



National Centre in HIV Epidemiology and Clinical Research

Australian HIV Surveillance Report

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Newly diagnosed HIV infection in Australia attributed to heterosexual contact

In Australia, the extent of HIV transmission through heterosexual contact has remained controversial. National AIDS surveillance indicates that exposure to HIV in the vast majority of AIDS cases was due to male homosexual contact and relatively small numbers of AIDS cases were attributed to heterosexual contact. However, the patient's report of exposure to HIV may be incomplete or inaccurate at AIDS diagnosis, which occurs a median of at least 10 years following HIV acquisition. More than 40% of 540 AIDS cases diagnosed by 30 September 2001 for which exposure to HIV was attributed to heterosexual contact had not reported a sexual partner with or at risk of HIV infection (NCHECR 2002). Since HIV infection may be diagnosed several years prior to AIDS diagnosis, monitoring exposure to HIV among cases of newly diagnosed HIV infection has the potential to provide a more accurate and complete description of HIV exposure history. We describe the pattern of heterosexually acquired HIV infection, based on patient self-report of exposure to HIV following diagnosis of HIV infection.

Information sought on cases of newly diagnosed HIV infection included the person's sex, date of birth, date of HIV diagnosis, and his or her reported HIV risk behaviour (McDonald *et al* 1994a). HIV risk behaviour was classified into a hierarchical set of mutually exclusive exposure categories. A history of male homosexual contact was considered high risk behaviour for HIV infection, injecting drug use an intermediate risk and heterosexual contact only as a relatively low risk. Exposure to HIV was categorised as heterosexual contact if the person reported no risk behaviours other than heterosexual contact, with a partner with or at risk of HIV infection.

HIV infection attributed to heterosexual contact was further categorised according to the risk behaviour of the sexual partner. People who originated from a high HIV prevalence country and who reported a history of heterosexual contact with a partner from that country were classified in the sub-category "From a high prevalence country". High HIV prevalence countries included countries in sub-Saharan Africa and specific countries in South East Asia (Thailand, Cambodia and Myanmar) where HIV prevalence was above 1%. People with newly diagnosed HIV infection who reported a history of heterosexual contact only, either in Australia or overseas, with a partner from a high HIV prevalence country, were classified in the sub-category "heterosexual contact with a partner from a high prevalence country". Women who reported heterosexual contact with a man who also had sex with men were classified as "heterosexual contact with a bisexual male", and men and women who reported heterosexual contact only, with a partner with a history of injecting drug use were classified as "heterosexual contact with an injecting drug user". Exposure to HIV was classified as "heterosexual contact, not further specified" if a history of heterosexual contact only was reported and a sexual partner with or at risk of HIV infection could not be identified or recalled.

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Announcements

National meetings

The **3rd Australasian Conference on Hepatitis C** will be held in Melbourne, Victoria, on 25 – 27 March 2002. Further information may be obtained through the Secretariat, ASN, PO Box 200 Balnarring VIC 3926.

Telephone: 03 5983 2400
E-mail: mp@asnevents.net.au
Website: www.hepc.conf.au

The **Australasian Sexual Health Conference** will be held in Perth, Western Australia, on 28 May – 1 June 2002. Further information may be obtained from Dr Heather Lyttle,

Telephone: 08 9224 2178
Facsimile: 08 9224 3557
E-mail: Heather.Lyttle@health.wa.gov.au

Conference Secretariat: Dart Associates,
PO Box 781 Lane Cove NSW 2066.

Telephone: 02 9418 9396/9397
Facsimile: 02 9418 9398
E-mail: dartconv@mpx.com.au
Website: www.acshp.org.au

The **19th National Serology Reference Laboratory, Australia Workshop on Serology** will be held in Melbourne on 20 – 22 August 2002. Further information may be obtained from Debra Irvine, National Serology Reference Laboratory, Australia, 4th Floor, Healy Building, 41 Victoria Parade, Fitzroy VIC 3065.

Telephone: 03 9418 1111
Facsimile: 03 9418 1155
E-mail: debra@nrl.gov.au
Website: www.nrl.gov.au

The **Australasian Society for HIV Medicine Conference 2002 Complex Problems: Emerging Solutions** will be held in Sydney, New South Wales, on 23 – 26 October 2002.

Further information may be obtained from OzAccom Conference Services,
PO Box 164 Fortitude Valley QLD 4006.

