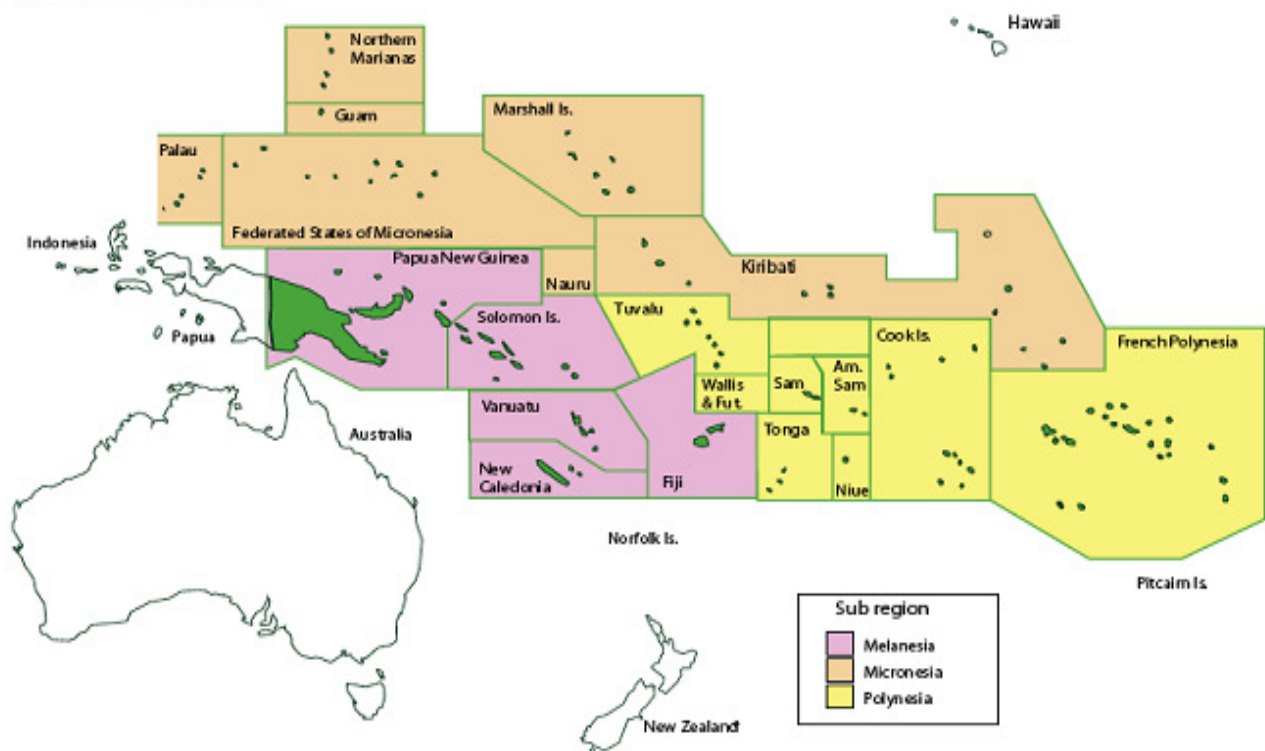


AIDS – New Zealand

HIV INFECTION IN THE PACIFIC REGION

Map of the Pacific



The Pacific Region

The Pacific Region includes 22 Pacific Island Countries and Territories (PICTs), scattered over a third of the world's surface, that are geographically close to Australia and New Zealand.

While the population is relatively low, 0.14% of world population, it has highly diverse cultures, languages, traditions and political systems. The Pacific Region is grouped in the three sub-regions of Melanesia, Micronesia, and Polynesia as shown above.

The diversity of Pacific nations, combined with the isolation of many communities present major challenges for the prevention and control of HIV in the Region. This issue of *AIDS - New Zealand* gives a short overview of the epidemic in this region.

