

AIDS – New Zealand

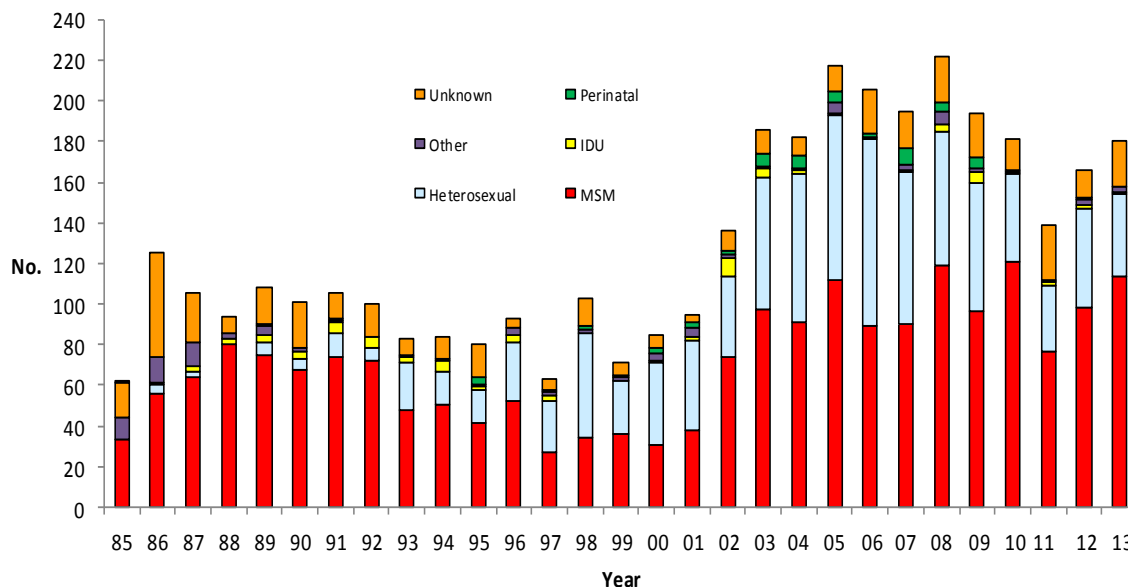


Figure 1: Number of people diagnosed with HIV in New Zealand through Western blot (WB) antibody test by year of diagnosis and means of infection, and since 2002 the number reported through viral load (VL) test. (*It is important to appreciate that infection might have occurred some time before diagnosis)

HIV diagnoses in 2013

In 2013, 180 people were first known to be infected with HIV in New Zealand, 130 through Western Blot antibody testing and 50 through viral load testing. Of these 180, 16 had been previously diagnosed overseas.

Of the 180, 114 were men who have sex with other men (MSM), and 40 (21 men and 19 women) were infected through heterosexual contact. One man was infected by injecting drug use (IDU) and two people (1 man, 1 woman) were infected by other means. For the remaining 23 people (18 men, 4 women, 1 transgender) the means of infection was unknown or information is still to be received.

The total number of diagnoses in 2013 (180) was slightly higher than in 2012 (170) (Figure 1). It is important to appreciate that the number diagnosed each year will not be the same as the number infected, as people may be infected for many years before being diagnosed.

Gay, bisexual and other men who have sex with men (MSM)

In 2013, of the 114 MSM found to be infected, 100 were first diagnosed in New Zealand (i.e. had not been previously diagnosed overseas), slightly higher than the equivalent number of 89 in 2012. The annual number first diagnosed in this country by place of infection since 1996 are shown in Figure 2. This shows the number diagnosed in New Zealand and infected here rose between 2001 and 2005. Since then there has been no clear trend up or down, although there have been some moderate annual fluctuations.

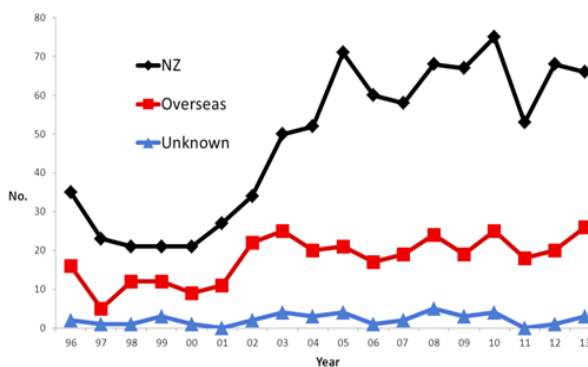


Figure 2 Place of infection of MSM diagnosed by antibody test and reported by viral load since 2002 whose place of diagnosis was New Zealand

