AIDS - New Zealand

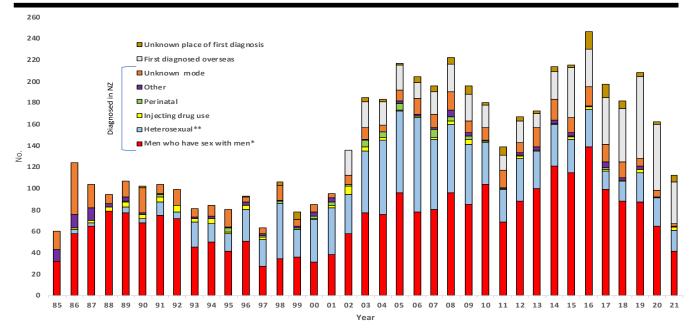


Figure 1. Number of people diagnosed with HIV in New Zealand by year of diagnosis and means of acquisition of HIV and, since 2002, the number of people first diagnosed overseas. (Infection may have occurred a number of years prior to diagnosis)
*Includes MSM & injecting drug use (IDU) **Includes Heterosexual & IDU

HIV notifications in 2021

In 2021, a total of 112 people (93 men and 19 women) were notified with HIV in New Zealand, of whom 67 were first diagnosed in New Zealand, 39 had previously been diagnosed overseas, and for six people the place of first diagnosis was unknown.

Of the 112, 70 were men who have sex with men (MSM), 29 people (15 women, 14 men) had acquired their HIV through heterosexual contact, three people through injecting drug use (IDU), and two through other means. For the remaining eight people the means of acquisition was unknown or this information has not yet been received.

The total number notified in 2021 (n=112) was the lowest since 2001 (Figure 1). This reduction has been largely driven by a decline in people who were first diagnosed in New Zealand – a 51% 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 was 39 in 2021, a 27% decline from the average over the past five years. This was mostly MSM (74%) and represented different ethnic groups: New Zealand European (38%), other European (15%), Māori (15%), Asian (18%), African, Latin American and Pacific Peoples (11%), and 3% for whom the ethnicity was not reported.

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

In 2021, of the 70 MSM notified, 41 were first diagnosed in New Zealand, and 29 had previously been diagnosed overseas.

Figure 2 shows the place of acquisition of HIV for MSM diagnosed in New Zealand. The number of MSM who acquired HIV locally has continued to decline after the peak in 2016 (n=97). There was a sharp decrease to 70 in 2017, then less of a decline to 63 in 2018, 58 in 2019, and 51 in 2020, and another sharp decrease to 29 in 2021. Eight MSM were reported in 2021 to have acquired HIV overseas which was similar to the number in 2020 (n=10) but a decline from the annual average of 26 over the previous five years.

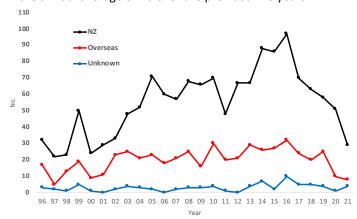


Figure 2. Place of acquisition of HIV of MSM first diagnosed in New Zealand

To give an indication of the stage of HIV infection at diagnosis we report the initial CD4 lymphocyte count of the 29 MSM diagnosed in 2021 and whose HIV was acquired in New Zealand. Twelve (41%) had a CD4 count more than 500 cells/mm³ indicating they were diagnosed within about 14 months following infection, five (17%) had a CD4 count between 350-499, 11 (38%) less than 350 indicating longer periods between infection and diagnosis, and for one (3%) person the initial CD4 count information was unavailable.

Of the 41 MSM diagnosed in New Zealand in 2021:

- 16 (39%) were European, eight (20%) Māori, eight (20%) Asian, seven (17%) Pacific Peoples, and two (5%) Latin American, African or other ethnicity.
- 16 (39%) were living in the Auckland region, 11 (27%) in the lower North Island, six (15%) in other parts of the North Island, and three (7%) in the South Island. For three (7%) men their region of residence was New Zealand but not stated where, and for two (5%) men, although diagnosed in New Zealand, their usual place of residence was overseas.
- The age range at diagnosis was 19-71 years; 9 (22%) were aged less than 30 years, 17 (41%) aged 30-39 years, 5 (12%) aged 40-49 years, and 10 (24%) aged 50 or more. Infection may have occurred at a younger age than when it was diagnosed.

