Australian HIV Surveillance Report

National Centre in HIV Epidemiology and Clinical Research

Volume 12, Number 1 **January 1996**

Subtypes of HIV in Australia

There has been recent interest in both the scientific and popular media concerning subtypes of the human immunodeficiency virus (HIV). Since the first published sequence of HIV-1 in 1985, it has been recognised that extensive genetic variability of HIV-1 exists, both between and within individuals. This variation is most obvious in the envelope (*env*) gene of HIV-1, and analysis of the sequences that make up the *env* gene allows HIV-1 to be classified into multiple genetic subtypes (or clades). There is usually 20% or more variation between different subtypes although there is often substantial variation within subtypes. This intra-subtype variation allows one to establish relatedness between strains, as in the analysis of HIV transmission from a Florida dentist and in a surgeon's office in Australia.

There are two subtype groups of HIV-1. Within the main group (M), which has been most extensively analysed, are subtypes A-H, while the outlier (O) group includes divergent sequences from Cameroon and France, which may differ among themselves as much

continued on page 3

In this issue:

The National Centre is funded by the Commonwealth Department of Human Services and Health through the Australian National Council on AIDS (ANCA), and is affiliated with the Faculty of Medicine, University of New South Wales

ANNOUNCEMENTS

National meeting

The 8th Annual Conference of the Australasian Society for HIV Medicine will be held in Randwick, New South Wales, on 14 – 17 November 1996. Telephone: 02 382 1656, Facsimile: 02 382 3699

International meetings

7th International Conference on the Reduction of Drug Related Harm—From Science to Policy to Practice will be held in Hobart, Tasmania from 3 – 7 March 1996. Further information may be obtained from the Australian Drug Foundation (Telephone 03 690 6000)

Australasian Sexual Health Conference will be held in Auckland, New Zealand, from 12 – 14 June 1996. Further information may be obtained from the Conference Company, PO Box 90-040, Auckland, New Zealand (Facsimile: 64 9 360 1242).

X1 International Conference on AIDS will be held in Vancouver, Canada, from 7 – 12 July 1996.

continued from page 1

as they do from the M group (Myers *et al* 1994, Loussert-Ajaka *et al* 1995). Although subtyping is usually done by sequencing the *env* gene (including the principal neutralising domain, the V3 loop), other regions of the HIV-1 genome (for example *gag*, *vpr, nef* and the part of *pol* that codes for protease) can also be used. After the sequences making up a particular region have been identified, they are analysed and phylogenetic trees constructed. In general, there is reasonable concordance between the subtypes based on *env* sequences and those based on *gag* or other sequences (Louwagie *et al* 1993, Table 1.1). Newer techniques such as the heteroduplex mobility assay (HMA) can be used as an alternative to sequencing, and are particularly useful where large numbers of samples from different geographic regions need to be analysed (Delwart *et al* 1993). Both HMA and sequencing are being used by the World Health Organisation (WHO) Network for HIV Isolation and Characterisation to monitor genetic variation of HIV-1 in WHO-sponsored vaccine evaluation sites. Serological tests have been developed as a screening assay for subtypes, but they are less specific and sensitive than sequencing (Pau *et al* 1993). There are some HIV-1 sequences that are not readily subtyped (U strains), and which may reflect new subtypes or recombinants of existing subtypes.

Certain subtypes of HIV-1 appear to predominate in different geographical regions (Table 1.1, Myers *et al* 1994). For example, it is known that two subtypes predominate in Thailand; subtype E is the most common and has been isolated in people apparently infected by heterosexual contact, and subtype B occurs mainly among injecting drug users (Kunanusont *et al* 1995). Spread of Thai-like subtype B isolates has occurred in other South East Asian countries including Myanmar, southern China, Malaysia and Cambodia (Weniger *et al* 1994). Subtype C strains similar to southern and eastern African strains are predominant in the Indian sub-continent (Grez *et al* 1994). Subtype B predominates in North America, with only the occasional reporting of other subtypes (Brodine *et al* 1995). In Europe, B is the commonest subtype although other subtypes have been detected. These other subtypes vary from country to country and usually relate to the subtypes circulating in African countries with significant links to European countries. All known subtypes are present in Africa.

Subtype B isolates predominate in Australia unsurprisingly, given that the initial cases of HIV-1 in Australia were acquired in North America. Nine Sydney HIV-1 isolates have been identified as subtype B (Distler *et al* 1995); another study of 45 isolates showed that all appear to be of subtype B, except two cases of subtype E (acquired in South East Asia) and two of subtype C (acquired in Africa) (Dwyer *et al* 1995). South East Asian and African strains have been detected in Western Australia, based on sequencing of reverse transcriptase as part of a study of Aboriginal people infected with HIV-1 (Gaudieri *et al* 1995). There is unpublished evidence that subtype B isolates have

Table 1.1 Known HIV-1 subtypes by geographic region of detection

HIV gene used to classify		Region
env	***gag***	
A	A, G	Central Africa
B	B	North America, Europe, South America, Asia, Australia
C	C	Central and Southern Africa, Brazil, India
D	D, A	Central Africa
E	A	Thailand, Central Africa
F	F	South America, Central Africa, Europe
G	G, H	Central Africa, Taiwan, Russia
H	H	Central Africa
U	U	Central and Southern Africa
O	O	West Africa, France

been found in Papua New Guinea and two distinct subtypes (mostly B) have been in New Zealand. Recombination between different subtypes and probably within subtypes of HIV-1 occurs. For example, the subtype E seen in Thailand is probably a recombinant of subtypes A and E. The clinical significance of recombination is uncertain, but may indicate that reinfection with different strains of HIV-1 is possible, and that new subtypes may arise by recombination.

It is uncertain whether particular HIV-1 subtypes are associated with differences in pathogenesis. While the heterosexual spread of subtype E in Thailand has been more rapid than spread of subtype B in injecting drug users, it is uncertain whether this difference is a viral characteristic or reflects local behavioural networks or the presence of other co-factors (Kunanusont *et al* 1995). Within Australia and overseas, subtype B isolates of HIV-1 have been associated with both long term and short term survival, suggesting that subtype is not related to clinical outcome (Deacon *et al* 1995, Holland *et al* in press). It has been suggested that some subtypes differ in their ability to infect lymphocytes, macrophages and other HIV permissive cells. It is also uncertain whether different subtypes are characterised by viral load, response to antiviral agents or efficacy of vertical transmission. The performance of some viral load assays based on polymerase chain reaction (PCR) varies from subtype to subtype (Arnold *et al* 1995); this may have implications for their clinical use in communities where multiple HIV subtypes are circulating.

