

AIDS – New Zealand

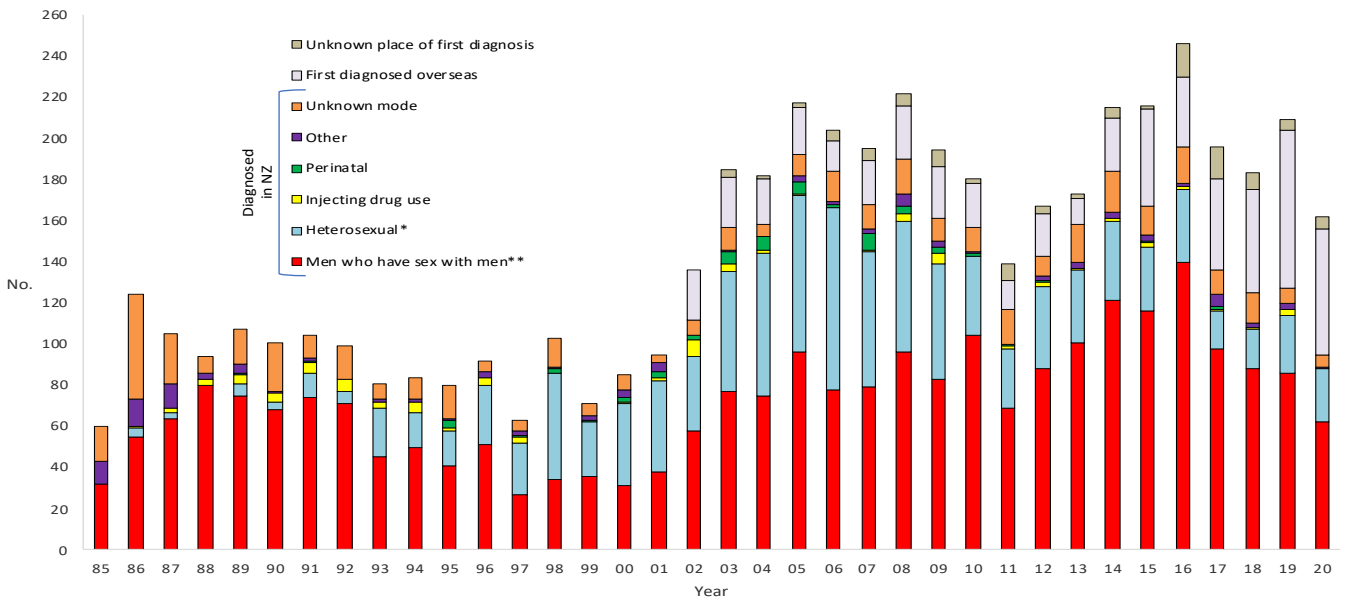


Figure 1. Number of people diagnosed with HIV in New Zealand by year of diagnosis and means of acquisition of HIV and, since 2002, the number of people first diagnosed overseas. (It is important to appreciate that infection may have occurred a number of years prior to diagnosis)

*Includes Heterosexual & injecting drug use (IDU) ** Includes MSM & IDU

HIV notifications in 2020

In 2020, a total of 162 people (138 men, 24 women) were notified with HIV in New Zealand, of whom 95 were first diagnosed in New Zealand, 61 had previously been diagnosed overseas, and for six people the place of first diagnosis was unknown.

Of the 162, 106 were men who have sex with men (MSM), 36 people (21 women, 15 men) had acquired their HIV through heterosexual contact, one person through injecting drug use (IDU), and one person through perinatal transmission. For the remaining 18 (three women, 15 men) people the means of acquisition was unknown or this information has not yet been received.

The total number notified in 2020 (n=162) was the lowest since 2012 (Figure 1) and represents a 23% decline from the average over the previous five years. This reduction has been largely driven by a decline in people who were first diagnosed in New Zealand – a 37% decline from the average over the previous five years.

