





AIDS – New Zealand

HIV INFECTION AND AIDS DIAGNOSED IN NEW ZEALAND IN 2009

HIV INFECTION

-  151 people were diagnosed with HIV through antibody testing in New Zealand in 2009.
-  73 were men infected through sex with other men, 50 (24 men and 26 women) through heterosexual contact, 5 (all men) through injecting drug use, 3 through mother-to-child transmission, and 2 through possible health care related infection overseas. For the remaining 18 people the means of infection was unknown or unreported.
-  A further 48 people with HIV infection who had not had an antibody test in New Zealand, had a first viral load test in 2009. These were mostly people who had been previously diagnosed overseas. 18 were men infected through sex with other men, 10 (3 men and 7 women) through heterosexual contact and 2 were children infected through mother-to-child transmission. For the remaining 18 people the means of infection was unknown or unreported.

AIDS

-  28 people were notified with AIDS in 2009. 15 were men infected through sex with other men, 9 (5 men and 4 women) through heterosexual contact, 1 through injecting drug use, 2 through mother-to-child transmission, and for 1 person the means of infection was unknown.

HIV INFECTIONS DIAGNOSED IN 2009

Figure 1 shows the annual number of people diagnosed with HIV in New Zealand, through antibody testing, since this began in 1985. It is important to appreciate that this graph represents the number of people diagnosed rather than infected with HIV each year, and that these people were not necessarily infected in New Zealand.

In 2009, the total number diagnosed was 151.

This suggests that there has been no continuation of the increase in annual HIV diagnoses seen in the previous ten years. While the number is somewhat less than in 2008, it is too soon to say whether we are experiencing a definite downward trend in diagnoses.

A further 48 people were reported with HIV through viral load testing; mostly people who were previously diagnosed overseas.

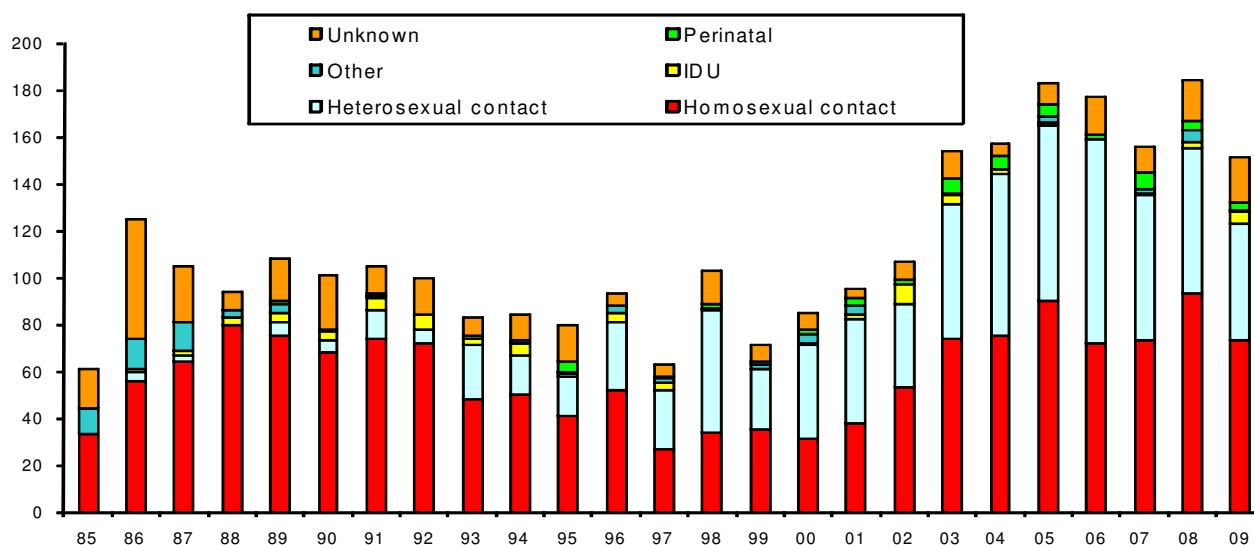


Figure 1 Number of people diagnosed with HIV in New Zealand through antibody testing by year of diagnosis* and means of infection. (*Infection might have occurred some time before diagnosis.)

HIV diagnoses among men who had had sex with men (MSM) - 2009

Overall, 73 MSM were diagnosed with HIV through antibody testing in 2009. This is less than the number diagnosed in 2008 (93) which was the highest number of MSM ever diagnosed in one year, but similar to the numbers diagnosed in 2007 (73) and 2006 (72).

Of the 73 MSM, 43 (59%) were European, 6 (8%) Māori, 8 (11%) Asian, 4 (5%) Pacific and 12 (16%) of 'other' or unknown ethnicity. Half (48%) were living in Auckland, 20% in Wellington, 11% in other parts of the North Island, 16% in the South Island and 4% overseas at diagnosis.