Telephone: 07 3854 1611
Facsimile: 07 3854 1507
E-mail: ashm2002@ozaccom.com.au
Website: www.ashm.org.au

International meeting

The **XIV International AIDS Conference** will be held in Barcelona, Spain on 7 – 12 July 2002. Further information may be obtained from the Communications Department, XIV International AIDS Conference,

Calle Pomaret 21, 08017 Barcelona, Spain.
E-mail: kbennett@aids2002.com
Website: www.aids2002.com

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Because HIV infection following exposures other than male homosexual contact is a relatively rare occurrence in Australia, standardised documentation of HIV exposure history was routinely sought in cases attributed to other exposures, including heterosexual contact (McDonald *et al* 1994b). An exposure assessment questionnaire was forwarded to the diagnosing doctor by State/Territory health authorities, asking the doctor to provide further information on the patient's HIV exposure history including their country of birth, and year of arrival in Australia if born overseas. The doctor was also asked to indicate if they were generally satisfied with the patient's reported exposure history.

In January 1996 – September 2001, 4,510 cases of HIV infection were newly diagnosed among adults/adolescents (aged 13 years or older at HIV diagnosis) in Australia and 871 (19.3%) cases attributed their exposure to HIV to heterosexual contact only. While the total number of new HIV diagnoses has declined steadily, from 910 in 1996 to 745 in 2000 and to 564 in the first nine months of 2001, the number of diagnoses attributed to heterosexual contact has remained relatively stable at around 150 per year (Table 1.1). The mean age at HIV diagnosis and the male to female sex ratio, among cases attributed to heterosexual contact, was 34 years and 1.2:1, respectively, whereas among other cases, the mean age and sex ratio was 36 years and 59:1, respectively.

Table 1.1 Number of new diagnoses of HIV infection attributed to heterosexual contact, January 1996 – 30 September 2001, by year and HIV exposure category of sexual partner

HIV exposure category of the sexual partner	1996	1997	1998	1999	2000	2001 ¹	1996–2001 ¹	%	Male: Female
Injecting drug use	9	9	10	7	7	1	43	4.9	0.4:1
Bisexual male	6	3	6	9	4	5	33	3.8	–
Person from a high prevalence country	40	40	63	45	60	39	287	33.0	1:1
<i>Sub-Saharan Africa</i>	25	21	28	21	35	20	150		
<i>South East Asia</i>	13	16	25	18	22	12	106		
<i>Not reported</i>	2	3	10	6	3	7	31		
Partner from a high prevalence country	28	24	29	27	43	28	179	20.6	2:1
<i>Sub-Saharan Africa</i>	8	4	7	10	10	8	47		
<i>South East Asia</i>	11	13	13	11	20	9	77		
<i>Not reported</i>	9	7	9	6	13	11	55		
Person with medically acquired HIV	1	0	1	0	3	0	5	0.6	0.7:1
Person with HIV infection, other exposure	13	17	27	14	12	8	91	10.4	0.4:1
Not further specified	40	44	42	44	34	29	233	26.7	3:1
Total heterosexual contact	137	137	178	146	163	110	871	100.0	1.2:1
Total diagnoses	910	811	760	720	745	564	4 510		8.8:1

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Diagnoses to 30 September 2001

People from a wide range of countries of birth were included among Australian HIV diagnoses for which exposure to HIV was due to heterosexual contact. Australian born people accounted for 25.9% of Australian HIV diagnoses attributed to heterosexual contact. People born in countries in South East Asia (21.1%), sub-Saharan Africa (18.4%), Europe (5.5%), the Pacific Islands (2.6%), North, Central and South America (2.2%), and the Middle East (0.6%) also contributed to heterosexually acquired HIV infections diagnosed in Australia. Country of birth was not reported in 23.7% of cases.

Among cases of newly diagnosed HIV infection for which exposure to HIV was attributed to heterosexual contact, one third had acquired HIV infection in a high prevalence country, 20.6% reported heterosexual contact with a partner from a high prevalence country and in 26.7% of cases, the sexual partner with or at risk of HIV infection was not specified (Table 1.1). Relatively small numbers of cases were attributed to heterosexual contact with an injecting drug user (4.9%), a bisexual man (3.8%) or a person with medically acquired HIV infection (0.6%).