The number of people previously diagnosed overseas and having a first viral load test in New Zealand to monitor their HIV has increased over the past five years from 34 in 2016 to 61 in 2020. In 2020, this was mostly MSM (72%) and represented different ethnic groups: New Zealand European (34%), other European (20%), Māori (7%), Asian (15%), Latin American (10%), African (3%) and 11% for whom the ethnicity was not reported.

HIV diagnoses among gay, bisexual and other men who have sex with men (MSM)

In 2020, of the 106 MSM notified, 62 were first diagnosed in New Zealand and 44 had previously been diagnosed overseas.

Figure 2 shows the place of acquisition of HIV for MSM diagnosed in New Zealand since 1996. The number of MSM who acquired HIV locally has continued to decline after the peak in 2016 (n=97) with a sharp decrease to 69 in 2017, then less of a decline to 63 in 2018, 58 in 2019, and 49 in 2020. The number of MSM who acquired HIV overseas also declined in 2020 with only nine people, compared to an average of 26 over the previous five years.

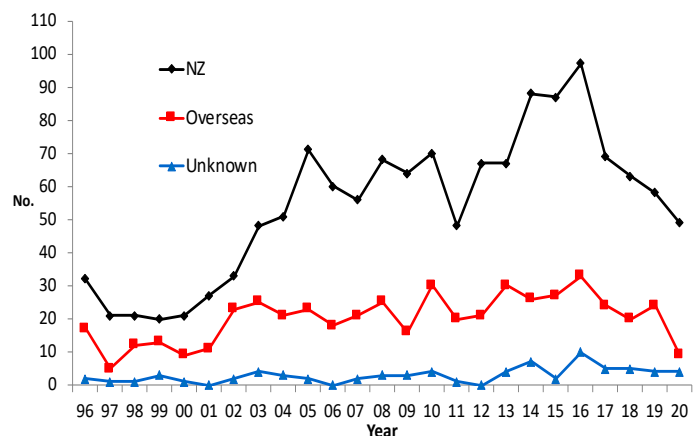


Figure 2. Place of acquisition of HIV for MSM first diagnosed in New Zealand since 1996

The initial CD4 lymphocyte count gives an indication of the stage of HIV infection at diagnosis. Here we have limited the reporting of the initial CD4 count to those 49 MSM diagnosed and whose HIV was acquired in New Zealand in 2020 as this group best indicates the underlying incidence. Nineteen (39%) had a CD4 count more than 500 cells/mm³ indicating they were diagnosed within about 14 months following infection, 11 (22%) had a CD4 count between 350-499, 18 (37%) less than 350 indicating longer periods between infection and diagnosis, and for one (2%) person the initial CD4 count information was unavailable.

The number and proportion of MSM with a high CD4 count in 2020 (19; 39%), indicating a recent infection, was less than the annual average in the preceding five-year period (32; 42%), consistent with a declining incidence.

Of the 62 MSM diagnosed in New Zealand in 2020:

- 31 (50%) were European, 12 (19%) Asian, eight (13%) Māori, six (10%) Pacific, and five (8%) of other ethnicities.
- 21 (34%) were living in the Auckland region, 11 (18%) in the lower North Island, seven (11%) in other parts of the North Island, and six (10%) in the South Island. For 12 (19%) men their region of residence was reported as New Zealand but not further specified, and for five (8%) men it was reported that they normally live overseas.
- The age range at diagnosis was 18-73 years; 22 (35%) were aged less than 30 years, 16 (26%) aged 30-39 years, 10 (16%) aged 40-49 years, and 14 (23%) aged 50 or more. Infection may have occurred at a younger age than when it was diagnosed.

Of the 44 MSM notified in 2020 who were first diagnosed overseas:

- 24 (54%) were European, six (14%) Latin American, five (11%) Asian, three (7%) Māori, and six (14%) of other ethnicities or the ethnicity was not reported.