HIV-2 has approximately 60% sequence homology with HIV-1 and a different regulatory

gene arrangement to HIV-1. Published data on HIV-2 variants are limited, although divergent HIV-2 strains have been described and there is preliminary evidence that multiple subtypes of HIV-2 do exist (Gao *et al* 1994). Given that outbreaks of HIV-2 have now been described outside western Africa (including four cases in Australia), subtyping of HIV-2 is also important. In west India, an epidemic of HIV-2 with HIV-1 subtype C has been described (Grez *et al* 1994).

There are a number of reasons why subtyping of HIV is important. Knowledge of circulating subtypes allows one to follow the movement of HIV or indicate the origin of HIV strains in communities, assisting the targeting of appropriate interventions. Knowledge of subtype variation is also necessary in the design of HIV vaccines and may have relevance to therapy if different pathogenic features of individual subtypes are identified. In Australia, subtype B is the predominant local strain to date, although other subtypes are now present. Detection of other subtypes in Australia may allow prevention efforts to be better targeted towards people engaging in high risk sexual activity in South East Asia and elsewhere, Australians working overseas or travellers, immigrants or short term visitors to Australia. Australian strains of HIV may also be spread overseas, especially to South East Asia and the Pacific.

For these reasons, it is appropriate for surveillance of HIV subtypes to become more routine in Australia. This could be done most readily by sequence analysis of cases of newly acquired infection or in people whose infection was acquired by routes (such as heterosexual contact overseas) that may expose them to less common subtypes. Monitoring of subtypes or variation within subtypes will also allow molecular confirmation of transmission in epidemiologically linked cases of HIV, a number of which have been reported in Australia. Knowledge of local subtypes also contributes to global understanding of the circulation of HIV -1.

References

1. Arnold C, Barlow KL, Kaye S, Loveday C, Balfe P, Clewley JP. HIV type 1 sequence subtype G transmission from mother to infant: failure of variant sequences species to amplify in the Roche Amplicor Test. *AIDS Res Hum Retrovir* 1995; 11: 999-1001
2. Brodine SK, Mascola JR, Weiss PJ, Ho SI, Porter KR, Artenstein AW *et al.* Detection of diverse HIV-1 genetic subtypes in the USA. *Lancet* 1995; 346: 1198-1199
3. Deacon JN, Tsykin A, Solomon A, Smith K, Ludford-Menting M, Hooker DJ *et al*. Genomic structure of an attenuated quasispecies of HIV-1 from a blood transfusion donor and recipient. *Science* 1995; 270: 988-991
4. Delwart EL, Shaper, EG, McCutchan FE, Louwagie J, Grez M, Rubsamen-Wargmann H, Mullins JI. Genetic relationships determined by a DNA heteroduplex mobility assay: analysis of HIV-1 *env* genes. *Science* 1993; 262: 1257-1261
5. Distler O, McQueen PW, Tsang ML, Byrne C, Neilan BA, Evans L, Penny R, Cooper DA and Delaney SF. Characterisation of the V3 region of HIV-1 isolates from Sydney,

Australia. *AIDS Res Hum Retroviruses* 1995; 11: 423-425
6. Dwyer DE, Ge Y, Naif H, Cunningham AL, Saksena NK. Australian HIV-1 isolates are mostly subtype B and nucleotide variation differs with acquisition risk factor. Australasian Society for HIV Medicine, 7th Annual Conference, Coolum, QLD, 1995
7. Gaudieri S, Townend D, French MAH, Christiansen FT. Reverse transcriptase sequence analysis of HIV isolates from a single rural cohort of Western Australian Aboriginals. Australasian Society for HIV Medicine, 7th Annual Conference, Coolum, QLD, 1995
8. Gao F, Yue L, Robertson DL, Hill SC, Hui H, Biggar RJ *et al*. Genetic diversity of human immunodeficiency virus type 2: evidence for distinct sequence subtypes with differences in virus biology. *J Virol* 1994; 68: 7433-7447
9. Grez M, Dietrich U, Balfe P, von Briesen H, Maniar JK, Mahambre G *et al*. Genetic analysis of human immunodeficiency virus type 1 and 2 (HIV-1 and HIV-2) mixed infections in India reveals a recent spread of HIV-1 and HIV-2 from a single ancestor for each of these viruses. *J Virol* 1994; 68: 2161-2168
10. Holland DJ, Dwyer DE, Saksena NK, Naif H, Packham DR, Cunningham AL. Dementia, cytopenia and death from AIDS within one year of primary HIV infection *Clin Infect Dis* (in press)
11. Kunanusont C, Foy HM, Kreiss JK, Rerks-Ngarm S, Phanuphak P, Raktham S *et al*. HIV-1 subtypes and male to female transmission in Thailand. *Lancet* 1995; 345: 1078-1083
12. Loussert-Ajaka I, Chaix, ML, Korber B, Le tourneur F, Gomas E, Allen E *et al*. Variability of human immunodeficincy virus type 1 group O strains isolated from Cameroonian patients living in France. *J Virol* 1995; 69: 5640-5649
13. Louwagie J, McCutchan FE, Peeters M, Brennan TP, Sanders-Buell E, Eddy GA *et al*. Phylogenetic analysis of *gag* genes from 70 international HIV-1 isolates provides evidence for multiple genotypes. *AIDS* 1993; 7: 769-780
14. Myers G, Kober B, Wain-Hobson S, Jeang KT, Henderson LE, Pavlakis GN. A compilation and analysis of nucleic acid and amino acid sequences. Los Alamos: Department of Theoretical Biology and Biophysics, Los Alamos National Laboratory, NM, USA 1994
15. Pau CP, Lee-Thomas S, Auwanit W, George JR, Ou CY, Parekh BS *et al*. Highly specific V3 peptide enzyme immunoassay for serotyping HIV-1 specimens in Thailand. *AIDS* 1993; 7: 337-340
16. Weniger BG, Takebe Y, Ou CY, Yamazaki S. The molecular epidemiology of HIV in Asia. *AIDS* 1994; 8: S13-S28

Reported by

Dr Dominic E Dwyer and Dr Nitin K Saksena
Department of Virology
Centre for Infectious Diseases and Microbiology
ICPMR
Westmead Hospital, Sydney

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 30 September 1995, and for two previous yearly intervals.