Of the 29 MSM notified in 2021 who were first diagnosed overseas:

17 (59%) were European, five (17%) Māori, six (21%)
 Asian, Latin American or Pacific ethnicity, and one (3%) for whom the ethnicity was not reported.

HIV diagnoses among people with heterosexually acquired HIV

In 2021, there were 29 people notified with HIV who had acquired HIV heterosexually. Of these 29, 20 were first diagnosed in New Zealand and nine had previously been diagnosed overseas.

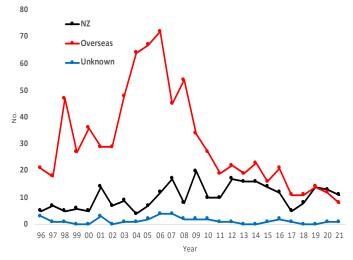


Figure 3. Place of acquisition of HIV of people first diagnosed in New Zealand with heterosexually acquired HIV

Of the 20 people diagnosed in New Zealand whose HIV was heterosexually acquired:

- 10 (50%) were women and 10 (50%) men.
- Nine (45%) were European, five (25%) Asian, and six (30%) Māori, Pacific or African ethnicity.
- The age range at diagnosis was 26-64 years; seven (35%) were aged less than 40 years, eight (40%) aged 40-49 years, and five (25%) 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 acquired in New Zealand has stayed relatively stable over the past 10 years whereas the number who acquired their HIV overseas has slightly declined.

Of the 11 heterosexual men and women whose HIV was acquired in New Zealand in 2021, four (36%) had a CD4 count at the time of diagnosis of >500 cells/mm³, two (18%) between 350-499, and five (45%) <350.

People who inject drugs (PWID)

The number of people diagnosed with HIV whose likely means of infection was reported as injecting drug use has remained low (Figure 4). In 2021, three people were reported as having acquired HIV solely through injecting drug use, two people through either heterosexual sex or injecting drug use, and one man through either sex with men or injecting drug use. Of these six people, five had acquired HIV in New Zealand.

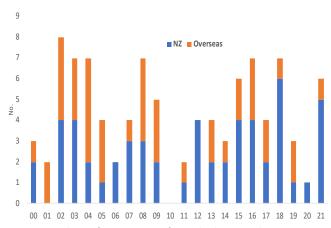


Figure 4. Place of acquisition of people diagnosed in New Zealand who reported injecting drug use

Children infected through mother-to-child transmission

Since 2007, there have been no children with perinatally acquired HIV born in New Zealand.

Between 1998-2021, there have been 206 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 2021 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.

The number of people living with HIV in New Zealand

The number of individuals living with diagnosed HIV in New Zealand will be less than the total ever found to be infected because of deaths from AIDS and non-AIDS related causes and the unknown number who have gone overseas.

Data from PHARMAC, New Zealand's pharmaceutical management agency, show that there were 2964 people receiving subsidised antiretroviral therapy (ART) at the end of June 2021.

AIDS diagnoses

Sixteen people (10 men, six women), were diagnosed with AIDS in 2021 (Figure 5). Of these, seven (44%) were MSM, seven (44%) heterosexually acquired, one (6%) through injecting drug use, and the means of acquisition was not reported for one (6%) person.

Seven (44%) were European, five (31%) Asian, and the remaining four (25%) were of other ethnicities. Eleven (69%) 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.

No deaths from AIDS were reported in 2021 (Figure 5). It is possible, however, that this number could rise due to delayed reports.

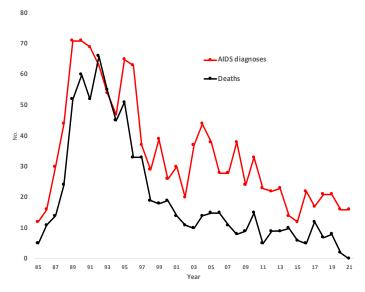


Figure 5. Annual number of diagnoses of AIDS and deaths among people notified with AIDS (The number of notifications and deaths for 2021 are expected to rise due to delayed reports)

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 67% of all locally acquired HIV diagnoses in 2021.