The ratio of male to female cases differed substantially by the risk behaviour of the sexual partner. Among cases of HIV infection acquired in a high prevalence country, the sex ratio was 1:1, whereas it was 2:1 among cases for which exposure to HIV was attributed to heterosexual contact with a partner from a high prevalence country. The male to female ratio was 0.4:1 among cases attributed to heterosexual contact with an HIV infected person with an unspecified exposure history, and was 3:1 among cases whose exposure was categorised as "heterosexual contact, not further specified".

Of 287 cases from high HIV prevalence countries, the majority (52%) came from countries in sub-Saharan Africa; 37% came from countries in South East Asia including Thailand (62.3%), Cambodia (24.5%) and Myanmar (7.5%) and for 11% of cases, country of birth was not reported. Of the 150 cases from sub-Saharan Africa, information on year of arrival in Australia was available for 112 (87%) of 129 cases for which an exposure assessment response was available. Almost half of the cases of HIV infection acquired in sub-Saharan Africa had arrived in Australia either in the same year as they were diagnosed or in the previous year; 82% of cases had arrived in Australia within five years of their HIV diagnosis. Of 72 cases from South East Asia with information on year of arrival, 70% had arrived in Australia in the same year or the year prior to HIV diagnosis and 92% had arrived within five years of their diagnosis. The doctor was generally satisfied with the patient's reported exposure history in 91.4% of cases attributed to exposure in a high HIV prevalence country.

Table 1.2 Number of cases of HIV infection attributed to heterosexual contact with a partner from a high prevalence country by year, country/region of birth of the case and region of birth of the sexual partner

Country/region of birth of case/ Region of birth of partner	1996	1997	1998	1999	2000	2001 ¹	Total	%
Australia	10	6	13	17	16	9	71	39.7
<i>Sub-Saharan Africa</i>	5	0	5	7	5	4	26	36.6
<i>South East Asia</i>	4	6	8	9	8	4	39	54.9
<i>Not reported</i>	1	0	0	1	3	1	6	8.5
Other country of birth	7	12	7	6	18	9	59	33.0
<i>Sub-Saharan Africa</i>	1	4	2	3	4	4	18	30.5
<i>South East Asia</i>	6	6	5	2	11	5	35	59.3
<i>Not reported</i>	0	2	0	1	3	0	6	10.2
Not reported	11	6	9	4	9	10	49	27.4
<i>Sub-Saharan Africa</i>	2	0	0	0	1	0	3	6.1
<i>South East Asia</i>	1	1	0	0	1	0	3	6.1
<i>Not reported</i>	8	5	9	4	7	10	43	87.8
Total	28	24	29	27	43	28	179	100.0

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Diagnoses to 30 September 2001

Among 179 cases of HIV infection attributed to heterosexual contact with a partner from a high prevalence country, 26% reported a partner from sub-Saharan Africa and 43% a partner from South East Asia; country/region of birth was not reported for 31% of cases (Table 1.1). Almost 40% of the cases of HIV infection attributed to heterosexual contact with a partner from a high prevalence country were among Australian born cases (Table 1.2). A sexual partner from a wide range of countries was reported by the 26 Australian born cases whose exposure to HIV was attributed to heterosexual contact with a partner from sub-Saharan Africa. By contrast, 85% of 39 Australian born cases, with a history of heterosexual contact with a partner from South East Asia, reported a partner from Thailand. Cases born in countries other than Australia accounted for one third of the cases attributed to heterosexual contact with a partner from a high prevalence country and the majority (59.3%) of these cases reported heterosexual contact with a partner from South East Asia, predominantly Thailand (65.7%). Around 10% of cases born in high prevalence countries in sub-Saharan Africa and in South East Asia had evidence of newly acquired HIV infection following heterosexual contact, either in Australia or in another country, with a partner from their country/region of birth. The doctor reported being generally satisfied with the patient's exposure history in 88.9% of cases attributed to heterosexual contact with a partner from a high prevalence country.

A sexual partner with or at risk of HIV infection was not reported in 233 cases attributed to heterosexual contact. Among these cases, country of birth was reported as Australia in 33.5%, other low HIV prevalence countries in 36% and was not reported in 30.5%. The doctor reported being generally satisfied with the patient's reported exposure history in 68% of cases attributed to "heterosexual contact, not further specified" whereas the doctor was generally satisfied with the reported exposure history in 91.4% of cases in which a sexual partner at risk of HIV infection was specified ($p < 0.0005$).