Cases

STATE/ TERRITORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
ACT	6	1	9	1	69	4	73	1.2
NSW	477	13	330	14	3524	125	3659	58.2
NT	3	0	2	0	25	0	25	0.4
QLD	93	5	93	2	603	26	631	10.0
SA	39	2	26	4	254	17	271	4.3
TAS	4	0	2	0	32	2	34	0.5
VIC	166	11	137	11	1267	47	1321	21.0
WA	22	4	28	1	261	16	278	4.4
TOTAL†	**810**	**36**	**627**	**33**	**6035**	**237**	**6292**	**100.0**

Deaths

ACT	8	0	5	0	49	2	51	1.1
NSW	377	15	313	15	2530	91	2627	57.9
NT	4	0	2	0	18	0	18	0.4
QLD	71	4	63	2	402	19	423	9.3
SA	35	5	27	3	170	13	183	4.0
TAS	2	1	1	0	21	2	23	0.5
VIC	172	5	129	12	982	28	1016	22.4
WA	25	4	20	1	186	9	196	4.3
TOTAL†	**694**	**34**	**560**	**33**	**4358**	**164**	**4537**	**100.0**

†. Total columns of Tables 2.1 - 2.6 and 7.1 include 20 cases and 15 AIDS deaths in people whose sex was reported as transsexual.

Table 2.2
Incidence of AIDS per million current population by sex and State/Territory of diagnosis, from 1 January 1981 to 30 September 1995, and for two yearly intervals prior to 30 September 1995[1].

STATE/ TERRITORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95		
	Male	Female	Male	Female	Male	Female	Total
ACT	39.7	6.7	58.7	6.6	450.4	26.5	240.1
NSW	158.7	4.3	108.6	4.6	1159.7	40.6	598.4
NT	33.9	0.0	22.4	0.0	279.6	0.0	143.8
QLD	58.0	3.1	56.6	1.2	367.1	15.9	192.5
SA	53.5	2.7	35.5	5.4	347.1	22.9	183.9
TAS	17.1	0.0	8.5	0.0	136.5	8.4	71.9
VIC	74.9	4.9	61.5	4.8	568.4	20.7	293.4
WA	25.7	4.7	32.2	1.2	300.1	18.6	160.5
TOTAL†	**91.2**	**4.0**	**70.7**	**3.6**	**671.3**	**26.1**	**348.5**

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 1995, and for two previous yearly intervals.

Cases[1]

AGE GROUP (years)	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
0 – 12	1	2	2	4	27	13	40	0.6
13 – 19	0	0	2	0	20	3	23	0.4
20 – 29	116	10	83	8	1056	62	1130	18.0
30 – 39	362	15	291	13	2537	74	2616	41.6
40 – 49	242	8	171	5	1716	38	1756	27.9
50 – 59	65	1	59	2	520	21	542	8.6
60 +	24	0	19	1	159	26	185	2.9
TOTAL[†]	**810**	**36**	**627**	**33**	**6035**	**237**	**6292**	**100.0**

Deaths[2]

0 – 12	2	2	1	2	21	8	29	0.6
13 – 19	0	0	1	1	13	3	16	0.4
20 – 29	52	4	52	11	547	33	589	13.0
30 – 39	289	12	236	10	1752	48	1804	39.8
40 – 49	245	10	182	5	1391	29	1422	31.3
50 – 59	78	1	68	3	483	19	502	11.1
60 +	28	5	20	1	151	24	175	3.8
TOTAL[†]	**694**	**34**	**560**	**33**	**4358**	**164**	**4537**	**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 1995, and for two previous yearly intervals of diagnosis.

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

EXPOSURE CATEGORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/bisexual contact	680	-	541	-	5199	-	5199	82.6
Male homosexual/bisexual contact and ID use	47	-	22	-	250	-	250	4.0
ID use (female and heterosexual male)	14	8	17	7	100	56	156	2.5
Heterosexual contact:	28	23	25	18	160	103	263	4.2
Sex with ID user	*0*	*1*	*2*	*2*	*3*	*6*	*9*	
Sex with bisexual male	*-*	*3*	*-*	*1*	*-*	*23*	*23*	
From specified country	*2*	*3*	*6*	*3*	*19*	*15*	*34*	
Sex with person from specified country	*6*	*2*	*2*	*2*	*18*	*10*	*28*	
Sex with person with medically acquired HIV	*2*	*2*	*0*	*0*	*3*	*6*	*9*	
Sex with HIV–infected person, exposure not specified	*6*	*2*	*0*	*4*	*24*	*15*	*39*	
Not further specified	*12*	*10*	*15*	*6*	*93*	*28*	*121*	
Haemophilia/coagulation disorder	8	0	5	0	81	1	82	1.3
Receipt of blood components/tissue	8	1	3	3	77	54	131	2.1
Health care setting	1	1	0	1	2	3	5	0.1
Other/undetermined[†]	23	1	12	0	139	7	166	2.6
Total Adults/ Adolescents[†]	**809**	**34**	**625**	**29**	**6008**	**224**	**6252**	**99.4**

Children (under 13 years at diagnosis of AIDS)

Mother with/at risk for HIV infection	1	2	2	3	10	10	20	0.3
Haemophilia/coagulation disorder	0	0	0	0	5	0	5	0.1
Receipt of blood components/tissue	0	0	0	1	12	3	15	0.2
Total Children	**1**	**2**	**2**	**4**	**27**	**13**	**40**	**0.6**
TOTAL[†]	**810**	**36**	**627**	**33**	**6035**	**237**	**6292**	**100.0**

Table 2.5
Deaths following AIDS by sex and exposure category, cumulative to 30 September 1995, and for two previous yearly intervals.

