

AIDS – New Zealand



The World AIDS Conference held last month in Spain was an opportunity to assess the worldwide HIV/AIDS epidemic. In this, the 50th issue of *AIDS – New Zealand*, we have briefly reviewed the state of the current epidemic in this country and worldwide.

The epidemic of HIV/AIDS continues with great severity worldwide. New Zealanders need to be aware of the situation to contribute to the efforts to contain the disease personally, nationally and internationally. New Zealanders need to understand and minimize their own risks both while in New Zealand and overseas. Health professionals need to recognise the HIV risks for people who come from areas of the world with high HIV prevalence. The community needs to recognize the long term needs of HIV positive people for social support and lack of discrimination as HIV becomes a chronic, manageable illness.

Worldwide, the number of people with HIV/AIDS continues to grow, with an estimated 40 million people living with HIV. Sub-Saharan Africa remains the worst affected but India, China, and the countries of Central and Eastern Europe are also experiencing a major increase in incidence.

Although the HIV/AIDS epidemic is under relative control in New Zealand, new infections continue to occur here. These are particularly among men who have sex with men, but also among heterosexual men and women. In countries where effective anti-retroviral treatment is available death rates have fallen substantially but there is concern among public health agencies that this success might mean people relax their efforts to prevent spread.

The HIV/AIDS epidemic in New Zealand

The first people were diagnosed with AIDS in New Zealand in 1983. The annual number of people diagnosed with AIDS rose steeply during the 1980s and peaked in 1989 (Figure 1). For the next few years it was relatively stable. This leveling off in the early 1990s was due to a drop in the incidence of new infections among men who had sex with men (MSM) some years earlier. There was a substantial drop in AIDS diagnoses in 1997 that has been maintained. This drop was the result of the introduction of treatments that very effectively delayed the progression of HIV infection to AIDS.

The proportion of people diagnosed with AIDS who were infected through homosexual contact has reduced in recent years, partly because fewer diagnoses of AIDS have occurred in this group and partly because of more diagnoses among heterosexuals.

Testing for HIV first became available in 1985. The number of people diagnosed with HIV in New Zealand each year has remained relatively steady over the last decade. As with AIDS, the proportion of people diagnosed with HIV who were heterosexually infected has increased since the early years of testing. Since 1996, of those diagnosed with

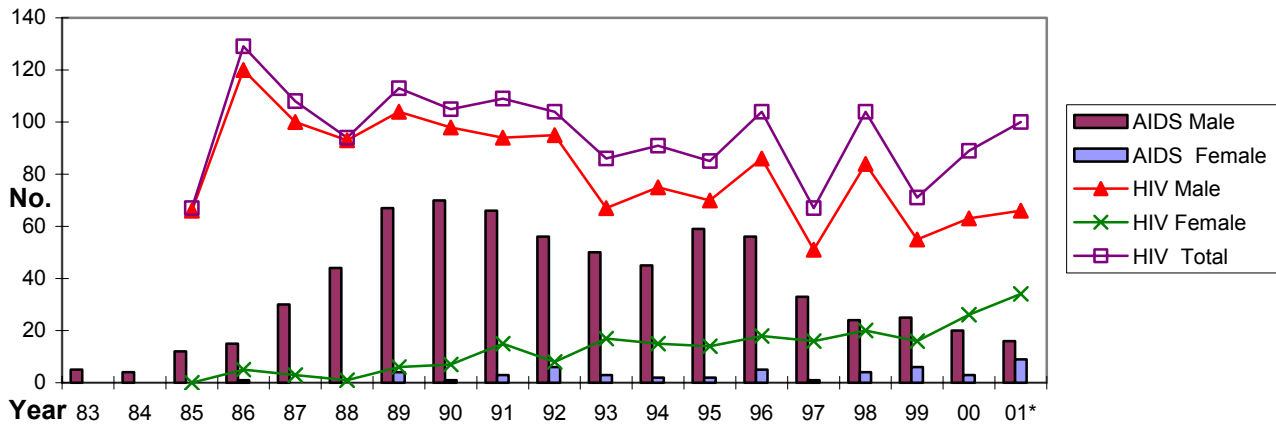


Figure 1. HIV/AIDS cases by year of diagnosis in NZ

(* The numbers of people diagnosed in 2001, and possibly earlier, may increase due to delayed notifications.)