The information available through national surveillance for newly diagnosed HIV infection and assessment of patient report of exposure to HIV suggests that the number of HIV diagnoses attributed to heterosexual contact has remained relatively stable in Australia over the past six years. However, the extent of heterosexually acquired infection may be overestimated, especially among cases attributed to heterosexual contact for which a partner at risk of HIV infection was not specified and among cases with a partner from an unspecified high prevalence country. Nevertheless, heterosexual contact in high HIV prevalence countries in sub-Saharan Africa and in South East Asia, or with partners from these countries, contributes substantially to heterosexually acquired HIV infection diagnosed in Australia.

Reported by

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References

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McDonald AM, Imrie A, Neilsen G, Downie J, Gertig DM, Robertson P, Guinan J, Mullins S and Kaldor JM. Assessment of self-report in HIV surveillance: a pilot study. *Australian Journal of Public Health* 1994b; 18 (4): 429 – 432

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 2001, and for two previous yearly intervals

Cases

State/Territory	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			
	Male	Female	Male	Female	Male	Female	Total†	%
ACT	1	1	1	0	88	9	97	1.1
NSW	90	17	60	8	4 791	208	5 011	57.6
NT	0	0	2	0	37	0	37	0.4
QLD	35	3	27	1	876	51	929	10.7
SA	5	0	7	1	360	26	386	4.4
TAS	1	0	0	0	45	3	48	0.6
VIC	51	2	42	4	1 720	76	1 805	20.7
WA	10	1	4	0	363	27	392	4.5
Total	193	24	143	14	8 280	400	8 705	100.0

Deaths

State/Territory	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			
	Male	Female	Male	Female	Male	Female	Total†	%
ACT	3	1	2	0	70	4	74	1.2
NSW	65	2	37	3	3 271	118	3 397	56.1
NT	0	0	0	0	24	0	24	0.4
QLD	13	2	12	2	587	35	624	10.3
SA	4	0	8	1	241	16	257	4.3
TAS	1	0	0	0	29	2	31	0.5
VIC	30	2	21	3	1 311	53	1 371	22.7
WA	5	1	1	0	256	17	274	4.5
Total	121	8	81	9	5 789	245	6 052	100.0

† Totals include 25 AIDS cases and 18 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 1999 – 30 Sep 2000			1 Oct 2000 – 30 Sep 2001		
	Male	Female	Total	Male	Female	Total
ACT	6.5	6.4	6.4	6.4	0.0	3.2
NSW	28.1	5.2	16.6	18.5	2.4	10.4
NT	0.0	0.0	0.0	19.2	0.0	10.2
QLD	19.7	1.7	10.7	15.0	0.6	7.8
SA	6.8	0.0	3.3	9.4	1.3	5.3
TAS	4.3	0.0	2.1	0.0	0.0	0.0
VIC	21.7	0.8	11.1	17.6	1.6	9.8
WA	10.6	1.1	5.9	4.2	0.0	2.1
Total	20.3	2.5	11.4	14.9	1.4	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 2001, and for two previous yearly intervals

Cases¹

Age group (years)	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			
	Male	Female	Male	Female	Male	Female	Total†	%
0–2	0	1	0	0	9	8	17	0.2
2–12	0	0	0	0	20	9	29	0.3
0–12	0	1	0	0	29	17	46	0.5
13–19	0	0	0	0	27	4	31	0.4
20–29	18	5	11	2	1 352	102	1 467	16.9
30–39	79	13	56	8	3 481	146	3 635	41.7
40–49	58	3	39	3	2 318	66	2 386	27.4
50–59	29	1	23	1	807	32	841	9.7
60+	9	1	14	0	266	33	299	3.4
Total	193	24	143	14	8 280	400	8 705	100.0

Deaths²

Age group (years)	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			
	Male	Female	Male	Female	Male	Female	Total†	%
0–2	0	0	0	0	5	5	10	0.2
2–12	0	0	1	0	17	6	23	0.3
0–12	0	0	1	0	22	11	33	0.5
13–19	1	0	0	0	14	3	17	0.3
20–29	12	0	2	2	672	44	726	12.0
30–39	46	6	27	4	2 321	91	2 418	40.0
40–49	40	0	29	0	1 839	42	1 883	31.1
50–59	16	0	12	3	692	25	717	11.8
60+	6	2	10	0	229	29	258	4.3
Total	121	8	81	9	5 789	245	6 052	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 2001, and for two previous yearly intervals