HIV diagnoses among people with heterosexually acquired HIV

In 2020, there were 36 people notified with HIV who had acquired HIV heterosexually. Of these 36, 26 were first diagnosed in New Zealand and 10 had previously been diagnosed overseas.

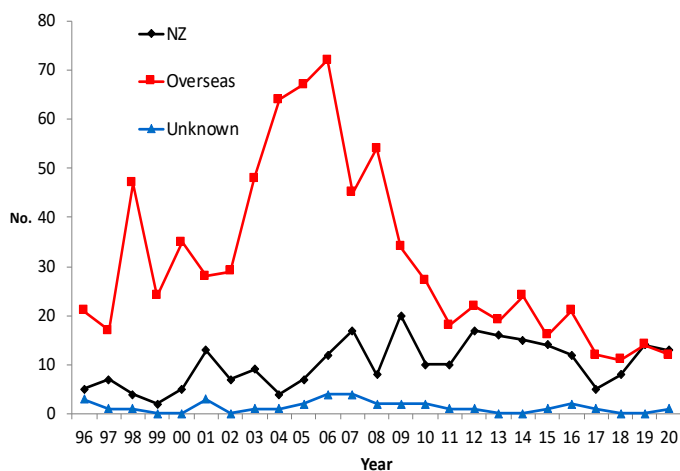


Figure 3. Place of acquisition of HIV for people first diagnosed in New Zealand with heterosexually acquired HIV

Of the 26 people diagnosed in New Zealand whose HIV was heterosexually acquired:

- 16 (62%) were women and 10 (38%) men.
- 10 (38%) were European, three (12%) Māori, two (8%) Pacific, and 11 (42%) of other ethnicities.
- The age range at diagnosis was 23-70 years; six (23%) were aged less than 30 years, seven (27%) aged 30-39 years, six (23%) aged 40-49 years, and seven (27%) aged 50 or more. Infection may have occurred at a younger age than when it was diagnosed.

Figure 3 shows the place of acquisition of HIV for heterosexual men and women first diagnosed in New Zealand. The number whose HIV was acquired in New Zealand (n=13) and overseas (n=12) have both remained steady since about 2011.

Of the 13 heterosexuals whose HIV was acquired in New Zealand in 2020, four (31%) had a CD4 count at the time of diagnosis of more than 500 cells/mm³, two (15%) between 350-499, and seven (54%) less than 350 indicating a longer period between infection and diagnosis. Over the preceding five-year period 2015 to 2019, among the 51 people whose HIV was heterosexually acquired in New Zealand, 15 (29%) had a CD4 count of more than 500 cells/mm³, nine (18%) between 350-499, 24 (47%) less than 350, and for three (6%) the CD4 count information was unavailable.

People who inject drugs (PWID)

The number of people diagnosed with HIV whose only likely means of infection reported was injecting drug use has remained low. Only one person was reported as having acquired their infection in this way in 2020, and one man through either sex with men or injecting drug use. Both acquired their infection overseas.

Children infected through mother-to-child transmission

In 2020, one person who had previously been diagnosed overseas through mother-to-child transmission was notified. Since 2007, there have been no children with perinatally acquired HIV born in New Zealand.

Between 1998-2020, there have been 193 births to women known to have HIV prior to delivery in New Zealand. None of these children have been infected with HIV. However, for children born more recently in 2020 it is too soon to be sure about this as acquired HIV cannot be definitively ruled out until a child is over one year old. In 2020, there were three women diagnosed with HIV through antenatal testing.

The number of people living with HIV in New Zealand

Data from PHARMAC, New Zealand's pharmaceutical management agency, show that there were 2828 adults (2381 men, 447 women) and 11 children receiving subsidised antiretroviral therapy (ART) at the end of June 2020.

AIDS diagnoses - 2020

Overall 14 people, 10 men and four women were diagnosed with AIDS in 2020. Of these 14, six (43%) were MSM, six (43%) were heterosexually acquired, and for two (14%) people the means of acquisition was not reported.