Diagnosed HIV infection in the Pacific

The first case of HIV in the Pacific was diagnosed in 1985. By the end of 2009, a total of 29,713 people had been reported to have been diagnosed with HIV in all the PICTs.

Overall this number is high relative to the size of the population, and the diagnosis rate is higher than for New Zealand. But when this is examined for individual PICTs (Table 1- overleaf) the reason for this is the very high number of diagnoses in Papua New Guinea (PNG). For all the other PICTs combined the rate is lower than for New Zealand.

Whilst the overall diagnosis rate is higher in Micronesia, than Polynesia and Melanesia (excluding PNG), there is considerable variation between countries within these regions. However, the extent and

Table 1. Number of reported HIV diagnoses and cumulative incidence per 100,000 adult population to December 2009 in PICTs, Australia and New Zealand

Country	HIV (including AIDS)	HIV Cumulative diagnosis per 100,000
All PICTs	29,713	498.6
All PICTs (exc. PNG)	1,419	71.7
MELANESIA (exc. PNG)	695	57.6
Fiji Islands	333	57.6
New Caledonia	344	195.0
Papua New Guinea	28,294	711.1
Solomon Islands	13	4.2
Vanuatu	5	3.5
MICRONESIA	352	100.3
Federated States of Micronesia	37	54.9
Guam	196	158.0
Kiribati	52	84.2
Marshall Islands	22	71.4
Nauru	2	32.3
Northern Mariana Islands	34	74.6
Palau	9	58.6
POLYNESIA	372	87.8
American Samoa	3	7.5
Cook Islands	2	19.2
French Polynesia	314	165.8
Niue	0	0.0
Pitcairn Islands	0	0.0
Samoa	22	20.7
Tokelau Islands	0	0.0
Tonga	18	30.1
Tuvalu	11	154.1
Wallis and Futuna	2	22.7
New Zealand	2825	98.4
Australia*	28,872	195.5

Source: Secretariat of the Pacific Community (www.spc.int/aids) (13 July 2010)¹

* National Centre in HIV Epidemiology and Clinical Research. Australian HIV Surveillance Report Vol. 25 No. 4 October 2009. Data up to 30 June 2009

pattern of HIV testing across the region is not known, so it is not possible to say how much this might explain the variation in diagnosis rates among countries.

Most diagnosed infections throughout the Pacific have been sexually transmitted (Figure 1). In PNG the vast majority have occurred through heterosexual contact. This is also the most common means of infection in the rest of Melanesia, although about 20% of infections have occurred among men who have sex with men (MSM). In Micronesia and Polynesia, similar number of infections have occurred through heterosexual and homosexual contact. However,

as sex between men is much less common than between men and women, the risk of becoming infected among MSM is much higher.

Mother to child transmission accounts for about 5% of HIV diagnoses in the region, most of which have occurred in PNG. Hopefully this will decline in the future with expansion of programmes for testing pregnant women.

Injecting drug use was the highest non-sexual means of transmission in Polynesia, where French Polynesia has the highest proportion of HIV cases (12%) infected in this way.

The number of new HIV diagnoses in PICTs, excluding PNG, has steadily increased over the years 1985-2009 which has mostly been driven by an increase in Melanesia.

The proportion of new HIV diagnoses among women in the Pacific region has also increased steadily, although this might be partly due to increased antenatal testing. By the end of 2009, approximately 60% of diagnoses in PNG were in women, and about 30% elsewhere.

Other sexually transmitted infections (STIs)

While HIV prevalence remains low in much of the Pacific region, the prevalence of other STIs is high which is an indication of unprotected sexual activity. Given that the risk of HIV transmission is higher when another STI is present, this is a concern.