Of all the 114 MSM found to be infected in 2013, which includes those previously diagnosed overseas:

- 68 (60%) were New Zealand European, 8 (7%) Maori, 27 (24%) Asian and 11 (9%) of other ethnicities.
- 74 (65%) were living in Auckland, 13 (11%) in Wellington, 11 (10%) in other parts of the North Island, and 9 (8%) in the South Island. Seven (6%) reported that they normally lived overseas.
- The age range of MSM at diagnosis was 21-77 years; 20 (18%) were aged <30 years, 33 (29%) aged 30-39 years, 35 (31%) aged 40-49 years, and 26 (23%) aged 50 or more. Of course, infection may have occurred at a younger age than when it was diagnosed.

Of the 70 MSM men infected in New Zealand, 34 (49%) were reported to have had a previous negative test, 20 within the past 2 years. This suggests that new infections are continuing to occur among MSM in New Zealand.

The CD4 lymphocyte count gives an indication of the stage of HIV infection at diagnosis. Of the 90 MSM for whom this CD4 count was reported, 34 (38%) had a CD4 count of 350 cells/ μ L or less. A European study has shown that half the people infected with HIV progress to this level of immune suppression about 4 years after infection, hence many of these people will have been living with undiagnosed HIV for some years.

HIV diagnoses among people heterosexually infected

In 2013, of the 40 people found to be infected with HIV who had been heterosexually infected, 38 were first diagnosed in New Zealand (i.e. had not been previously diagnosed overseas). This is very similar to the equivalent number (39) in 2012.

The annual numbers first diagnosed in this country (i.e. had not been previously diagnosed overseas) with heterosexually-acquired HIV by place of infection since 1996 are shown in Figure 3. The annual number infected in New Zealand has risen gradually since the mid-1990s, and in 2013 was similar to the number infected overseas, although still very much smaller than the number of MSM.

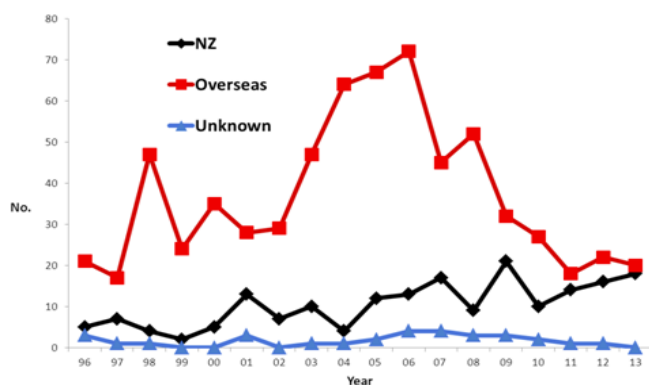


Figure 3 Place of infection of people diagnosed annually in New Zealand with heterosexually-acquired HIV by antibody test since 2006 and including those reported by viral load testing since 2002

In 2013, of all the 40 people heterosexually-infected (which includes those previously diagnosed overseas), 21 were men and 19 were women. Overall 19 (48%) were New Zealand European, 5 (13%) African, 9 (23%) Asian, 2 (5%) Maori, 4 (10%) Pacific and 1 (3%) of other ethnicity. Their ages ranged from 19 to 63 years. 19 (48%) people were reported to have been infected through heterosexual contact in New Zealand, and 21 (53%) overseas.

Children infected through mother-to-child transmission

In 2013, there were no children diagnosed with HIV in New Zealand infected through mother-to-child transmission. As shown in Figure 4, there have been no children diagnosed with perinatally-acquired HIV born in New Zealand since 2007. There may however be children living with unrecognised HIV born since then or even earlier, as such children may not be diagnosed for many years.

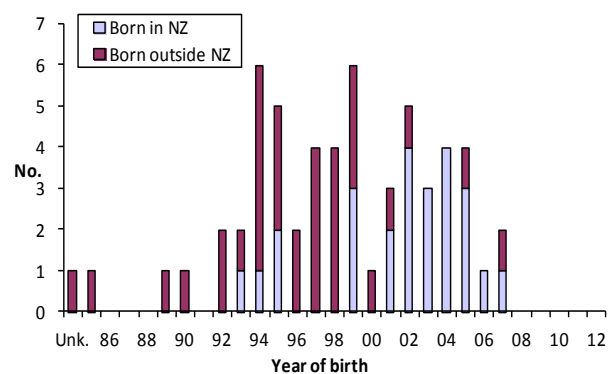


Figure 4 The number of children diagnosed with mother-to-child transmission in New Zealand, by place and year of birth

Between 1998-2012, there were 115 births to women known to be HIV infected prior to delivery in New Zealand, none of whom have been infected with HIV. It is too soon to be sure about this for all children born in 2013.