Exposure category	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			%
	Male	Female	Male	Female	Male	Female	Total	
Male homosexual/ bisexual contact	131	–	102	–	6 884	–	6 884	82.1
Male homosexual/ bisexual contact and injecting drug use	10	–	5	–	378	–	378	4.5
Injecting drug use	11	2	2	3	180	90	270	3.2
<i>Heterosexual</i>	6	2	1	1	116	69	185	
<i>Not further specified</i>	5	0	1	2	64	21	85	
Heterosexual contact	20	19	22	11	330	210	540	6.5
<i>Sex with injecting drug user</i>	0	4	0	0	7	21	28	
<i>Sex with bisexual male</i>	–	2	–	0	–	41	41	
<i>From a high prevalence country</i>	8	5	5	6	63	44	107	
<i>Sex with person from a high prevalence country</i>	4	1	8	1	51	15	66	
<i>Sex with person with medically acquired HIV</i>	0	1	0	0	2	10	12	
<i>Sex with HIV infected person, exposure not specified</i>	2	4	0	2	29	28	57	
<i>Not further specified</i>	6	2	9	2	178	51	229	
Haemophilia/coagulation disorder	3	0	0	0	115	3	118	1.4
Receipt of blood/tissue	0	1	0	0	78	63	141	1.7
Health care setting	0	0	0	0	1	3	4	0.0
Total Adults/Adolescents	175	22	131	14	7 966	369	8 335	99.4
Children (under 13 years at AIDS diagnosis)								
Mother with/at risk for HIV infection	0	1	0	0	13	14	27	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	0	0	29	17	46	0.6
Sub-total	175	23	131	14	7 995	386	8 381	100.0
Other/undetermined ¹	18	1	12	0	285	14	324	
Total	193	24	143	14	8 280	400	8 705	

1 The 'Other/undetermined' exposure category includes 25 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 2001, and for two previous yearly intervals

Exposure category	1 Oct 99 - 30 Sep 00		1 Oct 00 - 30 Sep 01		Cumulative to 30 Sep 01			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/ bisexual contact	85	–	57	–	4 909	–	4 909	83.9
Male homosexual/ bisexual contact and injecting drug use	9	–	6	–	265	–	265	4.5
Injecting drug use	5	0	6	2	108	51	159	2.7
<i>Heterosexual</i>	3	0	2	1	77	43	120	
<i>Not further specified</i>	2	0	4	1	31	8	39	
Heterosexual contact	8	7	3	5	150	117	267	4.6
<i>Sex with injecting drug user</i>	1	3	0	0	3	11	14	
<i>Sex with bisexual male</i>	–	0	–	2	–	29	29	
<i>From a high prevalence country</i>	3	0	1	2	14	14	28	
<i>Sex with person from a high prevalence country</i>	1	0	0	0	17	10	27	
<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	0	0	1	22	15	37	
<i>Not further specified</i>	3	4	2	0	92	31	123	
Haemophilia/coagulation disorder	3	0	3	0	92	3	95	1.6
Receipt of blood/tissue	0	0	0	2	67	53	120	2.1
Health care setting	0	0	0	0	1	2	3	0.0
Total Adults/Adolescents	110	7	75	9	5 592	226	5 818	99.4
Children (under 13 years at death following AIDS)								
Mother with/at risk for HIV infection	0	0	1	0	8	9	17	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	0	1	0	22	11	33	0.6
Sub-total	110	7	76	9	5 614	237	5 851	100.0
Other/undetermined ¹	11	1	5	0	175	8	201	
Total	121	8	81	9	5 789	245	6 052	

1 The 'Other/undetermined' exposure category includes 18 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 2001, and for two previous yearly intervals

State/Territory	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			
	Male	Female	Male	Female	Male	Female	Total	Rate ²
ACT	9	1	4	0	230	27	257	82.0
NSW ³	346	38	320	32	11 487	665	12 417	190.5
NT	3	0	3	1	111	10	121	61.5
QLD	106	18	86	14	2 128	175	2 310	63.6
SA	23	2	24	6	715	69	784	52.2
TAS	0	0	2	0	80	5	85	18.1
VIC ⁴	158	16	162	22	4 149	244	4 433	91.8
WA	38	10	33	7	973	130	1 109	57.9
Total⁵	683	85	634	82	19 873	1 325	21 516⁶	111.1

1 Fifty people (21 NSW, 7 QLD, 16 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 244 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 268 people whose sex was not reported.