The number of MSM who acquired HIV in New Zealand has continued to decline since the peak in 2016 (n=97), with the number in 2021 (n=29) being the lowest since 2001. The decline in 2020 and 2021 will, 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 once COVID-19 restrictions are lifted. It will also be important to continue the prevention efforts of:

- Condom use
- Increasing uptake and adherence to PrEP
- Regular HIV testing and rapid linkage to care to enable viral suppression for best clinical outcomes and prevention of ongoing transmission
- Testing for other sexually transmitted infections

Of all the MSM reported in 2021, 29 (41%) had been previously diagnosed overseas. This is also a decline since 2016 which will be mostly due to COVID-19 border restrictions in the last two years.



The total number of people diagnosed with heterosexually acquired HIV continues to remain relatively stable with an average of 37 people per year over the past 10 years.

Among those with heterosexually acquired HIV in New Zealand in 2021, just under half (46%) 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, seven of the 16 people diagnosed with AIDS in 2021 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.



Reople who inject drugs

The number of people whose HIV was acquired through injecting drug use continues to be small in New Zealand with only three people (two in New Zealand and one overseas) being diagnosed in 2021, and a further three (all in New Zealand) who reported acquiring HIV through either injecting drug use or sexual contact.

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

Sex Male		HIV notifications*							
	Exposure category Male-to-male sex (MSM)	1985-2015		2016-2020		2021		Total 1985-2021	
		N	%	N	%	N	%	N	%
		2437	55.8	653	65.6	69	61.6	3159	57.7
	MSM & injecting drug use	52	1.2	15	1.5	1	0.9	68	1.2
	Heterosexual contact	560	12.8	86	8.6	14	12.5	660	12.1
	Injecting drug use	74	1.7	9	0.9	3	2.7	86	1.6
	Blood product recipient	34	0.8	0	0.0	0	0.0	34	0.6
	Transfusion recipient§	15	0.3	1	0.1	1	0.9	17	0.3
	Perinatal	40	0.9	1	0.1	0	0.0	41	0.7
	Other	11	0.3	4	0.4	0	0.0	15	0.3
	Unknown	403	9.2	96	9.6	5	4.5	504	9.2
Female	Heterosexual contact	580	13.3	88	8.8	15	13.4	683	12.5
	Injecting drug use	14	0.3	0	0.0	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	0.4	2	0.2	0	0.0	21	0.4
	Unknown	61	1.4	26	2.6	3	2.7	90	1.6
Transgender	Total	20	0.5	11	1.1	1	0.9	32	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		4368	100.0	995	100.0	112	100.0	5475	100

^{*} 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

Sex	Ethnicity	HIV notifications**								
		1996-2015		2015-2020		2021		Total 1996-2021		
		N	%	N	%	N	%	N	%	
Male	European	1595	47.9	425	42.7	42	37.5	2062	46.5	
	Maori†	221	6.6	76	7.6	14	12.5	311	7.0	
	Pacific Peoples	81	2.4	35	3.5	10	8.9	126	2.8	
	African	266	8.0	19	1.9	2	1.8	287	6.5	
	Asian	331	9.9	176	17.7	17	15.2	524	11.8	
	Other	89	2.7	78	7.8	3	2.7	170	3.8	
	Unknown	118	3.5	56	5.6	5	4.5	179	4.0	
Female	European	132	4.0	29	2.9	6	5.4	167	3.8	
	Maori†	28	0.8	8	0.8	2	1.8	38	0.9	
	Pacific Peoples	34	1.0	7	0.7	1	0.9	42	0.9	
	African	279	8.4	17	1.7	2	1.8	298	6.7	
	Asian	113	3.4	42	4.2	5	4.5	160	3.6	
	Other	13	0.4	2	0.2	0	0.0	15	0.3	
	Unknown	15	0.5	14	1.4	2	1.8	31	0.7	
Transgender	Total	13	0.4	11	1.1	1	0.9	25	0.6	
Unknown		0	0.0	0	0.0	0	0.0	0	0.0	
TOTAL		3328	100.0	995	100.0	112	100.0	4435	100.0	

^{*} Information on ethnicity of people diagnosed with HIV only collected since 1996.

For further information about the occurrence of HIV/AIDS in New Zealand, contact: AIDS Epidemiology Group, Department of Preventive and Social Medicine, Dunedin School of Medicine University of Otago, PO Box 56, Dunedin, New Zealand

> Email: aidsepigroup@otago.ac.nz Website address: www.otago.ac.nz/aidsepigroup

^{**} 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 identify as Māori and another ethnicity.