

AIDS - New Zealand

INTRODUCTION

This is the fourth issue of AIDS - New Zealand, and the first for 1990. Facts and figures relating to the epidemiological features of infection with the Human Immunodeficiency Virus (HIV) in New Zealand and the subsequent epidemic of Acquired Immunodeficiency Syndrome (AIDS) are presented. This report is produced quarterly by the Medical Research Council AIDS Epidemiology Group. This group is responsible to the AIDS Task Force of the Department of Health for the monitoring of the HIV/AIDS epidemic in New Zealand.

AIDS IN NEW ZEALAND

During 1989 a total of 61 people were known to have developed AIDS in New Zealand. Thirteen further notifications

received so far in 1990 (to 7 February) bring the total number of people in New Zealand known to have developed AIDS to 175. One of the newly notified patients was the first child with AIDS who is believed to have been infected perinatally (i.e. around the time of birth). Figure 1 shows the growth in the number of people with AIDS.

The number of new diagnoses in the fourth quarter of 1989 was sixteen. Thus the seasonal fluctuation which was mentioned in Issue 3 continues. The reason for this trend is unknown but it is probably influenced to a large degree by administrative procedures. With the introduction of the updated notification form in November 1989, the actual date of diagnosis (rather than the notification date which is subject to reporting delays of variable lengths) is recorded. This will give a better

FIGURE 1 - AIDS Notifications in New Zealand

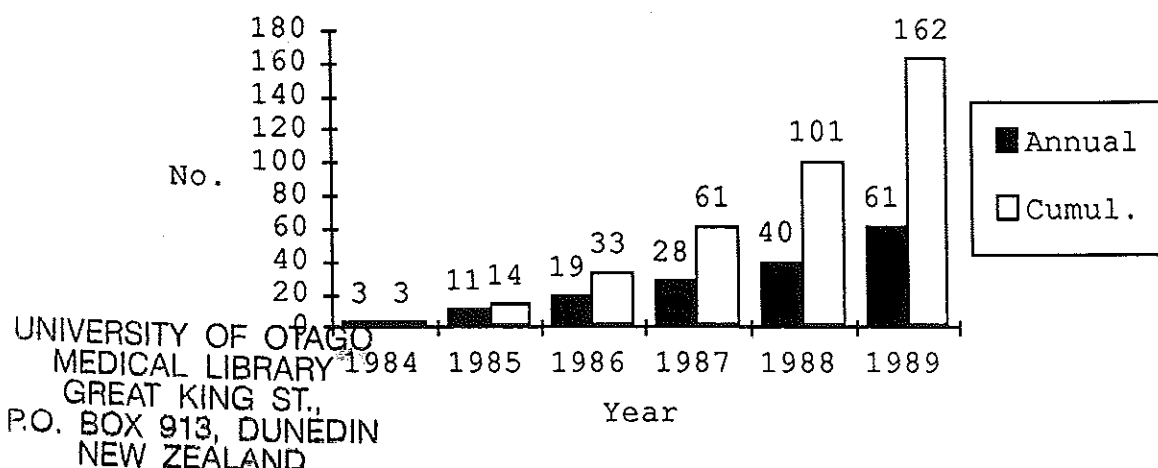
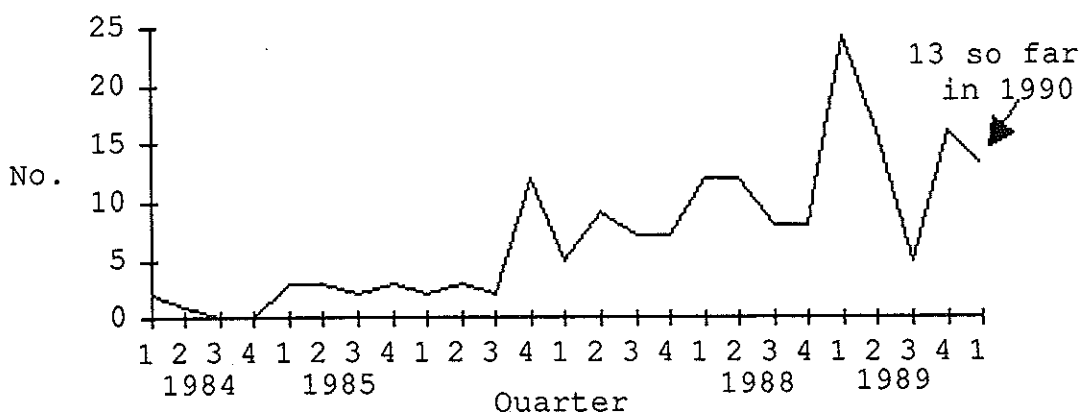


FIGURE 2- Number of AIDS Notifications by Quarter



understanding of the progression of the AIDS epidemic in New Zealand and also enable techniques for future projections to be applied. It is hoped that use of the "actual dates of diagnosis" will be possible in the analyses to be presented in the next quarterly update (due May 1990). Figure 2 shows the quarterly totals and the seasonal trends.

