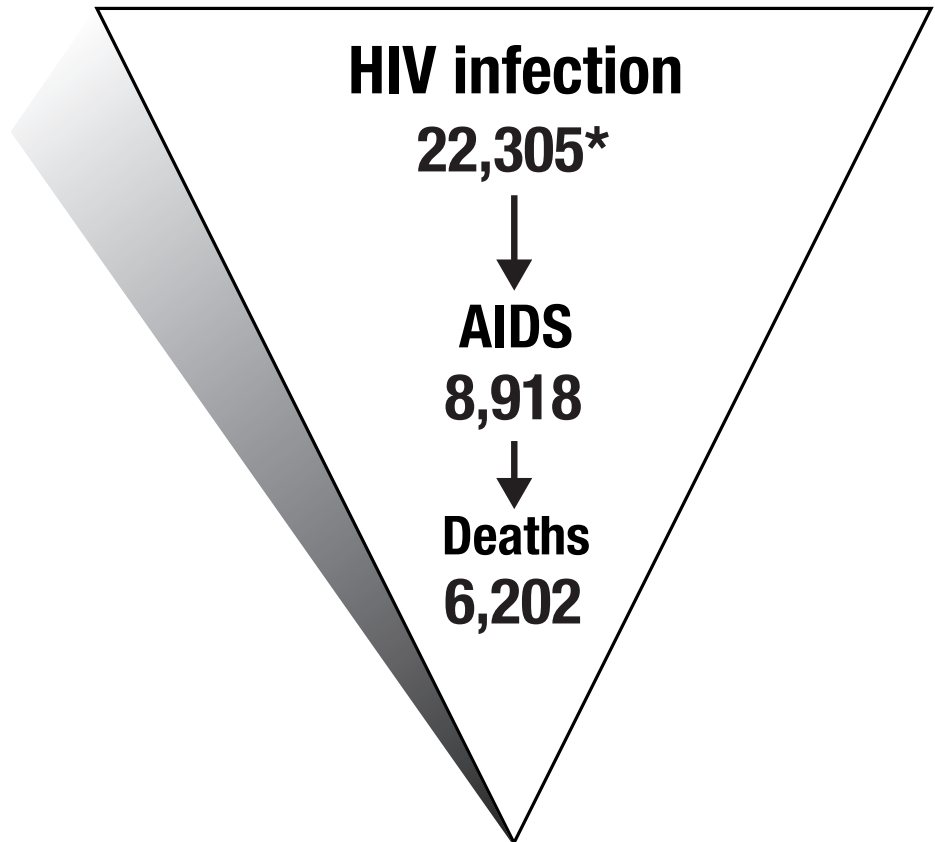
Table 4.4 Number of people seen¹, number of people tested for HIV antibody and number of people newly diagnosed with HIV infection, by sex and age group, during the quarter 1 July to 30 September 2002

Age group (years)	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total
13–19	150	453	90	179	0	0	0
20–29	1 652	1 891	929	840	4	1	5
30–39	1 318	854	651	380	4	0	4
40–49	650	311	286	148	3	0	3
50–59	299	100	114	26	0	0	0
60+	127	24	37	7	0	0	0
Total	4 196	3 633	2 107	1 580	11	1	12

¹ Data from the Melbourne Sexual Health Centre, VIC, not available for this quarter.

The HIV Epidemic in Australia

A cumulative profile to 30 September 2002



* Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 19,400 (range 18,950 to 19,850).



Diagnoses in the third quarter

1 July – 30 September 2002

- a total of 194 diagnoses of HIV infection, 30 diagnoses of AIDS and 15 deaths following AIDS were reported, by 31 December 2002, to have occurred in the third quarter of 2002
- following adjustment for reporting delay, the estimated numbers of AIDS diagnoses and deaths following AIDS occurring in the third quarter of 2002 were 57 and 22
- in comparison, 212 diagnoses of HIV infection, 56 diagnoses of AIDS and 32 deaths following AIDS were reported, by 31 December 2002, to have occurred in the third quarter of 2001

New HIV infection

During the third quarter of 2002, 46 males were reported as having newly acquired HIV infection identified by a negative test within the 12 months prior to diagnosis or the diagnosis of HIV seroconversion illness. A history of male homosexual contact, with or without a history of injecting drug use, was reported in 43 (93.5%) of cases.