The average age of these MSM was 37 years. Two (3%) were in the 15-19 year age group, 24 (33%) aged 20-29 years, 15 (21%) aged 30-39 years, 23 (31%) aged 40-49 years, and 9 (12%) aged more than 50 years. Again while these data do not show the age at the time of infection it indicates that among MSM, HIV infection should be considered across a wide age range.

Of the 73 MSM diagnosed in 2009, for 55 (75.3%) the infection was reported to have occurred in New Zealand. Figure 2 shows the place of infection for MSM since 1996.

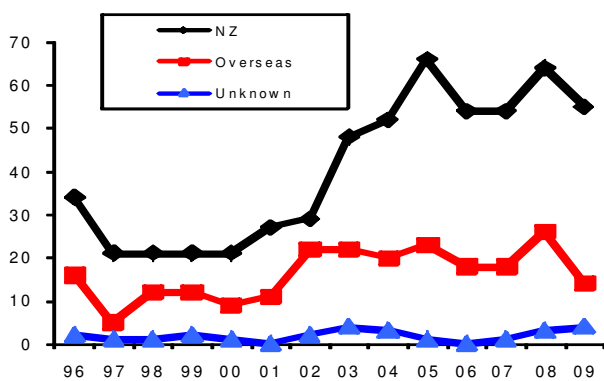


Figure 2 Place of infection of MSM diagnosed by antibody test, by year of diagnosis

Of these 55 men infected in New Zealand, 29 were reported to have had a previous negative test, 13 within the past 2 years, and 13 between 2 and 5 years before diagnosis. This shows new HIV infections are continuing to occur among MSM in New Zealand.

The initial CD4+ lymphocyte count gives an indication of the stage of infection at the time of HIV diagnosis. Of the 73 MSM diagnosed in 2009 an initial CD4+ count was reported to us for 63. Of these 63, 8 (13%) had a count of 200 cells per cubic mm or less, and 24 (38%) of 350 cells per cubic mm or less. This shows that at least a third of MSM diagnosed with HIV in 2009 did not have their infection recognised until a relatively late stage.

A further 18 MSM were reported with HIV through viral load testing, half of whom were initially diagnosed overseas. Of the 18, 15 (83%) were of European ethnicity, 1 (6%) Māori and 2 (11%) Asian.

HIV diagnoses among people heterosexually infected - 2009

Overall 50 people (24 men and 26 women) were diagnosed with heterosexually acquired infection in 2009. There were 17 (34%) African, 11 (22%) Asian, 10 (20%) European, 4 (8%) Māori, 1 (2%) Pacific, and 7 (14%) of 'other' or unknown ethnicity.

Of the 50 people, 19 (38%) were reported to have been infected in New Zealand, 29 (58%) overseas, and for 2 (4%) people this information was not available.

Figure 3 shows the trends in the annual number of people diagnosed by place of infection since 1996. There has been a marked drop in the number of people diagnosed with heterosexually acquired HIV overseas since it peaked in 2006. The drop is mainly due to fewer people being diagnosed who were tested for immigration purposes.

While the number reported to be infected in New Zealand remains lower than for those infected overseas, there has been a slow rise in this group since information was first collected in 1996, reaching a high of 19 in 2009 (9 men and 10 women).

Of these 19, 7 (37%) were African, 6 (32%) European, 3 (16%) Māori, 2 (10%) Asian, and 1 (5%) of Pacific ethnicity.

No information on the partners' risk was available for 8 of the 9 men infected in New Zealand, and the remaining man reported a partner from a high prevalence country. For the women heterosexually infected in New Zealand, 8 were infected by a partner from a high prevalence country, 1 was infected by a bisexual man and for 1 woman no information was available.

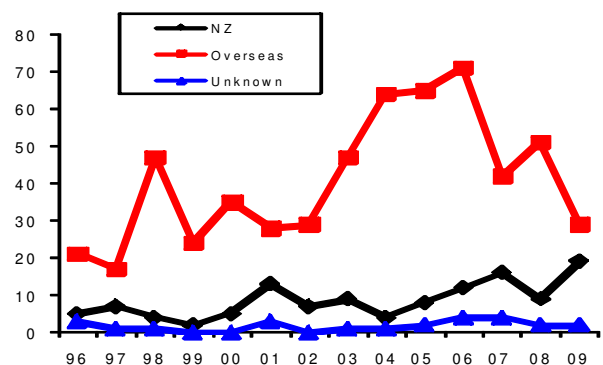


Figure 3 Place of infection of those infected through heterosexual contact, diagnosed by antibody test, by year of diagnosis

A further 10 people infected through heterosexual contact were reported with HIV through viral load testing. Of these, 7 were initially diagnosed overseas. Three were of European ethnicity, 3 African, 1 Pacific and 3 of 'other' ethnicity.