In 2013, there was one pregnant women diagnosed with HIV, and overall there have been five in the period 2011-2013. As the majority of pregnant women are now tested, this shows a very low prevalence among such women.

People who inject drugs (PWID)

The number of people reported to have been infected solely through injecting drug use has remained low, with only one such person diagnosed in New Zealand in 2013, and overall five in the period 2011-2013, of whom two were reported infected overseas.

AIDS Notifications- 2013

Overall 25 people were notified with AIDS in 2013. Of these, 13 were MSM, 9 (3 men and 6 women) were infected heterosexually, and for 3 people

the means of transmission was unknown or not reported. Thirteen (52%) were New Zealand European, 4 (16%) Maori, 3 (12%) Asian, 1 (4%) Pacific Islander, 1 (4%) African and 3 (12%) of other ethnicities.

Seventeen (68%) had their AIDS diagnosis within three months of being diagnosed with HIV and would probably not have had the opportunity for antiretroviral treatment to control progression of their HIV infection. This suggests that there would be even fewer people progressing to AIDS if more people were presenting earlier for HIV testing.

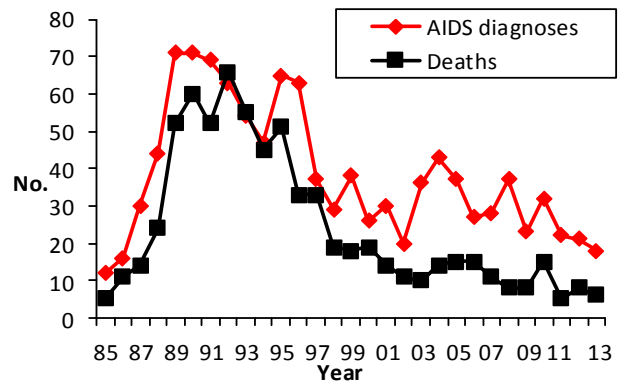


Figure 5 shows the annual number of notification of AIDS by year of diagnosis and the number of deaths of number of deaths of people with AIDS notified.

Figure 5 Annual number of diagnoses of AIDS and deaths among people notified with AIDS (The number of notifications and deaths for 2013 are expected to rise due to delayed reports)

SUMMARY OF TRENDS OF HIV DIAGNOSES IN NEW ZEALAND

Gay, bisexual and other men who have sex with men (MSM)
In the late-1990s a low and stable number of MSM were diagnosed annually with HIV in New Zealand. This rose between 2001 and 2005, mainly due to an increase in those infected locally. Since then there has been no clear trend up or down, although some moderate annual fluctuations have been seen.

Over a short period the number diagnosed with HIV will differ from those infected as diagnosis may not occur until some time after infection; changes in the pattern of testing will impact on the annual number diagnosed. Over a longer period the annual number diagnosed will give an indication of the epidemic, and among MSM this is now clearly higher than in the mid-1990s.

HIV testing in the previous year was reported in the 2011 Gay Auckland Periodic Sex Survey (GAPSS), a rise from 35% in 2002 and 40% in 2008. Such variation, if a reflection of all MSM, could explain some of the fluctuations in the number diagnosed in recent years.

In a context of more testing and more MSM living with HIV hence capable of onward transmission, the annual number of new infections among MSM could be expected to rise. The fact that annual diagnoses have not continued to increase steadily among MSM in recent years is therefore encouraging, as overall it suggests transmission from individuals with HIV may be declining.

Heterosexual men and women
The number diagnosed with heterosexually acquired HIV also rose in the early 2000s. This was mainly due to an increase in people infected overseas, which has always been higher than those infected in New Zealand. Since the peak in 2006 the annual number has dropped due to fewer people infected overseas.

The annual number infected in New Zealand has risen gradually since the mid-1990s, and in 2013 was similar to the number infected overseas, although still very much smaller than the number of MSM. It is important that HIV is considered a possibility even in people have not been at risk overseas.