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

EXPOSURE CATEGORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/bisexual contact	582	-	471	-	3789	-	3789	83.5
Male homosexual/bisexual contact and ID use	43	-	27	-	170	-	170	3.8
ID use (female and heterosexual male)	10	6	17	6	61	36	97	2.1
Heterosexual contact:	25	19	17	19	93	64	157	3.5
Sex with ID user	*0*	*0*	*0*	*1*	*0*	*3*	*3*	
Sex with bisexual male	*-*	*9*	*-*	*0*	*-*	*17*	*17*	
From specified country	*0*	*0*	*4*	*4*	*7*	*8*	*15*	
Sex with person from specified country	*2*	*0*	*1*	*2*	*9*	*6*	*15*	
Sex with person with medically acquired HIV	*1*	*1*	*0*	*1*	*2*	*4*	*6*	
Sex with HIV–infected person, exposure not specified	*11*	*5*	*2*	*1*	*21*	*9*	*30*	
Not further specified	*11*	*4*	*10*	*10*	*54*	*17*	*71*	
Haemophilia/coagulation disorder	10	1	9	0	63	1	64	1.4
Receipt of blood components/tissue	7	5	2	5	62	49	111	2.4
Health care setting	0	1	0	0	0	1	1	0.0
Other/undetermined[†]	15	0	16	0	97	4	116	2.6
Total Adults/ Adolescents[†]	**692**	**32**	**559**	**30**	**4335**	**155**	**4505**	**99.3**

Children (under 13 years at diagnosis of AIDS)

Mother with/at risk for HIV infection	2	2	1	1	6	6	12	0.3
Haemophilia/coagulation disorder	0	0	0	0	5	0	5	0.1
Receipt of blood components/tissue	0	0	0	2	12	3	15	0.3
Total Children	**2**	**2**	**1**	**3**	**23**	**9**	**32**	**0.7**
TOTAL[†]	**694**	**34**	**560**	**33**	**4358**	**164**	**4537**	**100.0**

Table 2.6
Cases of AIDS by AIDS–defining condition and sex, cumulative to 30 September 1995, and for two previous yearly intervals.

AIDS DEFINING CONDITION	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
Pneumocystis carinii pneumonia (PCP)	187	10	132	11	1807	60	1873	29.8
Kaposi's sarcoma (KS) - skin	86	0	66	0	787	3	791	12.6
KS and PCP only	6	0	4	0	58	0	58	0.9
KS and other (not PCP)	13	0	10	0	109	0	109	1.7
PCP and other (not KS)	22	0	18	1	303	14	320	5.1
Candidiasis-oesophageal	112	5	109	1	554	22	577	9.2
Toxoplasmosis-cerebral	28	0	16	3	218	11	231	3.7
Cryptococcosis-meningeal	37	2	25	1	237	7	246	3.9
Lymphoma-non-Hodgkin	38	1	20	1	222	11	233	3.7
Mycobacterium-avium	47	6	36	6	289	23	313	5.0
Herpes simplex virus	11	2	13	1	142	13	155	2.5
HIV encephalopathy	38	0	26	3	196	7	204	3.2
Cytomegalovirus	46	1	26	1	248	4	253	4.0
HIV wasting disease	45	2	50	1	255	24	280	4.4
Cryptosporidiosis-gut	23	1	23	0	143	4	147	2.3
Mycobacterium-tuberculosis (TB)	5	1	3	0	34	4	38	0.6
Other single diagnoses[1]	26	2	20	2	114	10	125	2.0
Other multiple diagnoses	40	3	30	1	319	20	339	5.4
TOTAL[†]	**810**	**36**	**627**	**33**	**6035**	**237**	**6292**	**100.0**

1. Following implementation of the Australian AIDS case definition in January 1993, AIDS was diagnosed on the basis of recurrent pneumonia for 23 cases, pulmonary tuberculosis in 6 cases and cervical cancer for 0 cases.

Table 2.7
Survival following the diagnosis of AIDS by one–year period of diagnosis.

Calendar Period of Diagnosis	Cases	Deaths to 30 Sep 95[1]	Alive at 1 Oct 94[2]	Lost to Follow Up[3]	Other[4]	% Survival 1 yr	% Survival 2 yrs
1984	54	52	0	1	1	25.1	7.7
1985	126	123	0	2	1	44.0	21.6
1986	231	219	1	8	3	34.4	15.2
1987	381	368	3	1	9	57.1	29.1
1988	533	490	6	8	29	67.1	29.5
1989	612	557	12	4	39	61.2	30.6
1990	667	573	14	4	76	64.2	34.2
1991	796	671	17	6	102	59.9	31.9
1992	777	594	36	7	140	60.6	26.9
1993	804	502	106	0	196	-	-
1994	868	338	333	4	193	-	-
1995	443	50	393	0	0	-	-
TOTAL	**6292**	**4537**	**921**	**45**	**789**	**-**	**-**

1. Deaths occurring prior to 1 October 1995.
2. Last medical contact on or after 1 October 1994.
3. Reported as having permanently left Australia with no subsequent report of status.
4. Last medical contact prior to 1 October 1994.

Table 2.8: Cases of AIDS by month of diagnosis, 1986 to 1995.

YEAR	Jan	Feb	Mar	Jul	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1986	14	15	14	14	19	20	17	24	24	32	25	13	**231**
1987	29	27	32	20	43	34	28	26	37	30	45	30	**381**
1988	42	43	24	35	34	45	56	50	44	52	59	49	**533**
1989	64	47	41	31	46	56	47	57	56	63	51	53	**612**
1990	63	45	56	51	45	52	59	59	67	71	49	50	**667**
1991	64	66	66	70	60	64	54	65	84	78	66	59	**796**
1992	55	66	66	61	75	65	73	73	59	64	61	59	**777**
1993	68	67	66	65	48	67	74	79	69	74	63	64	**804**
1994	75	64	77	75	58	73	57	78	93	90	60	68	**868**
1995	52	59	55	50	58	41	36	55	37	-	-	-	**443**

Table 2.9: Deaths following the diagnosis of AIDS by month of death, 1986 to 1995.