HIV diagnoses among injecting drug users - 2009

Five men infected through injecting drug use were diagnosed with HIV in 2009. Two were reported to have been infected in New Zealand, both were of European ethnicity and aged over 30 years. Neither had had a previous HIV test. Though this number remains very small, this is the highest annual total since 2002 (Figure 4).

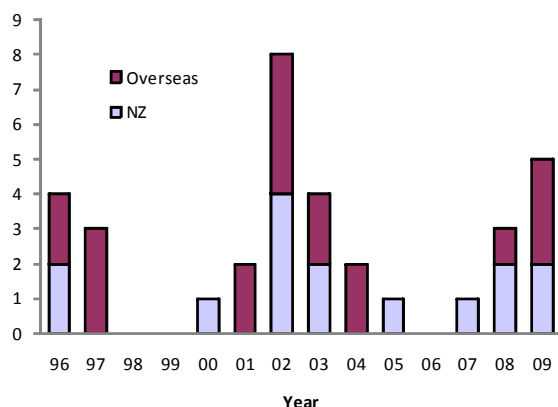


Figure 4 Number of people diagnosed with HIV through injecting drug use, by place of infection

Children infected through mother-to-child transmission - 2009

Three children (2 siblings) were diagnosed in 2009 with HIV that had been acquired through mother-to-child transmission. All had been born in New Zealand to women whose HIV had not been diagnosed during pregnancy. These children were aged between 5 and 8 years at diagnosis. One of the mothers was of Asian ethnicity and the other African.

A further two children, who had been previously diagnosed overseas, were reported through a viral load test.

Figure 5 shows the number of children diagnosed with HIV through mother-to-child transmission by year of birth. Of the 23 children born in New Zealand, 6 were not diagnosed until over the age of 3 years. So it is highly likely that there are children born in recent years living with undiagnosed HIV.

Since 1995, there have been 84 births to women known to be infected with HIV at the time of delivery. None of the children have been infected with HIV.

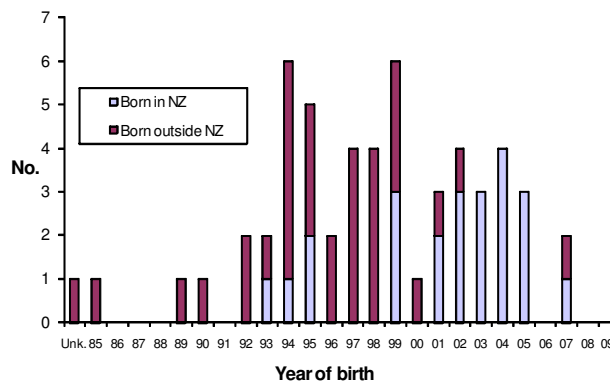


Figure 5 Number of children diagnosed with mother-to-child transmission in New Zealand, by year of birth

AIDS NOTIFICATIONS - 2009

Trends in AIDS notifications and deaths

A total of 28 people (23 males and 5 females) were notified with AIDS in 2009. Fifteen were MSM, 9 were people infected through heterosexual contact, 1 through injecting drug use, 2 were children infected through mother-to-child transmission and for 1 person the means of transmission was unknown. Of these 28, 10 (36%) were European, 7 (25%) Māori, 4 (14%) Pacific, 2 (7%) African, 2 (7%) Asian and 3 (11%) of 'other' ethnicity.

Eighteen (64%) had their AIDS diagnosis within 3 months of being diagnosed with HIV and therefore probably would not have had the opportunity for antiretroviral treatment to control progression of their HIV infection. This suggests there would be even fewer people progressing to AIDS if there was more HIV testing.

Figure 6 shows the annual number of notifications of AIDS by year of diagnosis and the number of deaths of people notified. It is encouraging that treatments are continuing to ensure that few people notified with AIDS are dying.

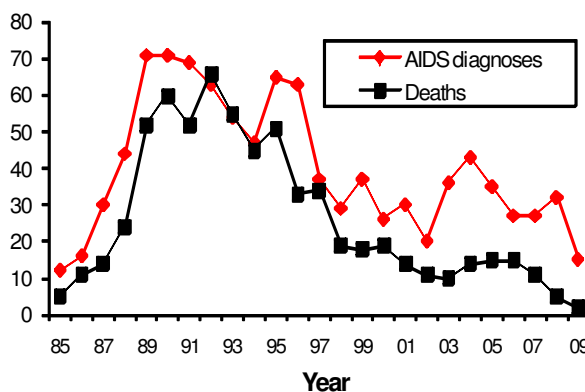


Figure 6 Annual number diagnoses of AIDS and deaths among people notified with AIDS (The number of notifications and deaths for 2009 might rise due to delayed reports)

Table 1. Exposure category by time of diagnosis for those found to be infected with HIV by antibody test and first viral load test.