People who inject drugs (PWID)
New Zealand continues to have a small number of HIV diagnoses among people who inject drugs, a result of the early introduction of the Needle Exchange Programme (NEP). However if HIV were introduced into this population, and needle and syringe sharing happened, it could spread rapidly.

Children
There have been no children diagnosed with perinatally acquired HIV born in New Zealand since 2007. However there may be children living with unrecognised HIV born since then or even earlier, as the last child diagnosed was over ten years old at the time.

Prevention of HIV spread

Prevention approaches should continue to include:

- The promotion of wide scale condom use especially among populations most at risk of HIV.
- The encouragement of HIV testing especially among
 - ◊ Those who have had unprotected sexual exposure that could result in HIV transmission (vaginal or anal sex without a condom) especially among MSM and those with sexual contacts from countries where transmission of HIV infection is common.
 - ◊ Those seeking assessment for sexually transmitted infections.
 - ◊ Those whose injecting drug use involves the sharing of equipment.
 - ◊ Pregnant women.
- Offering appropriate antiretroviral treatment to those infected that improves outcomes for individuals as well as reducing infectivity.
- The diagnosis and treatment of other sexually transmitted infections, which facilitate both acquisition and transmission of HIV.
- Avoiding sharing needles and syringes.

To facilitate these approaches it is important that the stigma and discrimination around HIV are combated in the general population, and that a high level of knowledge about HIV is maintained in the general population as well as those at increased risk.

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

		HIV Infection*							
		1985-2003		2004-2012		2013		Total	
Sex	Exposure category	N	%	N	%	N	%	N	%
Male	Homosexual contact	1163	56.0	871	51.2	112	62.0	2146	54.3
	Homosexual & IDU	26	1.3	19	1.1	2	1.1	47	1.2
	Heterosexual contact	212	10.2	296	17.4	21	11.7	529	13.4
	Injecting drug use	53	2.6	16	1.0	1	0.6	70	1.8
	Blood product recipient	34	1.6	0	0.0	0	0.0	34	0.9
	Transfusion recipient [§]	9	0.4	4	0.2	0	0.0	13	0.3
	Perinatal	13	0.6	25	1.5	0	0.0	38	0.9
	Other	4	0.2	5	0.3	1	0.6	10	0.3
	Unknown	237	11.0	125	7.4	18	10.0	380	9.6
Female	Heterosexual contact	234	11.0	279	16.4	19	10.6	532	13.5
	Injecting drug use	11	1.0	1	0.1	0	0.0	12	0.3
	Transfusion recipient [§]	8	0.4	2	0.1	0	0.0	10	0.3
	Perinatal	11	1.0	9	0.5	0	0.0	20	0.5
	Other	7	0.3	9	0.5	1	0.6	17	0.4
	Unknown	24	1.2	35	2.1	4	2.2	63	1.6
Transgender	Total	8	0.4	4	0.2	1	0.6	13	0.3
NS	Transfusion recipient	5	0.2	0	0.0	0	0.0	5	0.1
	Unknown	13	0.6	0	0.0	0	0.0	13	0.3
TOTAL		2072	100.0	1700	100.0	180	100.0	3952	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

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		2004-2012		2013		Total (From 1/1/1996)	
Sex	Ethnicity	N	%	N	%	N	%	N	%
Male	European/Pakeha	514	50.0	739	43.5	83	46.1	1336	46.0
	Maori [†]	60	5.8	116	6.8	8	4.4	184	6.3
	Pacific Island	19	1.9	42	2.5	5	2.8	66	2.3
	African	96	9.3	155	9.1	4	2.2	255	8.8
	Asian	91	8.9	158	9.3	33	18.3	282	9.7
	Other	19	1.8	90	5.3	7	3.9	116	4.0
	Unknown	20	1.9	61	3.6	15	8.3	96	3.3
Female	European/Pakeha	53	5.2	48	2.8	6	3.3	107	3.7
	Maori [†]	7	0.7	16	0.9	2	1.1	25	0.9
	Pacific Island	13	1.3	15	0.9	3	1.7	31	1.0
	African	88	8.6	173	10.2	2	1.1	263	9.0
	Asian	44	4.3	52	3.1	7	3.9	103	3.5
	Other	1	0.1	17	1.0	1	0.6	19	0.7
	Unknown	1	0.1	14	0.8	3	1.7	18	0.6
Transgender	Total	1	0.1	4	0.2	1	0.6	6	0.2
TOTAL		1027	100.0	1700	100.0	180	100.0	2907	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:
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