YEAR	Jan	Feb	Mar	Jul	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1986	11	7	8	6	13	10	17	8	15	17	16	16	**144**
1987	13	15	18	29	23	15	17	13	17	9	15	18	**202**
1988	12	18	15	21	18	20	19	19	14	20	24	23	**223**
1989	20	24	29	33	26	43	32	41	30	41	43	39	**401**
1990	55	32	49	35	43	44	48	47	46	40	32	41	**512**
1991	45	38	42	53	60	51	54	48	38	50	43	54	**576**
1992	49	47	59	52	56	49	42	51	44	38	46	46	**579**
1993	52	39	62	64	71	46	53	53	50	56	66	64	**676**
1994	58	56	59	68	60	68	69	55	53	50	55	59	**710**
1995	56	65	58	46	53	43	50	40	20	-	-	-	**432**

Table 2.10: Deaths following the diagnosis of AIDS by month of diagnosis, 1986 to 1995.

YEAR	Jan	Feb	Mar	Jul	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1986	14	15	13	12	18	18	17	22	21	31	25	13	**219**
1987	28	27	31	19	43	32	28	24	37	29	41	29	**368**
1988	39	40	23	33	34	43	46	43	41	50	51	47	**490**
1989	58	43	37	30	39	50	43	52	52	57	50	46	**557**
1990	54	41	53	48	38	41	49	48	58	60	42	41	**573**
1991	61	59	55	62	53	43	48	54	64	66	56	50	**671**
1992	45	49	55	52	57	50	60	57	44	46	42	37	**594**
1993	41	50	43	45	36	39	39	49	43	42	41	34	**502**
1994	34	30	32	35	25	27	27	38	29	31	20	10	**338**
1995	10	15	9	4	9	2	1	0	0	-	-	-	**50**

THE NATIONAL HIV DATABASE

Table 3.1
Number of new diagnoses of HIV infection by sex[1] and State/Territory, cumulative to 30 September 1995, and for two previous yearly intervals.

STATE/ TERRITORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	Rate[2]
ACT	7	1	17	3	163	15	178	58.5
NSW[3]	416	30	400	36	9826	541	12423	203.2
NT	7	0	4	0	79	3	82	47.2
QLD	170	10	111	13	1529	95	1629	49.7
SA	31	2	35	4	553	44	597	40.5
TAS	0	1	3	0	70	4	74	15.6
VIC[4]	197	20	179	13	3287	163	3501	77.8
WA	51	11	50	17	736	70	808	46.7
TOTAL[5]	**879**	**75**	**799**	**86**	**16243**	**935**	**19292**	**106.9**

1. Twenty two people (7 NSW, 5 QLD, 8 VIC and 2 WA) whose sex was reported as transsexual are included in the total columns of Tables 3.1 – 3.6.
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 2049 people whose sex was not reported.
4. Cumulative total for VIC includes 43 people whose sex was not reported.
5. Cumulative total for Australia includes 2092 people whose sex was not reported.

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 1995 and for two previous yearly intervals.

EXPOSURE CATEGORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/bisexual contact	656	-	580	-	10159	-	10159	80.5
Male homosexual/bisexual contact and ID use	38	-	39	-	385	-	385	3.0
ID use	27	11	26	6	461	147	630	5.0
Heterosexual	*14*	*9*	*12*	*3*	*119*	*54*	*176*	
Not further specified	*13*	*2*	*14*	*3*	*342*	*93*	*454*	
Heterosexual contact:	80	51	84	64	574	386	963	7.6
Sex with ID user	*3*	*6*	*3*	*6*	*16*	*28*	*44*	
Sex with bisexual male	*-*	*4*	*-*	*7*	*-*	*27*	*27*	
From specified country	*10*	*7*	*16*	*12*	*45*	*30*	*75*	
Sex with person from specified country	*15*	*8*	*9*	*13*	*51*	*35*	*86*	
Sex with person with medically acquired HIV	*1*	*2*	*0*	*0*	*4*	*6*	*10*	
Sex with HIV–infected person, exposure not specified	*4*	*3*	*9*	*6*	*29*	*26*	*55*	
Not further specified	*47*	*21*	*47*	*20*	*429*	*234*	*666*	
Haemophilia/coagulation disorder	0	0	1	0	190	2	192	1.5
Receipt of blood/tissue	9	0	1	3	106	65	171	1.4
Health care setting[1]	1	3	0	0	3	7	10	0.1
Total Adults/ Adolescents[2]	**811**	**65**	**731**	**73**	**11878**	**607**	**12510**	**99.1**

Children (under 13 years at diagnosis of HIV infection)

Mother with/at risk for HIV infection	4	5	3	6	23	20	43	0.3
Haemophilia/coagulation disorder	0	0	0	0	54	0	54	0.4
Receipt of blood/tissue	0	0	0	0	13	5	19	0.2
Total Children	**4**	**5**	**3**	**6**	**90**	**25**	**116**	**0.9**
Sub-total	**815**	**70**	**734**	**79**	**11968**	**632**	**12626**	**100.0**
Other/undetermined[3]	64	5	65	7	4275	303	6666	
TOTAL	**879**	**75**	**799**	**86**	**16243**	**935**	**19292**	

1. The category 'Health care setting' includes 5 cases of occupationally acquired HIV infection and 4 cases of transmission in surgical rooms.
2. Total column includes cases for which sex was not reported.
3. The 'Other/undetermined' category includes 6648 adults/adolescents and 18 children. Twenty two people whose sex was reported as transsexual are 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.

Table 3.3
Number of new diagnoses of HIV infection by sex and age group, cumulative to 30 September 1995, and for two previous yearly intervals.

AGE GROUP (YEARS)	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95			
	Male	Female	Male	Female	Male	Female	Total	%
0 – 2	3	3	2	2	29	13	43	0.2
3 – 12	1	2	1	5	75	15	91	0.5
0 – 12	4	5	3	7	104	28	134	0.7
13 – 19	14	4	10	11	351	53	411	2.1
20 – 29	288	35	252	28	5285	364	5762	29.9
30 – 39	333	19	311	28	5278	217	5607	29.1
40 – 49	140	6	149	8	2352	72	2466	12.8
50 – 59	65	4	43	3	701	32	741	3.8
60 +	28	2	25	1	225	38	264	1.4
Unknown	7	0	6	0	1947	131	3907	20.2
TOTAL[1]	**879**	**75**	**799**	**86**	**16243**	**935**	**19292**	**100.0**

1. See footnotes Table 3.1.

Table 3.4
Number of new diagnoses of HIV infection for which HIV seroconversion illness was diagnosed or the date of a prior negative HIV antibody test was within one year of diagnosis of infection, by sex and State/Territory, cumulative to 30 September 1995, and for two previous calendar intervals.