Diagnoses in the year to 30 September 2002

- 772 diagnoses of HIV infection
- 161 diagnoses of AIDS
- 65 deaths following AIDS were reported by 31 December 2002

HIV diagnoses

People diagnosed with HIV infection in the year to 30 September 2002 had an average age of 35 years and 1.6% was in the age group 13 – 19 years

- 87.8% were male, 11.5% were female and sex was reported as transgender for 0.7% of cases.
- of 609 cases of HIV infection, newly diagnosed among males in the year to 30 September 2002 for which exposure to HIV was recorded, a history of male homosexual contact, with or without a history of injecting drug use, was reported in 86.7%.

Total diagnoses to 30 September 2002

- 22,305 diagnoses of HIV infection
- 19,400 diagnoses of HIV infection following adjustment for multiple reporting
- 8,918 diagnoses of AIDS
- 6,202 deaths following AIDS were reported by 31 December 2002

HIV testing in sexual health clinics

Six sexual health clinics in Adelaide, Brisbane, Gold Coast, Melbourne and Sydney tested 5,150 people in the quarter 1 July – 30 September 2002 who were not previously known to have HIV infection

- of 1,753 people reported as having been tested for the first time, 1 (0.1%) was found to have HIV infection
- of 1,934 people reported as having been retested following a previous negative test, 11 (0.6%) were found to have HIV infection
- of 479 men who reported a history of homosexual contact, with or without a history of injecting drug use, who were retested following a previous negative test, 10 (2.1%) were newly diagnosed with HIV infection

Contents

Underreporting of AIDS in Australia, 1988 – 1997	1
Announcements	2
National AIDS Registry	5
National HIV Database	10
Sentinel HIV Surveillance in sexual health clinics	14
Australian HIV Surveillance Update	17
Notes	20

List of tables and figures

Table 1.1	Number of deaths attributed to AIDS, registered with the National Death Index, which were matched to AIDS cases and deaths following AIDS notified to the National AIDS Registry, cumulative to 31 December 1997	3
Table 1.2	Number of deaths attributed to AIDS on the National Death Index which were not matched to AIDS cases, number which were matched and possibly matched following clerical review and number for which a record of HIV/AIDS diagnosis was not found, by State/Territory of death	4
Table 2.1	Cases of AIDS and deaths following AIDS by sex and State/Territory in which diagnosis of AIDS was made, cumulative to 30 September 2002, and for two previous yearly intervals	5
Table 2.2	Incidence of AIDS per million current population by sex and State/Territory of diagnosis for the two most recent yearly intervals	6
Table 2.3	Cases of AIDS and deaths following AIDS by sex and age group, cumulative to 30 September 2002, and for two previous yearly intervals	7
Table 2.4	Cases of AIDS by sex and exposure category, cumulative to 30 September 2002, and for two previous yearly intervals	8
Table 2.5	Deaths following AIDS by sex and exposure category, cumulative to 30 September 2002, and for two previous yearly intervals	9
Table 3.1	Number of new diagnoses of HIV infection by sex and State/Territory, cumulative to 30 September 2002, and for two previous yearly intervals	10
Table 3.2	Number of new diagnoses of HIV infection for which exposure category was reported, by sex and exposure category, cumulative to 30 September 2002, and for two previous yearly intervals	11
Table 3.3	Number of new diagnoses of HIV infection by sex and age group, cumulative to 30 September 2002, and for two previous yearly intervals	12
Table 3.4	Number of new diagnoses of HIV infection in the year 1 October 2001 to 30 September 2002 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	12
Table 3.5	Number of new diagnoses of HIV infection in the year 1 October 2001 to 30 September 2002 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	13
Table 3.6	Number of new diagnoses of HIV infection in the year 1 October 2001 to 30 September 2002 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	13
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 July to 30 September 2002	14
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 July to 30 September 2002	14
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 July to 30 September 2002	15
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 July to 30 September 2002	15

Australian HIV Surveillance Report

National Centre in HIV Epidemiology and Clinical Research

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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.

Abbreviations: HIV is the human immunodeficiency virus, and unless otherwise specified, refers to HIV-1 only. AIDS is the acquired immunodeficiency syndrome and STI stands for sexually transmissible infection. High prevalence countries are those of sub-Saharan Africa, the Caribbean and specific countries in South East Asia (Cambodia, Myanmar and Thailand), where HIV prevalence is above 1% and transmission 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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State/Territory publications of surveillance data, available through the Internet, are listed below:

NSW Public Health Bulletin	www.health.nsw.gov.au/public-health/phb/phb.html
The Northern Territory Disease Control Bulletin	www.nt.gov.au/nths/public/cdc/bulletin.htm
Sexually Transmitted Diseases in South Australia	www.stdservices.on.net/publications
Victorian Infectious Diseases Bulletin	www.dhs.vic.gov.au/phd/vidb/
Disease WATCH	www.public.health.wa.gov.au/

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