HIV just under half (46%) were men who had had sex with men (MSM), and 40% were people who had been heterosexually infected. It is important to appreciate that HIV figures relate to those diagnosed – others might have been infected but not tested, and also that the infection might have occurred many years before the diagnosis was made.

The number and proportion of women reported with HIV in New Zealand has also increased. While overall 14% of HIV infections have been in females, in 2001 over a third of all new diagnosed cases were female.

Not all of the people diagnosed in New Zealand were infected here, and the proportion who were varies markedly by means of infection. Of those infected through heterosexual contact, 16% were reported to be infected in this country, compared to 68% infected through homosexual contact. So transmission between MSM remains by far the most common means of transmission within New Zealand.

The effect of the decreasing number of people dying from AIDS, and a steady number of people being diagnosed, is an ongoing rise in the number of people with diagnosed HIV infection living in New Zealand. The number receiving care was estimated to be up to 800 in September 2000, and will be somewhat higher now (Mills G *et al.* New Zealand's HIV infected population under active follow-up New Zealand Medical Journal 2002;115:173-6).

The worldwide epidemic

While the picture in New Zealand is of relative control, this contrasts starkly with the situation in many less developed countries. The total number of adults and children living with HIV/AIDS in the world is now estimated to be over 40 million (Table 1), 3 million of whom are children under the age of 15. Of these, 5 million were infected in 2001 (http://www.unaids.org/epidemic_update/report_dec01/index.html). AIDS has killed 20 million people since the epidemic began and the annual number of deaths continues to rise, with there being 3 million in 2001 alone. It is projected that another 68 million are likely to die from AIDS by the year 2020.

Sub-Saharan Africa remains the worst affected region where 70% of the 40 million people with HIV/AIDS worldwide live. In some of the countries in Southern Africa more than a quarter of the adult population between ages 15 and 49 is infected with HIV. In Africa there have been some successes. Prevention programmes in Kampala, the capital of Uganda, have reduced HIV prevalence among pregnant women from nearly 30% ten years ago to 11% in 2000. There have also been significant changes in sexual behaviour with increased condom use and a rise in the mean age at first sex for girls.

Others parts of the world where there is particular concern are India and China, the two most populous countries of the world. The overall prevalence among adults in India is estimated at just under 1%. While this

Table 1 Regional HIV/AIDS statistics and features, December 2001 (UNAIDS/WHO 2001)

Region	Number living with HIV/AIDS	Number infected with HIV 2001	Adult prevalence rate*	% of infected adults who are women	Main transmission mode(s) for adults† in order of frequency
Sub-Saharan Africa	28.1 million	3.4 million	8.4%	55%	Heterosexual
North Africa & Middle East	440 000	80 000	0.2%	40%	Hetero, IDU‡ ,
South & South-East Asia	6.1 million	800 000	0.6%	35%	Hetero, IDU
East Asia & Pacific	1 million	270 000	0.1%	20%	IDU, Hetero, MSM
Latin America	1.4 million	130 000	0.5%	30%	MSM, IDU, Hetero
Caribbean	420 000	60 000	2.2%	50%	Hetero, MSM
Eastern Europe & Central Asia	1 million	250 000	0.5%	20%	IDU
Western Europe	560 000	30 000	0.3%	25%	MSM, IDU
North America	940 000	45 000	0.6%	20%	MSM, IDU, Hetero
Australia & New Zealand	15 000	500	0.1%	10%	MSM
TOTAL	40 million	5 million	1.2%	48%	

* The proportion of adults (15 to 49 years of age) living with HIV/AIDS in 2001 using 2001 population numbers.

proportion is lower than in many other countries, it means that there are about 4 million people infected in India, more than in any other country apart from South Africa. In China, the rapid rise of reported sexually transmitted infections, massive population mobility and increasing socio economic disparities add to the likelihood of increased HIV infection.

The countries of the former Soviet Union and Central and Eastern Europe are experiencing the fastest growing epidemic in the world. In 2001 there were an estimated 250 000 new infections. This brings to 1 million the number of people living with HIV/AIDS, of whom over 80% are thought to be injecting drug users. Factors contributing to this rapid increase include the opening of borders which has increased drug trafficking; mass unemployment and economic insecurity; the removal of rigid social controls of the past, and depleted public health and other services.

AIDS and HIV infection in New Zealand for January to June 2002

The AIDS Epidemiology Group received 10 notifications of people (six males and four females) with AIDS during the first half of 2002. Two of the men were reported to have been infected through sex with other men and four were infected through heterosexual contact. Three females were infected heterosexually, two of whom were infected overseas. One female child was infected perinatally.