STATE/ TERRITORY	1 Oct 94 – 31 Mar 95		1 Apr 95 – 30 Sep 95		1 Oct 94 – 30 Sep 95		
	Male	Female	Male	Female	Male	Female	Total
ACT	0	0	4	0	4	0	4
NSW[1]	68	5	60	2	128	7	139
NT	1	0	0	0	1	0	1
QLD	13	0	14	1	27	1	28
SA	4	0	5	0	9	0	9
TAS	1	0	0	0	1	0	1
VIC	28	0	16	3	44	3	47
W A	4	0	3	1	7	1	8
TOTAL[1]	**119**	**5**	**102**	**7**	**221**	**12**	**237**

1. Total column for Tables 3.4 – 3.6 includes 1 person whose sex was reported as transsexual and 3 people whose sex was not reported.

Table 3.5
Number of new diagnoses of HIV infection for which HIV seroconversion illness was diagnosed or the date of a prior negative HIV antibody test was within one year of diagnosis of infection, by sex and exposure category, cumulative to 30 September 1995, and for two previous calendar intervals.

EXPOSURE CATEGORY	1 Oct 94 – 31 Mar 95		1 Apr 95 – 30 Sep 95		1 Oct 94 – 30 Sep 95		
	Male	Female	Male	Female	Male	Female	Total
Male homosexual/bisexual contact	105	-	79	-	184	-	184
Male homosexual/bisexual contact and ID use	6	-	7	-	13	-	13
ID use (female and heterosexual male)	1	1	4	1	5	2	7
Heterosexual contact	5	4	6	6	11	10	21
Health care setting	0	0	0	0	0	0	0
Other/undetermined[1]	2	0	6	0	8	0	12
TOTAL[1]	**119**	**5**	**102**	**7**	**221**	**12**	**237**

1. See footnote Table 3.4.

Table 3.6
Number of new diagnoses of HIV infection for which HIV seroconversion illness was diagnosed or the date of a prior negative HIV antibody test was within one year of diagnosis of infection, by sex and age group, cumulative to 30 September 1995, and for two previous calendar intervals.

AGE GROUP (YEARS)	1 Oct 94 – 31 Mar 95		1 Apr 95 – 30 Sep 95		1 Oct 94 – 30 Sep 95		
	Male	Female	Male	Female	Male	Female	Total
13 – 19	1	0	2	2	3	2	5
20 – 29	55	1	39	2	94	3	98
30 – 39	39	1	40	2	79	3	84
40 – 49	20	2	13	1	33	3	36
50 – 59	2	1	4	0	6	1	8
60 +	2	0	3	0	5	0	5
Not known	0	0	1	0	1	0	1
TOTAL[1]	**119**	**5**	**102**	**7**	**221**	**12**	**237**

1. See footnote Table 3.4.

NATIONAL ZIDOVUDINE REGISTRY

Table 4.1
Number of new zidovudine prescriptions cumulative to 30 September 1995 and for two previous yearly intervals, by sex and State/Territory.

STATE/ TERRITORY	1 Oct 93 – 30 Sep 94		1 Oct 94 – 30 Sep 95		Cumulative to 30 Sep 95		
	Male	Female	Male	Female	Male	Female	Total
ACT	13	0	4	0	82	5	87
NSW	240	10	78	0	4099	211	4320
NT	7	0	3	0	29	1	30
QLD	8	1	1	0	186	7	193
SA	46	1	20	0	362	25	390
TAS	0	0	0	0	16	3	21
VIC	7	1	3	0	1410	63	1481
WA	39	5	43	6	451	61	513
TOTAL[1]	**360**	**18**	**152**	**6**	**6635**	**376**	**7035**

1. Totals include people whose sex was not reported.

SENTINEL SURVEILLANCE OF HIV INFECTION IN SEXUALLY TRANSMISSIBLE DISEASE CLINICS

Table 5.1
Number of people seen, number of people tested for HIV antibody and number of people newly diagnosed with HIV infection by sex and STD clinic[1], during the quarter 1 July 1995 to 30 September 1995.

STD 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	1676	1067	681	418	3	0	3
Clinic 34, Darwin, NT	195	108	79	61	0	0	0
Brisbane Sexual Health Clinic, QLD	1078	681	374	229	3	0	3
Clinic 275, Adelaide, SA	1382	898	1057	656	4	0	4
Melbourne Sexual Health Centre, VIC	1875	1395	1431	1142	9	0	9
TOTAL	**6206**	**4149**	**3622**	**2506**	**19**	**0**	**19**

1. Data not available for Parramatta Sexual Health Clinic, NSW.

Table 5.2
Number of people seen[1] 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 1995 to 30 September 1995.

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	738	-	69.4	-	8	-	8	1.6
Homosexual/bisexual contact and ID use	83	-	68.7	-	1	-	1	1.8
ID use (female and heterosexual male)	252	142	63.1	67.6	0	0	0	0.0
Heterosexual contact	2281	1654	56.1	54.5	0	0	0	0.0
outside Australia[2]	*287*	*150*	*49.8*	*47.3*	*0*	*0*	*0*	*0.0*
within Australia only	*1994*	*1504*	*57.0*	*55.3*	*0*	*0*	*0*	*0.0*
Sex worker	-	363	-	77.1	-	0	0	0.0
Sex worker and ID use	-	40	-	67.5	-	0	0	0.0
Other/undetermined	82	109	90.2	73.4	0	0	0	0.0
TOTAL	**3436**	**2308**	**60.6**	**60.0**	**9**	**0**	**9**	**0.3**

1. At clinics other than Clinic 34, Darwin, NT.
2. Within 3 months for Clinic 275 and one year for other clinics.

Table 5.3
Number of people seen[1] 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 1995 to 30 September 1995.