The results of studies among women attending antenatal clinics in a number of PICTs between 2004-2005 undertaken by UNAIDS are shown in Table 2. The highest prevalence of antibody evidence of syphilis (indicating current or past infection) and gonorrhoea was found in PNG; the highest prevalence of chlamydial infection was in Fiji and Samoa. In all the countries, chlamydia was more

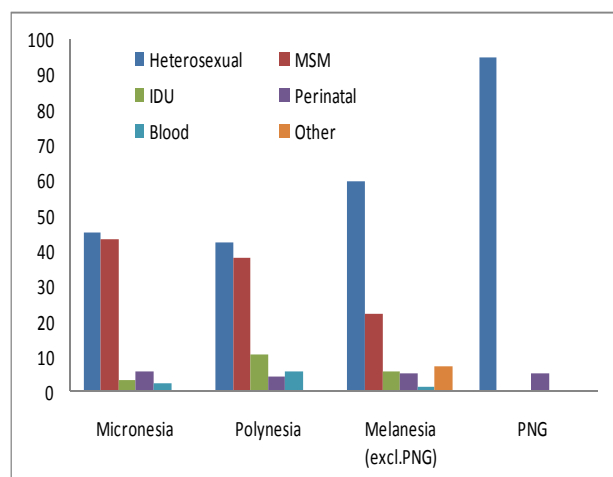


Figure 1 Proportion of diagnosed HIV by means of infection for each sub-region and separately for PNG

Table 2. STI prevalence among pregnant women in six Pacific Island countries 2004-2005³

	Chlamydia %	Gonorrhoea %	Syphilis %
Fiji (n=303)	29.0	1.7	2.6
Kiribati (n=192)	13.0	0.0	2.1
Samoa (n=298)	26.8	2.3	0.0
Solomon Is. (n=219)	6.4	0.5	10.0
Tonga (n=318)	14.5	2.5	3.2
Vanuatu (n=288)	13.2	2.4	0.8
PNG (n=3407)	18.2	11.0	13.6

common in women aged less than 25. In none of the countries, excluding PNG, were any of the pregnant women found to be infected with HIV.

Sexual Behaviour

Studies of the sexual behaviour of 1228 young people aged 15-24 years in Samoa, Solomon Islands and Vanuatu were undertaken in 2005.³ Although the samples may not have been representative of all youth in those countries, the results revealed that sexual activity was common with about two thirds ever having had sex, and half in the previous 12 months. Among all sampled, about a quarter had had sex with two or more casual partners in the past 12 months;

but only a third had used a condom the last time they had sex with a casual partner.

About a quarter of the young women reported ever having sex for money or other gifts. Of the young men, 8% had ever had sex with another male, and 5% had sex with another male in the past year.

Conclusions






The high prevalence of other STIs and a relatively large proportion of young people engaging in unprotected sex in the Pacific Region indicate the possibility of more extensive spread of HIV in the future. A comprehensive approach to the control of HIV and other STIs in the Pacific Region is outlined by the Report of the Commission on AIDS in the Pacific.²

Sources of information:

1. Secretariat of the Pacific Community (2010). HIV Epidemiological Update PICTs 2009. www.spc.int/aids
2. Commission on AIDS in the Pacific (2009) Turning the Tide: An OPEN Strategy for a response to AIDS in the Pacific
3. WHO (2006) Second generation surveillance surveys of HIV, other STIs and risk behaviours in 6 Pacific Island countries.

HIV & AIDS IN NEW ZEALAND JANUARY - JUNE 2010

HIV infection

-  Seventy-one people (62 males and 9 females) were diagnosed with HIV through antibody testing in New Zealand in the first half of 2010.
-  43 were men infected through sex with other men, 18 (10 men and 8 women) were people reported to have been infected through heterosexual contact, and for the remaining 10 people the means of infection was unknown or unreported.
-  Of the 43 men infected through sex with other men, 32 (74.4%) were infected in New Zealand, 9 (20.9%) were infected overseas, and for 2 (4.6%) men the place of infection was unknown.
-  Of the 18 people reported to have been infected heterosexually, 5 (27.8) people were infected in New Zealand, 12 (66.7%) were infected overseas, and for 1 (5.5%) the place of infection was unknown.
-  A further 16 people (15 males and 1 female) had a first viral load test in this period. These were mostly people who had been previously diagnosed overseas and who had not had an antibody test in New Zealand.