Six (43%) were European, and the remaining eight (57%) were of other ethnicities. Twelve (86%) had their AIDS diagnosis within three months of being diagnosed with HIV and would not have had the opportunity for antiretroviral treatment to control progression of their HIV infection.

Two deaths from AIDS were reported in 2020. It is possible, however, that this number could rise due to delayed reports.

Figure 4 shows the annual number of diagnoses of AIDS by year of diagnosis, and the number of deaths of people who had been notified with AIDS.

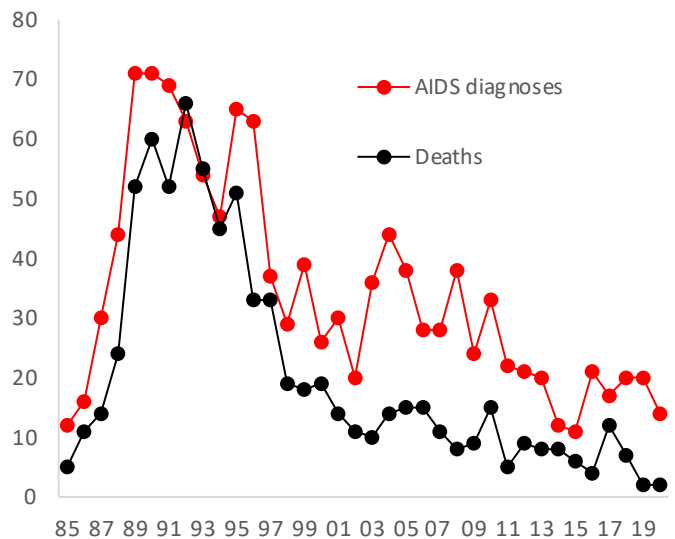


Figure 4. Annual number of diagnoses of AIDS and deaths among people notified with AIDS (The number of notifications and deaths for 2020 are expected to rise due to delayed reports)

Summary of trends of HIV in New Zealand

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

Gay, bisexual and other men who have sex with men continue to be the most affected by HIV infection in New Zealand, accounting for 75% of all locally acquired HIV diagnoses in 2020.

The number of MSM reported to have acquired HIV in New Zealand has continued to decline since the peak in 2016 (n=97), with the number in 2020 (n=49) being the lowest since 2011. This is likely due to combination preventive measures being promoted and available to this group, such as the availability of pre-exposure prophylaxis (PrEP) and increasing testing options. The decline in 2020 will also, in part, have been affected by less transmission due to COVID-19 physical distancing measures and more limited testing access. It will be important to continue monitoring these numbers to ascertain whether this downward decline continues as well as continuing the prevention efforts of:

- Regular HIV testing and linkage to care and treatment
- Testing for other sexually transmitted infections
- Condom use
- Increasing uptake and adherence to PrEP.

Of all the MSM reported in 2020, 44 (42%) had been previously diagnosed overseas. While this is slightly fewer than in 2019 (56; 39%), it is a significant number of men for whom it is important they are engaged with care and on treatment to ensure good health outcomes and prevent HIV transmission.

Heterosexual men and women

The total number of people diagnosed with heterosexually acquired HIV continues to remain relatively stable with an average of 30 people per year over the past 10 years.

Among those with heterosexually acquired HIV in New Zealand in 2020, just over half (54%) had a CD4 count at the time of diagnosis less than 350 cells/mm³ that was indicative of a late diagnosis of their HIV. Moreover, six of the 14 people diagnosed with AIDS in 2020 were heterosexually acquired, four of whom were diagnosed with AIDS at the same time as their HIV diagnosis. It is therefore important for clinicians to test for HIV in people with compatible clinical features, even if there does not appear to be any apparent risk factors.

People who inject drugs

The number of people whose HIV was acquired through injecting drug use continues to be small in New Zealand with only one person being diagnosed in 2020, who acquired HIV overseas, and one person who reported both injecting drug use and homosexual contact, who also acquired HIV overseas.