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	306	-	62.4	-	8	-	8	4.2
Homosexual/bisexual contact and ID use	14	-	71.4	-	0	-	0	0.0
ID use (female and heterosexual male)	94	41	84.0	80.5	1	0	1	0.9
Heterosexual contact	1810	1375	59.9	62.8	0	0	0	0.0
outside Australia[2]	*118*	*72*	*55.9*	*58.3*	*0*	*0*	*0*	*0.0*
within Australia only	*1692*	*1303*	*60.2*	*63.1*	*0*	*0*	*0*	*0.0*
Sex worker	-	70	-	77.1	-	0	0	0.0
Sex worker and ID use	-	9	-	33.3	-	0	0	0.0
Other/undetermined	226	229	43.4	46.3	1	0	1	0.5
TOTAL	**2450**	**1724**	**59.7**	**61.5**	**10**	**0**	**10**	**0.4**

1. At clinics other than Clinic 34, Darwin, NT.
2. Within 3 months for Clinic 275 and one year for other clinics.

Table 5.4
Number of people seen[1], 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 1995 to 30 September 1995.

AGE GROUP (YEARS)	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total
13 – 19	247	583	164	331	0	0	0
20 – 29	2793	2189	1709	1340	9	0	9
30 – 39	1772	847	982	523	5	0	5
40 – 49	762	302	438	190	3	0	3
50 – 59	297	91	174	52	2	0	2
60 +	139	28	75	9	0	0	0
Unknown	1	1	1	0	0	0	0
TOTAL	**6011**	**4041**	**3543**	**2445**	**19**	**0**	**19**

1. At clinics other than Clinic 34, Darwin, NT.

Table 5.5
Number of people diagnosed with specific STD[1], other than HIV, by sex, exposure category and whether or not they were tested for HIV antibody[2] during the quarter 1 July 1995 to 30 September 1995.

EXPOSURE CATEGORY	Tested for HIV antibody		Not tested for HIV antibody	
	Male	Female	Male	Female
Homosexual/bisexual contact	20	-	8	-
Homosexual/bisexual contact and ID use	0	-	0	-
ID use (female and heterosexual male)	10	5	2	1
Heterosexual contact	47	18	43	24
outside Australia[2]	*6*	*0*	*9*	*2*
within Australia only	*41*	*18*	*34*	*22*
Sex worker	-	3	-	3
Sex worker and ID use	-	0	-	0
Other/undetermined	1	4	2	0
TOTAL	**78**	**30**	**55**	**28**

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.

SENTINEL SURVEILLANCE FOR SEXUALLY TRANSMISSIBLE DISEASES

Table 6.1
Number of diagnoses of gonorrhoea in sentinel sexual health centres[1] during the quarter 1 July 1995 to 30 September 1995, by sex , exposure category and HIV antibody status.

CHARACTERISTICS OF CASES	1 Jul 95 – 30 Sep 95 Male	Female	Total
EXPOSURE CATEGORY[2]			
Homosexual/bisexual contact	13	0	13
Homosexual/bisexual contact and ID use	0	0	0
ID use (female and heterosexual male)	0	0	0
Heterosexual contact[3]	8	1	9
outside Australia	*2*	*0*	*2*
within Australia only	*6*	*1*	*7*
Sex worker	0	0	0
Sex worker and ID use	0	0	0
HIV ANTIBODY STATUS			
Positive	1	0	1
Negative	14	0	14
Unknown	6	1	7
Total[4]	**21**	**1**	**22**

1. Participating clinics provided data on 6,831 male attendances with 4,081 male patients seen and 4,907 female attendances with 3,016 female patients seen. Participating clinics this quarter: Clinic 275, Adelaide, SA; Clinic 34, Darwin, NT; Gold Coast Sexual Clinic, Gold Coast, QLD; Melbourne Sexual Health Clinic, Melbourne, VIC; Sydney Sexual Health Centre, Sydney, NSW.
2. For most clinics, the exposure categories represent those for the preceding 12 month period.
3. No other category specified.
4. Total number of males and females diagnosed with specific STD by exposure category and separately for HIV antibody status.

Table 6.2
Number of diagnoses of early syphilis[1] in sentinel sexual health centres during the quarter 1 July 1995 to 30 September 1995, by sex, exposure category and HIV antibody status.

CHARACTERISTICS OF CASES	1 Jul 95 – 30 Sep 95 Male	Female	Total
EXPOSURE CATEGORY[2]			
Homosexual/bisexual contact	1	-	1
Homosexual/bisexual contact and ID use	0	-	0
ID use (female and heterosexual male)	0	0	0
Heterosexual contact	0	3	3
outside Australia	*0*	*0*	*0*
within Australia only	*0*	*3*	*3*
Sex worker	0	0	0
Sex worker and ID use	0	0	0
HIV ANTIBODY STATUS			
Positive	0	0	0
Negative	0	3	3
Unknown	1	0	1
Total	**1**	**3**	**4**

1. Early syphilis includes cases diagnosed as primary, secondary or early latent infection only.
2. See footnotes Table 6.1.

HIV ANTIBODY TESTING IN BLOOD TRANSFUSION SERVICES AND PUBLIC HEALTH LABORATORIES.

Table 7.1
Number of new diagnoses of HIV infection in blood donors by State/Territory, cumulative to 30 September 1995, and for two previous yearly intervals.

STATE/ TERRITORY	1 Oct 93 – 30 Sep 94	1 Oct 94 – 30 Sep 95	1 May 85 – 30 Sep 95
ACT	0	0	1
NSW	1	2	34
NT	0	1	1
QLD	3	2	19
SA	0	0	3
TAS	0	0	0
VIC	1	0	12
WA	0	0	6
TOTAL	**5**	**5**	**76**

Table 7.2
Number of HIV antibody tests conducted in Blood Transfusion Services by State/ Territory and calendar interval.

STATE/ TERRITORY	1 Oct 93 – 30 Jun 94	1 Jul 94 – 30 Sep 94	1 Oct 93 to 30 Sep 94
A C T	10928	4088	15016
N S W	217235	70485	287720
N T	6868	2375	9243
Q L D	134918	45091	180009
S A	71104	24592	95696
T A S	18287	6143	24430
V I C	181267	55126	236393
W A	58195	18667	76862
T O T A L	**698802**	**226567**	**925369**

STATE/ TERRITORY	1 Oct 94 – 30 Jun 95	1 Jul 95 – 30 Sep 95	1 Oct 94 to 30 Sep 95
A C T	11692	4291	15983
N S W	212400	74056	286456
N T	5648	2499	8147
Q L D	132526	42953	175479
S A	66431	21967	88398
T A S	18896	6992	25888
V I C	173813	58519	232332
W A	58145	22163	80308
T O T A L	**679551**	**233440**	**912991**

Blood Transfusion Services for which counts were partially unavailable:

STATE/ TERRITORY	WEEKS	YEAR	Blood Transfusion Service
NSW	39-40	1995	Young District Hospital
VIC	25-40	1995	Ballarat Base Hospital

Table 7.3
Number of HIV antibody tests conducted in Public Health Laboratories by State/ Territory and calendar interval.

