AIDS – New Zealand

HIV AND AIDS IN NEW ZEALAND - 2008

HIV INFECTION

- 184 people were diagnosed with HIV through antibody testing in New Zealand during 2008: the highest number ever diagnosed in one year.
- 91 were men infected through sex with other men (MSM), 61 (39 men and 22 women) through heterosexual contact, 2 through injecting drug use, 2 through a transfusion (overseas), 4 were children infected through mother-to-child transmission (3 overseas and 1 in New Zealand), 3 people had another means of infection, and for 21 people the means of infection was unknown or unreported.
- A further 43 people with HIV infection, who had not had an antibody test in New Zealand, had a first viral load test during 2008. These were mostly people who had been previously diagnosed overseas. Twenty five were men infected through sex with other men, 3 through heterosexual contact, and for 15 people the means of infection was unknown or unreported.

AIDS

48 people were notified with AIDS in 2008. Twenty two were men infected through sex with other men, 19 (14 men and 5 women) through heterosexual contact, 2 through injecting drug use, 1 through a transfusion (overseas), 2 were children infected through perinatal transmission overseas, and for 2 people the means of infection was unknown or unreported.

In 2008, 184 people were newly diagnosed with HIV in New Zealand through antibody testing. This is one more than the previous highest annual number of 183 in 2005. A further 43 people were reported with HIV through viral load testing and were mostly people who were previously diagnosed overseas.

Figure 1 shows the number, by means of infection, of people diagnosed through antibody testing since it became available in 1985. It must be remembered that these numbers relate to the year people were diagnosed and that the infection may have occurred many years earlier. The annual number of HIV diagnoses rose markedly between 2000 and 2005, and since then has remained high.



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.)

In 2008, as in previous years, most of the HIV infections were through sexual contact, either through sex between men, or heterosexual contact. There were four children diagnosed who were infected through mother-to-child transmission, of whom three were born overseas.

Trends in new HIV diagnoses among men who had sex with men (MSM)

The trends over the past decade (1999-2008) in the place of infection, area of diagnosis within New Zealand, age at diagnosis, and ethnicity for MSM diagnosed through antibody testing are shown in Figure 2(a)-(d).

Throughout this period the majority of MSM were infected in New Zealand; 70% in 2008 (Figure 2 (a)). Since 2002 the number of infections acquired in New Zealand has risen while the number acquired overseas has remained level.

In most years over the past decade, there have been more diagnoses of HIV among MSM in Auckland than in the rest of New Zealand combined (Figure 2(b)).

For most of the period 1999-2008, the commonest age group for HIV diagnosis was 30-39 years however, since 2006 diagnoses have been most common among men aged 40-49 years (Figure 2 (c)). As the age at diagnosis rather than age at infection is recorded, this change may be a reflection of later diagnosis rather than changing age of infection. Throughout this ten year period, diagnoses have been equally common among men aged greater than 50 years and between 20 and 29 years.

Over the past decade most infections have been among Europeans and the distribution of ethnicities has been similar to that of adult men in New Zealand as a whole (Figure 2(d)).

The rise in HIV diagnoses in New Zealand among MSM is similar to that experienced in many countries. In 23 European countries with data for 2000–2006, the number of new HIV diagnoses among MSM increased by 86%. (G Likatavicius et al, An increase in newly diagnosed HIV cases reported among men who have sex with men in Europe, 2000–6. Sexually Transmitted Infections 2008;84:499–505). In New Zealand over this period the number rose by 89%.

Although these data show the trend in number for diagnoses rather than infection, they indicate that it is highly likely that new infections are continuing to occur in New Zealand among MSM at a relatively high rate. As well as safer sex practices, HIV testing, and prevention and treatment of other sexually transmitted infections are important to reduce the spread of HIV through this community.



Figure 2 Trends in the number of MSM diagnosed by antibody tests in New Zealand, according to characteristics

Trends in new HIV diagnoses among people infected heterosexually

The number of people diagnosed with HIV infected through heterosexual contact peaked in 2006, probably a reflection of more HIV testing for immigration purposes in that year.

While overall there have been a similar number of heterosexually infected men and women diagnosed, in 2008 there was a higher proportion of men; the reason for this is unclear.

In contrast to the situation with MSM, the majority of people with heterosexually acquired HIV over the period 1999-2008 were infected overseas; 81% in 2008 (Figure 3). These infections were mainly acquired in countries where there is a high prevalence of HIV in the heterosexual population.



Figure 3 Place of infection of people diagnosed with heterosexually acquired HIV infection by antibody testing in New Zealand - 1999-2008

Heterosexually acquired HIV in New Zealand

In the period 1999-2008 there were 85 people diagnosed with HIV that was heterosexually acquired in New Zealand. Of these, 33 were men and 52 women. This is, on average, 8.5 diagnoses per year. The comparable number of MSM diagnoses per year was 44.

Ethnicity of people with HIV heterosexually acquired in New Zealand

The ethnicity of people heterosexually infected in New Zealand diagnosed during 1999-2008 is shown in Table 1. The diagnosis rates have been calculated from census estimates of people aged 15-64 years in each ethnic group. Comparisons made between the ethnic groups have been presented as the Standardised Diagnosis Ratio. These are the ratios of the diagnosis rates among Maori, Pacific, Asian and people of "other" ethnicity, compared to those of European ethnicity, taking into account the age make up of the adult population in each group. The 95% confidence intervals (95% CIs) provide a range of this measure given the numbers involved in the calculations.