6 Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 18 650 (range 18 200 to 19 100). 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 2001, and for two previous yearly intervals

Exposure category	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			%
	Male	Female	Male	Female	Male	Female	Total ¹	
Male homosexual/ bisexual contact	468	–	414	–	13 753	–	13 753	77.6
Male homosexual/ bisexual contact and injecting drug use	26	–	28	–	708	–	708	4.0
Injecting drug use	27	4	27	9	600	188	796	4.5
<i>Heterosexual</i>	16	4	17	8	228	137	366	
<i>Not further specified</i>	11	0	10	1	372	51	430	
Heterosexual contact	97	78	78	64	1 025	836	1 864	10.5
<i>Sex with injecting drug user</i>	1	7	1	2	31	90	121	
<i>Sex with bisexual male</i>	–	6	–	6	–	115	115	
<i>From a high prevalence country</i>	31	28	23	27	194	200	395	
<i>Sex with person from a high prevalence country</i>	28	16	21	14	176	100	276	
<i>Sex with person with medically acquired HIV</i>	0	3	0	0	5	17	22	
<i>Sex with HIV infected person, exposure not specified</i>	4	11	4	6	58	122	181	
<i>Not further specified</i>	33	7	29	9	561	192	754	
Haemophilia/coagulation disorder	0	0	0	0	220	4	224	1.3
Receipt of blood/tissue	0	0	0	0	103	102	205	1.1
Health care setting ²	0	0	0	0	3	8	11	0.1
Total Adults/Adolescents¹	618	82	547	73	16 412	1 138	17 561	99.1
Children (under 13 years at HIV diagnosis)								
Mother with/at risk for HIV infection	1	1	1	1	39	28	67	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	1	1	118	36	154	0.9
Sub-total	619	83	548	74	16 530	1 174	17 715	100.0
Other/undetermined ³	64	2	86	8	3 343	151	3 801	
Total¹	683	85	634	82	19 873	1 325	21 516⁴	

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' exposure category includes 3 783 adults/adolescents and 18 children. Fifty 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 footnote Table 3.1

Table 3.3 Number of new diagnoses of HIV infection by sex and age group, cumulative to 30 September 2001, and for two previous yearly intervals

Age group (years)	1 Oct 99 – 30 Sep 00		1 Oct 00 – 30 Sep 01		Cumulative to 30 Sep 01			%
	Male	Female	Male	Female	Male	Female	Total ¹	
0–2	0	1	1	1	43	19	63	0.3
3–12	1	0	0	0	90	19	109	0.5
0–12	1	1	1	1	133	38	172	0.8
13–19	7	3	7	4	418	86	513	2.4
20–29	153	35	141	39	6 703	547	7 370	34.2
30–39	293	33	259	22	7 374	366	7 846	36.5
40–49	134	9	139	9	3 503	142	3 690	17.1
50–59	69	0	53	2	1 176	51	1 240	5.8
60+	20	2	22	2	386	59	447	2.1
Not reported	6	2	12	3	180	36	238	1.1
Total¹	683	85	634	82	19 873	1 325	21 516	100.0

1 See footnotes Table 3.2

Table 3.4 Number of new diagnoses of HIV infection in the year 1 October 2000 to 30 September 2001 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 00 – 31 Mar 01		1 Apr 01 – 30 Sep 01		1 Oct 00 – 30 Sep 01		
	Male	Female	Male	Female	Male	Female	Total ³
ACT	0	0	2	0	2	0	2
NSW ¹	39	2	45	3	84	5	90
NT	1	1	1	0	2	1	3
QLD	16	2	9	1	25	3	28
SA	2	0	3	1	5	1	6
TAS	1	0	0	0	1	0	1
VIC	31	1	17	1	48	2	50
WA ²	5	0	3	1	8	1	10
Total³	95	6	80	7	175	13	190

1 Total includes one person whose sex was not reported.

2 Total includes one person whose sex was reported as transgender.

3 Total includes one person whose sex was reported as transgender and one person whose sex was not reported.

Table 3.5 Number of new diagnoses of HIV infection in the year 1 October 2000 to 30 September 2001 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 00 – 31 Mar 01		1 Apr 01 – 30 Sep 01		1 Oct 00 – 30 Sep 01		
	Male	Female	Male	Female	Male	Female	Total ¹
Male homosexual/bisexual contact	85	–	63	–	148	–	148
Male homosexual/bisexual contact and injecting drug use	0	–	6	–	6	–	6
Injecting drug use (female and heterosexual male)	4	1	4	1	8	2	11
Heterosexual contact	4	5	3	4	7	9	16
Health care setting	0	0	0	0	0	0	0
Other/undetermined	2	0	4	2	6	2	9
Total¹	95	6	80	7	175	13	190