Children and pregnant women

Three women newly diagnosed with HIV in 2020 through antenatal screening were able to make treatment and care decisions to decrease the risk of mother-to-child transmission. This continues to highlight the importance of the antenatal HIV screening programme in reducing both vertical and secondary transmission.

Table 1. Exposure category by time of diagnosis for people first diagnosed with HIV in New Zealand and by time of notification for people who were previously diagnosed overseas

		HIV Infection*							
		1985-2014		2015-2019		2020		Total 1985-2020	
Sex	Exposure category	N	%	N	%	N	%	N	%
Male	Male-to-male sex (MSM)	2279	54.9	695	66.2	105	64.8	3079	57.4
	MSM & injecting drug use	49	1.2	16	1.5	1	0.6	66	1.2
	Heterosexual contact	536	12.9	96	9.1	15	9.3	647	12.1
	Injecting drug use	71	1.7	9	0.9	1	0.6	81	1.5
	Blood product recipient	34	0.8	0	0.0	0	0.0	34	0.6
	Transfusion recipient [§]	13	0.3	2	0.2	0	0.0	15	0.3
	Perinatal	38	0.9	1	0.1	1	0.6	40	0.7
	Other	10	0.2	4	0.4	1	0.6	15	0.3
	Unknown	398	9.6	101	9.6	14	8.6	513	9.6
Female	Heterosexual contact	564	13.6	81	7.7	21	13.0	666	12.4
	Injecting drug use	13	0.3	1	0.1	0	0.0	14	0.3
	Transfusion recipient [§]	10	0.2	0	0.0	0	0.0	10	0.2
	Perinatal	20	0.5	3	0.3	0	0.0	23	0.4
	Other	19	0.5	1	0.1	1	0.6	21	0.4
	Unknown	62	1.5	27	2.6	2	1.2	91	1.7
Transgender	Total	17	0.4	13	1.2	0	0.0	30	0.6
Unknown	Transfusion recipient	5	0.1	0	0.0	0	0.0	5	0.1
	Unknown	13	0.3	0	0.0	0	0.0	13	0.2
TOTAL		4151	100.0	1050	100.0	162	100.0	5363	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 who have initially been diagnosed overseas and not had an antibody test here. The date of initial diagnosis may have preceded the viral load day by months or years.

§ All people in this category, diagnosed since 1996, infection was acquired overseas.

Table 2. Ethnicity* by time of diagnosis for people first diagnosed with HIV in New Zealand and by time of first notification for people who were previously diagnosed overseas

		HIV Infection**							
		1996-2014		2015-2019		2020		Total 1996-2020	
Sex	Ethnicity	N	%	N	%	N	%	N	%
Male	European	1467	47.2	476	45.3	72	44.4	2015	46.6
	Maori†	205	6.6	79	7.5	12	7.4	296	6.8
	Pacific Islander	75	2.4	34	3.2	7	4.3	116	2.7
	African	261	8.4	23	2.2	2	1.2	286	6.6
	Asian	310	10.0	179	17.0	20	12.3	509	11.8
	Other	80	2.6	70	6.7	13	8.0	163	3.8
	Unknown	105	3.4	63	6.0	12	7.4	180	4.2
	Female	European	126	4.1	27	2.6	8	4.9	161
	Maori†	26	0.8	7	0.7	3	1.9	36	0.8
	Pacific Islander	31	1.0	8	0.8	2	1.2	41	0.9
	African	276	8.9	15	1.4	5	3.1	296	6.8
	Asian	110	3.5	38	3.6	5	3.1	153	3.5
	Other	14	0.5	2	0.2	0	0.0	16	0.4
	Unknown	15	0.5	16	1.5	1	0.6	32	0.7
Transgender	Total	10	0.3	13	1.2	0	0.0	23	0.5
Unknown		0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		3111	100.0	1050	100.0	162	100.0	4323	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 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 Māori and another ethnic group.

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