AIDS




-  Twenty-one people (17 males and 4 females) were notified with AIDS in the first half of 2010.
-  Fourteen were men infected through sex with other men, 5 (2 men and 3 women) were people infected through heterosexual contact, 1 man was infected through injecting drug use, and for 1 person the means of infection was unknown.
-  14 people were European, 2 Maori, 3 Asian, and 2 African.

Table 3. Exposure category by time of diagnosis for those found to be infected with HIV by antibody test and first viral load test.

		HIV Infection*							
		1985-2003		2004-2009		2010 (to end of second quarter)		Total	
Sex	Exposure category	No	%	No	%	No	%	No	%
Male	Homosexual contact	1162	56.1	580	47.7	49	52.9	1791	53.0
	Homosexual & IDU	26	1.3	16	1.3	0	0.0	42	1.2
	Heterosexual contact	212	10.2	226	18.6	11	12.9	449	13.3
	Injecting drug use	53	2.6	12	1.0	0	0.0	65	1.9
	Blood product recipient	34	1.6	0	0.0	0	0.0	34	1.0
	Transfusion recipient [§]	9	0.4	4	0.3	0	0.0	13	0.4
	Perinatal	13	0.6	22	1.8	0	0.0	35	1.0
	Other	4	0.2	5	0.4	0	0.0	9	0.3
	Unknown	239	11.5	84	6.9	16	20.0	339	10.0
Female	Heterosexual contact	234	11.3	221	18.2	8	8.2	463	13.7
	Injecting drug use	11	0.5	0	0.0	0	0.0	11	0.3
	Transfusion recipient [§]	8	0.4	2	0.2	0	0.0	10	0.3
	Perinatal	11	0.5	9	0.7	0	0.0	20	0.6
	Other	7	0.3	7	0.6	0	0.0	14	0.4
	Unknown	24	1.2	26	2.1	2	4.7	52	1.5
Transgender	Total	8	0.4	2	0.2	1	1.2	11	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	0.4
TOTAL		2073	100.0	1216	100.0	87	100.0	3376	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 had an antibody test here. The date of initial diagnosis may have preceded the viral load date by months or years.

Table 4. 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		2004-2009		2010 (to end of second quarter)		Total	
Sex	Ethnicity	No	%	No	%	No	%	No	%
Male	European/Pakeha	513	50.0	503	41.4	42	48.3	1058	45.4
	Maori [†]	60	5.8	85	7.0	5	5.7	150	6.4
	Pacific Island	18	1.8	30	2.5	0	0.0	48	2.1
	African	96	9.3	138	11.3	5	5.7	239	10.2
	Asian	91	8.9	99	8.1	7	8.0	197	8.4
	Other	19	1.9	54	4.4	3	3.4	76	3.3
	Unknown	22	2.1	40	3.3	14	16.1	76	3.3
Female	European/Pakeha	53	5.2	35	2.9	0	0.0	88	3.8
	Maori [†]	7	0.7	12	1.0	0	0.0	19	0.8
	Pacific Island	13	1.3	12	1.0	1	1.1	26	1.1
	African	88	8.6	148	12.2	4	4.6	240	10.3
	Asian	44	4.3	34	2.8	2	2.3	80	3.4
	Other	1	0.1	13	1.1	1	1.1	15	0.6
	Unknown	1	0.1	11	0.9	2	2.3	14	0.6
Transgender	Total	1	0.1	2	0.2	1	1.1	4	0.2
TOTAL		1027	100.0	1216	100.0	87	100.0	2330	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:
 Sue McAllister, AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago Medical School, PO Box 913,
 Dunedin, New Zealand. Website address: www.otago.ac.nz/aidsepigroup
 Phone: (03) 479 7220, Fax: (03) 479 7248, or Email aidsepigroup@otago.ac.nz