The Group has been informed of 56 people (45 males and 11 females) found to be infected with HIV during the first half of 2002. So far information on the likely mode of infection has been obtained for 50 of these people. Of the 50, 26 were men who were reported to have had sex with other men, and 19 (nine men and 10 women) were reported to have been infected heterosexually. Four men were infected through injecting drug use, three overseas. One child was infected perinatally in Africa. Of those 19 reported to have been infected heterosexually, 15 (seven men and eight women) were infected overseas. Of the four persons known to have been infected heterosexually in New Zealand, two had partners from high-prevalence countries.

A further 20 people were reported with HIV through viral load testing who have not had an antibody test. Of these, 14 were diagnosed overseas, four were diagnosed in New Zealand and for two, the place of diagnosis is unknown.

Exposure categories and ethnicity of people notified with AIDS and found to be infected with HIV

Information on the categories of risk, sex and ethnicity, of the 765 people notified as having AIDS and of the 1,818 people ever found to be infected with HIV in New Zealand to the end of June 2002 is shown in Tables 2 and 3 (overleaf).

Table 2. Exposure category by time of notification for people with AIDS, and by time of diagnosis for those found to be infected with HIV. A small number of transsexuals are included with the males.

Exposure category	Sex	AIDS				HIV Infection			
		12 months to 30.06.02		Total to 30.06.02		12 months to 30.06.02		Total to 30.06.02	
		No.	%	No.	%	No.	%	No.	%
Homosexual contact	Male	6	25.0	589	77.0	47	44.8	981	54.0
Homosexual & IDU	Male	0	0.0	10	1.3	0	0.0	23	1.3
Heterosexual contact	Male	6	25.0	48	6.3	17	16.2	161	8.8
	Female	8	33.3	41	5.4	23	21.9	189	10.4
Injecting drug use (IDU)	Male	0	0.0	13	1.7	4	3.8	41	2.2
	Female	0	0.0	5	0.7	0	0.0	11	0.6
Blood product recipient	Male	0	0.0	16	2.1	0	0.0	34	1.9
Transfusion recipient	Male	1†	4.2	2†	0.3	1†	1.0	9	0.5
	Female	0	0.0	1†	0.1	0	0.0	6	0.3
	NS	0	0.0	0	0.0	0	0.0	5	0.3
Perinatal	Male	2	8.3	3	0.4	1	1.0	9	0.5
	Female	1	4.2	4	0.5	1	1.0	8	0.4
Awaiting information/undetermined	Male	0	0.0	30	3.9	8	7.6	290	15.9
	Female	0	0.0	2	0.3	2	1.9	27	1.5
	NS	0	0.0	0	0.0	0	0.0	13	0.7
Other	Male	0	0.0	0	0.0	1	1.0	4	0.2
	Female	0	0.0	1	0.1	0	0.0	7	0.4
TOTAL		24	100.0	765	100.0	105	100.0	1818	100.0

NS = Not stated

*Includes people who have developed AIDS

†Acquired overseas

Table 3. Ethnicity by time of notification for people with AIDS, and by time of diagnosis for those found to be infected with HIV. A small number of transsexuals are included with the males.

Ethnicity	Sex	AIDS				HIV Infection			
		12 months to 30.06.02		Total to 30.06.02		12 months to 30.06.02		1.01.96 to 30.06.02	
		No.	%	No.	%	No.	%	No.	%
European/Pakeha	Male	5	20.8	559	73.1	43	41.0	282	44.9
	Female	2	8.3	26	3.4	8	7.6	32	5.1
Maori†	Male	1	4.2	79	10.3	9	8.6	35	5.6
	Female	0	0.0	3	0.4	0	0.0	5	0.8
Pacific Island	Male	0	0.0	17	2.2	0	0.0	6	1.0
	Female	0	0.0	4	0.5	2	1.9	11	1.7
Other	Male	9	37.5	49	6.4	26	24.8	141	22.5
	Female	7	29.2	21	2.7	15	14.3	95	15.1
Awaiting information/undetermined	Male	0	0.0	7	0.9	1	1.0	19	3.0
	Female	0	0.0	0	0.0	1	1.0	2	0.3
TOTAL		24	100.0	765	100.0	105	100.0	628	100.0

NS = Not stated

* Includes people who have developed AIDS

† Includes people who belong to Maori and another ethnic group

For further information about the occurrence of AIDS in New Zealand contact
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