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

Table 3.6 Number of new diagnoses of HIV infection in the year 1 October 2000 to 30 September 2001 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 00 – 31 Mar 01		1 Apr 01 – 30 Sep 01		1 Oct 00 – 30 Sep 01		
	Male	Female	Male	Female	Male	Female	Total ¹
13–19	2	0	0	0	2	0	2
20–29	30	3	17	3	47	6	53
30–39	34	3	38	0	72	3	76
40–49	20	0	20	2	40	2	42
50–59	6	0	5	1	11	1	12
60+	2	0	0	1	2	1	3
Not reported	1	0	0	0	1	0	2
Total¹	95	6	80	7	175	13	190

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

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 2001

Sexual health clinic	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total ¹
Sydney Sexual Health Centre, NSW	1 350	1 078	523	412	4	0	4
Livingstone Road Sexual Health Centre, Marrickville, NSW	316	300	113	105	0	0	0
Brisbane Sexual Health Clinic, QLD	954	769	346	229	0	0	0
Gold Coast Sexual Health Clinic, QLD	437	599	141	221	0	0	0
Clinic 275, Adelaide, SA	878	701	638	446	2	0	2
Melbourne Sexual Health Centre, VIC	2 003	1 498	525	414	4	2	6
Total	5 938	4 945	2 286	1 827	10	2	12

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 2001

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	642	–	57.5	–	6	–	6	1.6
Male homosexual/bisexual contact and injecting drug use	62	–	56.5	–	0	–	0	0.0
Injecting drug use (female and heterosexual male)	170	123	51.2	42.3	0	0	0	0.0
Heterosexual contact	1 615	1 553	38.6	33.2	0	0	0	0.0
<i>outside Australia</i>	166	119	59.6	52.9	0	0	0	0.0
<i>within Australia only</i>	1 449	1 434	36.2	31.6	0	0	0	0.0
Sex worker	–	438	–	50.2	–	0	0	0.0
Sex worker and injecting drug use	–	47	–	51.1	–	0	0	0.0
Other/undetermined	36	82	50.0	28.0	0	0	0	0.0
Total	2 525	2 243	44.9	37.2	6	0	6	0.3

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 2001

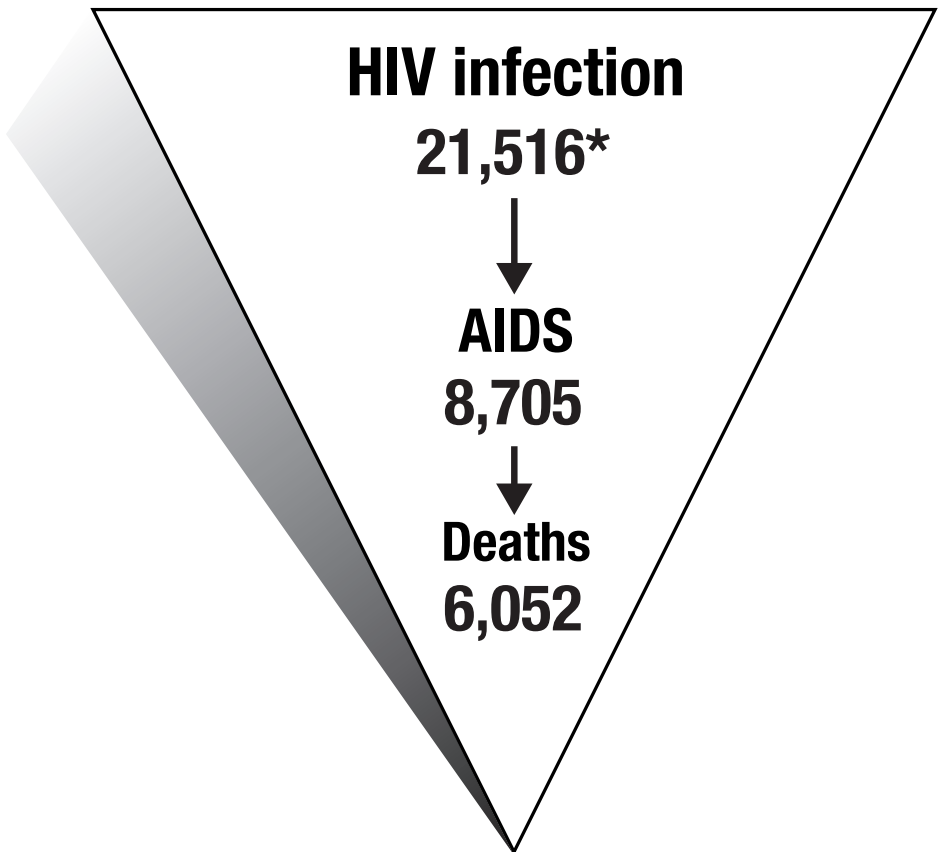
Exposure category	No previous HIV antibody test		% tested for HIV antibody		Newly diagnosed with HIV infection			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/ bisexual contact	556	–	36.5	–	2	–	2	1.0
Male homosexual/bisexual contact and injecting drug use	29	–	37.9	–	0	–	0	0.0
Injecting drug use (female and heterosexual male)	62	68	58.1	50.0	2	0	2	2.9
Heterosexual contact	1 807	1 941	45.0	38.1	0	0	0	0.0
<i>outside Australia</i>	174	156	59.2	44.9	0	0	0	0.0
<i>within Australia only</i>	1 633	1 785	43.5	37.5	0	0	0	0.0
Sex worker	–	140	–	64.3	–	0	0	0.0
Sex worker and injecting drug use	–	30	–	50.0	–	0	0	0.0
Other/undetermined	509	462	17.7	24.7	0	2	2	1.0
Total	2 963	2 641	38.9	37.6	4	2	6	0.3