		HIV Infection*							
		1985-2003		2004-2008		2009		Total	
Sex	Exposure category	No	%	No	%	No	%	No	%
Male	Homosexual contact	1162	56.1	487	47.7	89	44.7	1738	52.8
	Homosexual & IDU	26	1.3	15	1.5	1	0.5	42	1.3
	Heterosexual contact	212	10.2	198	19.4	27	13.6	437	13.3
	Injecting drug use	53	2.6	7	0.7	5	2.5	65	2.0
	Blood product recipient	34	1.6	0	0.0	0	0.0	34	1.0
	Transfusion recipient [§]	9	0.4	4	0.4	0	0.0	13	0.4
	Perinatal	13	0.6	17	1.7	5	2.5	35	1.1
	Other	4	0.2	5	0.5	0	0.0	9	0.3
	Unknown	239	11.5	65	6.4	28	14.1	332	10.1
	Female	Heterosexual contact	234	11.3	187	18.3	33	16.6	454
Injecting drug use		11	0.5	0	0.0	0	0.0	11	0.3
Transfusion recipient [§]		8	0.4	2	0.2	0	0.0	10	0.3
Perinatal		11	0.5	9	0.9	0	0.0	20	0.6
Other		7	0.3	5	0.5	1	0.5	13	0.4
Transgender	Unknown	24	1.2	20	2.0	9	4.5	53	1.6
	Total	8	0.4	1	0.1	1	0.5	10	0.3
NS	Transfusion recipient	5	0.2	0	0.0	0	0.0	5	0.2
	Unknown	13	0.6	0	0.0	0	0.0	13	0.4
TOTAL		2073	100.0	1022	100.0	199	100.0	3294	100.0

* Includes people who have developed AIDS. HIV numbers are recorded by time of diagnosis for those reported through antibody testing and by time of first viral load for those reported through viral load testing. The latter include many who have initially been diagnosed overseas and not had an antibody test here. The date of initial diagnosis may have preceded the viral load date by months or years.

NS = Not stated § All people in this category, diagnosed since 1996, infection was acquired overseas

Table 2. Ethnicity[‡] by time of diagnosis in New Zealand for those found to be infected with HIV by antibody test and first viral load test.

		HIV Infection*							
		1996-2003		2004-2008		2009		Total	
Sex	Ethnicity	No	%	No	%	No	%	No	%
Male	European/Pakeha	513	50.0	430	42.1	70	35.2	1013	45.1
	Māori [†]	60	5.8	75	7.3	9	4.5	144	6.4
	Pacific Island	18	1.8	25	2.4	5	2.5	48	2.1
	African	96	9.3	127	12.4	10	5.0	233	10.4
	Asian	91	8.9	81	7.9	18	9.0	190	8.5
	Other	19	1.9	35	3.4	18	9.0	72	3.2
	Unknown	22	2.1	25	2.4	25	12.6	72	3.2
Female	European/Pakeha	53	5.2	30	2.9	5	2.5	88	3.9
	Māori [†]	7	0.7	8	0.8	3	1.5	18	0.8
	Pacific Island	13	1.3	11	1.1	1	0.5	25	1.1
	African	88	8.6	130	12.7	17	8.5	235	10.5
	Asian	44	4.3	28	2.7	6	3.0	78	3.5
	Other	1	0.1	8	0.8	5	2.5	14	0.6
	Unknown	1	0.1	8	0.8	0	0.0	9	0.4
Transgender	Total	1	0.1	1	0.1	7	3.5	9	0.4
TOTAL		1027	100.0	1022	100.0	199	100.0	2248	100.0

[‡] Information on ethnicity of people diagnosed with HIV only collected since 1996

* Includes people who have developed AIDS. HIV numbers are recorded by time of diagnosis for those reported through antibody testing and by time of first viral load for those reported through viral load testing. The latter include many who have initially been diagnosed overseas and not had an antibody test here. The date of initial diagnosis may have preceded the viral load date by months or years.

[†] Includes people who belong to Maori and another ethnic group

For further information about the occurrence of HIV/AIDS in New Zealand, contact:
 Sue McAllister, AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago Medical School, PO Box 913,
 Dunedin, New Zealand. Website address: www.otago.ac.nz/aidsepigroup
 Phone: (03) 479 7220, Fax: (03) 479 7298, or Email aidsepigroup@otago.ac.nz