The only projections published to date for New Zealand and the actual observed numbers of cases are shown in Table 1 below. Performance of

these projections has been good considering the many uncertainties involved and there is as yet no reason to modify the prediction of 89 for the number of people to be notified as having AIDS in New Zealand in 1990. These projections were based on a comparison with Australian data (where the epidemic at that time was occurring on a time scale two to three years ahead of New Zealand) and on exponential projections. The epidemic has grown slightly more slowly than would be observed under exponential

TABLE 1 - Projections of Number of People Developing AIDS in New Zealand (based on Skegg DCG "The AIDS pandemic: What lies ahead?" New Zealand Medical Journal, 23 September 1987)

Year	Projected Number	Observed Number	Difference (= Obs - Proj)	
			No.	Percent
1987	31	28	-3	-10.8
1988	46	40	-6	-15.0
1989	66	61	-5	-8.2
1990	89	?	?	?

growth conditions (sub-exponential growth) so it is somewhat more likely that this projected figure of 89 will overestimate rather than underestimate the number of people who will develop AIDS in 1990.

AGE AND SEX DISTRIBUTION

The sex distribution of people with AIDS in New Zealand is as follows:

Male - 170
 Female - 5
 TOTAL - 175

The age distribution of people with AIDS in New Zealand is shown below in figure 3.

OUTCOMES

The known outcomes for people notified as having AIDS in New Zealand are shown below:

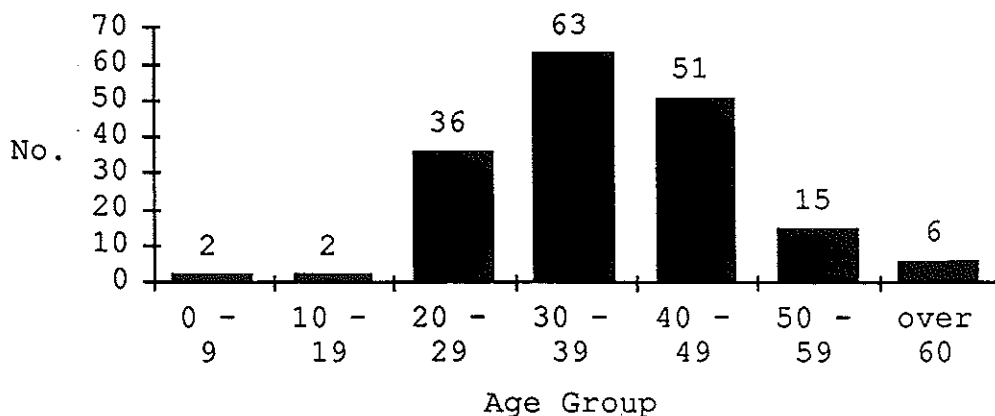
Known to have died - 74
 Moved overseas/
 lost to follow-up - 9
 Presumed alive - 92

GEOGRAPHICAL DISTRIBUTION

Table 2 shows the regional distribution of the cumulative total of people notified as having AIDS in New Zealand (to 7 February 1990). Highest notification rates continue to be observed from Auckland and Wellington, with a small increase in the number of notifications from Other North Island areas in the fourth quarter.

	No. of AIDS Reports	Rate per 100,000
Auckland	106	11.6
Wellington	35	9.1
Other North Island	24	2.2
South Is	10	1.2
NEW ZEALAND	175	5.4

FIGURE 3 - Age Distribution: People with AIDS in New Zealand



RISK BEHAVIOUR CATEGORY

Category of risk behaviour most likely to have resulted in transmission of HIV is shown in Table 3 below. These data are presented both for people notified with AIDS and, for the sake of comparison, for HIV antibody positive reports.

Of note in this report is the first report in New Zealand of a child with AIDS where HIV transmission has occurred perinatally (i.e. before, during or soon after birth). This mode of transmission is most prominent in countries where heterosexual transmission predominates (i.e. Africa and parts of Latin America and the Caribbean) because in these countries the male:female ratio of people with AIDS is close to 1.0. Nevertheless such cases have been observed in other

countries with similar patterns to New Zealand and it was expected that this mode of transmission would eventually occur in this country.

HIV ANTIBODY POSITIVE REPORTS

A total of 519 positive antibody tests had been reported in New Zealand to December 31, 1989. Of these, 471 were from males, 21 from females and in 22 instances the gender was unstated. This total of 519 positive results represents an increase of 27 since September 30, 1989 (upon which the figures in the last newsletter were based). Because of confidentiality requirements in testing, these data contain an unknown number of duplicate results.

TABLE 3 - Risk Behaviour Categories (percentage)

	People with AIDS	HIV-Antibody Positive
Homosexual/bisexual men	85.1	55.1
Intravenous drug user (IVDU)	1.1	1.9
Homosexual and IVDU	1.7	1.5
Haemophiliac	1.7	6.0
Transfusion-related	1.1	2.7
Heterosexual	2.9	1.5
Perinatal transmission	0.6	0
Unknown or not stated	5.7	31.0

(Totals not equal to 100.0 because of rounding)

For further information about the occurrence of AIDS in New Zealand, contact: Dr. Robert Carlson, MRC AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago Medical School, PO Box 913, DUNEDIN. Phone (024) 797 268. Fax (024) 790 529.