This analysis shows that both men and women of "other" ethnicities had high diagnosis rates. For women only, the rates were also higher among Māori, Pacific and Asian compared to European women - in the order of 2 to 4 times higher. It must be noted that these results are based on very small numbers.

These results are from diagnoses. While this is likely to be an indicator of the infection rate, this assumes that the testing is similar between ethnic groups, which may not be so.

These results suggest that HIV prevention efforts in the heterosexual population should take into account the ethnic groups that might have particular prevention needs. Fortunately heterosexual spread of HIV is rare in New Zealand, whereas other sexually transmitted infections (STIs) are common. The prevention and early treatment of all STIs will reduce the risk of HIV acquisition and transmission.

 Table 1 Ethnicity of men and women heterosexually infected in New Zealand:1999-2008.

			Men		Women					
	No.	Rate per 100,000	Standardised Diagnosis Ratio	95% CI	No.	Rate per 100,000	Standardised Diagnosis Ratio	95% CI		
European	21	2.1	1.0	Reference	19	1.8	1.0	Reference		
Māori	5	2.8	1.5	0.48-3.5	11	5.8	2.8	1.4-5.0		
Pacific	2	2.4	1.3	0.16-4.7	6	7.0	3.3	1.2-7.3		
Asian	3	2.5	1.3	0.27-3.8	10	7.5	3.6	1.7-6.7		
Other	2	16.4	8.1	1.0-29.3	5	46.5	27	9.8-58		
Total	33	2.4			52*	3.6				

* The ethnicity of one women was not reported

 Table 2. Exposure category by time of diagnosis for those found to be infected with HIV by antibody test and first viral load test. (A small number of transsexuals are included with the males).

		HIV Infection*									
		1985-1999		2000-2004		2005-2007		2008		Total	
Exposure category	Sex	No.	%	No.	%	No.	%	No.	%	No.	%
Homosexual contact	Male	907	59.4	346	47.5	286	46.3	114	50.2	1653	53.3
Homosexual & IDU	Male	20	1.3	12	1.6	7	1.1	2	0.9	41	1.3
Heterosexual	Male	120	7.9	130	17.8	121	19.6	39	17.2	410	13.2
contact	Female	128	8.4	141	19.3	126	20.4	25	11.0	420	13.6
Injecting drug	Male	36	2.4	19	2.6	2	0.3	2	0.9	59	1.9
use (IDU)	Female	10	0.6	1	0.1	0	0.0	0	0.0	11	0.3
Blood product recipient	Male	34	2.2	0	0.0	0	0.0	0	0.0	34	1.1
Transfusion recipient§	Male	6	0.4	3	0.4	2	0.3	1	0.4	12	0.4
	Female	6	0.4	3	0.4	0	0.0	1	0.4	10	0.3
	NS	5	0.3	0	0.0	0	0.0	0	0.0	5	0.2
Perinatal	Male	6	0.4	10	1.4	12	1.9	2	0.9	30	1.0
	Female	4	0.3	10	1.4	4	0.6	2	0.9	20	0.6
Other	Male	3	0.2	1	0.1	3	0.5	2	0.9	9	0.3
	Female	4	0.3	3	0.4	2	0.3	2	0.9	11	0.3
Awaiting infor- mation/ undetermined	Male	205	13.4	44	6.0	37	6.0	28	12.3	314	10.1
	Female	19	1.2	6	0.8	15	2.4	7	3.1	47	1.5
	NS	13	0.8	0	0.0	0	0.0	0	0.0	13	0.4
TOTAL		1526	100.0	729	100.0	617	100.0	227	100.0	3099	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, acquired overseas

			HIV Infection*										
		1996-1999		2000-2004		2005-2007		2008		Total			
Ethnicity	Sex	No.	%	No.	%	No.	%	No.	%	No.	%		
European/	Male	257	53.5	337	46.4	250	40.5	97	42.7	941	45.8		
Pakeha	Female	25	5.2	30	4.1	21	3.4	7	3.1	83	4.0		
Maori†	Male	29	6.0	41	5.6	46	7.4	17	7.5	133	6.5		
	Female	4	0.8	5	0.7	5	0.8	1	0.4	15	0.7		
Pacific Island	Male	4	0.8	19	2.6	16	2.6	4	1.8	43	2.1		
	Female	4	0.8	10	1.4	7	1.1	2	0.9	23	1.1		
African	Male	55	11.4	70	9.6	77	12.5	21	9.2	223	10.9		
	Female	33	6.9	85	11.6	81	13.1	18	7.9	217	10.6		
Asian	Male	32	6.7	69	9.5	52	8.4	19	8.3	172	8.4		
	Female	16	3.3	32	4.4	19	3.1	5	2.2	72	3.5		
Other	Male	7	1.4	16	2.2	17	2.7	13	5.7	53	2.6		
	Female	0	0.0	2	0.3	7	1.1	1	0.4	10	0.5		
Awaiting	Male	13	2.7	13	1.8	12	1.9	19	8.3	57	2.8		
undetermined	Female	1	0.2	0	0.0	7	1.1	3	1.3	11	0.5		
TOTAL		480	100.0	729	100.0	617	100.0	227	100.0	2053	100.0		

Table 3. Ethnicity[‡] by time of diagnosis in New Zealand for those found to be infected with HIV by antibody test and first viral load test. (A small number of transsexuals are included with the males).

* 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.

[‡] Information on ethnicity of people diagnosed with HIV only collected since 1996
 [†] Includes people who belong to Maori and another ethnic group

For further information about the occurrence of HIV/AIDS in New Zealand, contact:

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