STATE/ TERRITORY	1 Oct 93 – 30 Jun 94	1 Jul 94 – 30 Sep 94	1 Oct 93 to 30 Sep 94
A C T	7217	2475	9692
N S W	247637	88648	336285
N T	7846	2752	10598
Q L D	91856	40499	132355
S A	65844	11376	77220
T A S	10394	3468	13862
V I C	116955	31365	148320
W A	54992	19585	74577
T O T A L	**602741**	**200168**	**802909**

STATE/ TERRITORY	1 Oct 94 – 30 Jun 95	1 Jul 95 – 30 Sep 95	1 Oct 94 to 30 Sep 95
A C T	7505	2536	10041
N S W	254543	71807	326350
N T	9945	2850	12795
Q L D	123287	40436	163723
S A	60196	16334	76530
T A S	10055	3290	13345
V I C	83840	29678	113518
W A	59587	18924	78511
T O T A L	**608958**	**185855**	**794813**

Public Health Laboratories for which counts were partially unavailable:

STATE/ TERRITORY	WEEKS	YEAR	Public Health Laboratory
NSW	41-52	1994	Hanly Moir Pathology
	25-40	1995	Sydney Diagnostic Service
	29-40	1995	Sugermans' Pathology
	37-40	1995	Hampsons Pathology
	37-40	1995	Repatriation General Hospital
	38-40	1995	St Vincent's Hospital
QLD	52, 1-12	1993,1994	Queensland State Health Laboratory
	33-40	1995	Prince Charles Hospital
	33-40	1995	Queensland Medical Laboratory
SA	33-52,1-40	1994,1995	Clinpath Laboratories
VIC	33-40	1995	Gribbles Pathology
	37-40	1995	Fairfield Hospital
WA	33-40	1995	Western Diagnostic Pathology
	37-40	1995	Russell Pathology

REPORT FROM WHO WESTERN PACIFIC REGION

Dr G Poumerol, Acting Regional Advisor, WHO Regional Office, Manila.

Table 8.1
AIDS and HIV in the WHO Western Pacific Region by country; based on reports available at 30 September 1995.

COUNTRY/ AREA	CUMULATIVE AIDS CASES Male	Female	Children <13 Years	Total	AIDS Rate[1]	Cumulative Diagnoses HIV
American Samoa	0	0	0	0	0.0	0
Australia	6035	237	40	6292	34.9	19292
Brunei	6	0	0	6	2.1	252
Cambodia	56	23	0	86	0.9	2536
China[2]	70	7	0	77	0.0	2428
Cook Islands	0	0	0	0	0.0	0
Fed. S. Micronesia	2	0	0	2	1.8	2
Fiji	4	3	1	7	0.9	28
French Polynesia	25	5	1	45	20.8	144
Guam	30	1	0	31	21.9	77
Hong Kong	136	12	3	148	2.5	573
Japan	962	64	0	1026	0.8	3919
Kiribati	0	0	0	0	0.0	2
Laos	9	3	0	13	0.3	80
Macao	7	1	0	8	1.9	105
Malaysia	239	20	4	259	1.3	13250
Marshall Islands	2	0	0	2	10.4	10
Nauru	0	0	0	0	0.0	0
New Caledonia	37	6	1	43	23.2	123
New Zealand	490	21	4	511	14.4	1052
Niue	0	0	0	0	0.0	0
N. Mariana Islands	2	0	0	6	10.4	10
Palau	1	0	0	1	5.8	1
Papua New Guinea	71	70	3	141	3.5	335
Philippines	141	79	5	220	0.3	668
Rep. of Korea	27	5	0	32	0.1	456
Samoa	1	1	0	2	1.2	2
Singapore	135	10	1	145	5.0	348
Solomon Islands	0	0	0	0	0.0	1
Tokelau	0	0	0	0	0.0	0
Tonga	5	0	0	5	5.1	6
Tuvalu	0	0	0	0	0.0	0
Vanuatu	0	0	0	0	0.0	0
Vietnam	250	34	0	292	0.4	2963
Wallis and Futuna	1	0	0	1	7.1	2
TOTAL†	**8744**	**602**	**63**	**9401**	**0.5**	**48665**

1. AIDS cases per 100,000 total current population.
2. For Taiwan 45 AIDS cases in males, 3 in females and 300 diagnosis of HIV infection were reported to 30 September 1995.

CONTENTS

LIST OF TABLES AND FIGURES

The Australian HIV Surveillance Report is printed on 100% recycled paper

Australian HIV Surveillance Report

National Centre in HIV Epidemiology and Clinical Research

ISSN No. 1035–221X

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 STD 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 STD 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 HIV Reference Laboratory, 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, ID stands for injecting drug, and STD 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.

The Australian HIV Surveillance Report is produced by the National Centre in HIV Epidemiology and Clinical Research on a quarterly basis, issued in January, April, July and October. Subscription is free, and can be obtained by writing to the Editor or by calling the Epidemiology Section of the NCHECR:

Australian HIV Surveillance Report
National Centre in HIV Epidemiology and Clinical Research
376 Victoria Street
Darlinghurst NSW 2010
Australia

Tel: (02) 332 4648
Fax: (02) 332 1837 International prefix: (612)

For further information at a State/Territory level, contact:

ACT	Ms Irene Passaris, ACT Health	(06)	205 0960
NSW	Mr Robert Menzies, NSW Department of Health	(02)	391 9195
NT	Dr Frank Bowden, Department of Health and Community Services	(089)	228 007
QLD	Dr Hugo Rée, Queensland Department of Health	(07)	224 5526
SA	Ms Therese Davey, SA Health Commission	(08)	226 6000
TAS	Mr David Coleman, Department of Health	(002)	333 203
VIC	Dr Sandy Thompson, Macfarlane Burnet Centre for Medical Research	(03)	280 2534
WA	Dr Lewis Marshall, WA Department of Health	(09)	388 4999