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 2001

Age group (years)	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total
13–19	179	526	81	190	0	0	0
20–29	2 233	2 541	1 000	943	3	0	3
30–39	1 882	1 211	679	452	2	2	4
40–49	1 005	488	335	193	2	0	2
50–59	436	143	122	42	1	0	1
60+	203	36	69	7	2	0	2
Total	5 938	4 945	2 286	1 827	10	2	12

The HIV Epidemic in Australia

A cumulative profile to 30 September 2001



* Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 18,650 (range 18,200 to 19,100), cumulative to 30 September 2001.



Diagnoses in the third quarter

1 July – 30 September

- a total of 195 diagnoses of HIV infection, 40 diagnoses of AIDS and 29 deaths following AIDS were reported, by 31 December 2001, to have occurred in the third quarter of 2001
- following adjustment for reporting delay, the estimated numbers of AIDS diagnoses and deaths following AIDS occurring in the third quarter of 2001 were 61 and 40
- in comparison, 182 diagnoses of HIV infection, 41 diagnoses of AIDS and 28 deaths following AIDS were reported, by 31 December 2001, to have occurred in the third quarter of 2000

New HIV infection

During the third quarter of 2001, 45 cases 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 homosexual contact only was reported in 73.8% of cases among males.

Diagnoses in the year to 30 September 2001

- 721 diagnoses of HIV infection
- 158 diagnoses of AIDS
- 89 deaths following AIDS were reported by 31 December 2001

HIV diagnoses

People diagnosed with HIV infection in the year to 30 September 2001 had an average age of 36 years and 1.6% was in the age group 13 – 19 years

- 87.9% were male, 11.4% were female and sex was reported as transgender for 0.3% and was not reported for 0.4% of cases
- of 547 cases of HIV infection in adult/adolescent men, newly diagnosed in the year to 30 September 2001 for which exposure to HIV was recorded, a history of homosexual contact only was reported in 75.7%.

Total diagnoses to 30 September 2001

- 21,516 diagnoses of HIV infection
- 18,650 diagnoses of HIV infection following adjustment for multiple reporting
- 8,705 diagnoses of AIDS
- 6,052 deaths following AIDS were reported by 31 December 2001

HIV testing in sexual health clinics

Six sexual health clinics in Adelaide, Brisbane, Gold Coast, Melbourne and Sydney tested 4,113 people in the quarter 1 July – 30 September 2001 who were not previously known to have HIV infection

- of 2,145 people reported as having been tested for the first time, 6 (0.3%) were found to have HIV infection
- of 1,968 people reported as having been retested following a previous negative test, 6 (0.3%) were found to have HIV infection
- of 369 men who reported a history of homosexual contact only, and who were retested following a previous negative test, 6 (1.6%) were newly diagnosed with HIV infection

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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. 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.

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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 WAch	www.public.health.wa.gov.au/

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