

# STD services in the Pacific: report of a survey

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## Abstract

The epidemiology of STD in the Pacific is largely unknown. Some information on cases treated in public facilities is available through the diseases surveillance reports made to the WHO Regional Office for the Western Pacific although reporting has not been consistent.

No systematic study of the STD service provision in the Pacific has been made and this paper presents an analysis of a questionnaire on STD care and prevention, circulated by the WHO Regional Office for the Western Pacific and completed by 19 out of 23 countries in the Pacific.

Although only two countries reported a specific STD action plan, review of AIDS Medium Term Plans show that many have planned STD activities. Forty two percent had one or more categorical STD clinics, 63% had treatment guidelines and 47% partner notification policies. In only 26%, however, were drugs likely to be effective against penicillin resistant gonorrhoea on an essential drugs list, although they were available in pharmacies in a further 23%.

STD services in the public system are in general free or low cost although patients may be asked to pay for drugs. An unknown but clearly significant proportion of STD care is provided by the private sector which may include private physicians, non-physician health workers, pharmacists and medicine sellers.

Surveillance activities are often poor with inconsistent and unreliable reporting and without useful data analysis. The commonest STD programme constraints identified by re-

spondents included inappropriate health care seeking behaviour, poor surveillance mechanisms and lack of effective partner notification. Support for health worker training was considered the most useful activity for WHO.

## Introduction

Although most sexually transmitted diseases (STD) have been curable by appropriate chemotherapeutic agents for over forty years they have continued to be a public health problem. An equilibrium has been reached, however, in most industrialized countries with low (and often still falling) rates of infection. In contrast the levels reached in many developing countries has been with epidemic levels of disease. In many developing countries STD have ranked for several decades among the top five diseases for which adults seek health care. Reliable surveillance is rarely in place and the exact size of the problem is frequently unknown. Where data is available it shows significantly greater rates in the 15 to 44 years age group.

In 1993 the World Bank ranked STD the second most important disease, worldwide, for which intervention was possible amongst women aged between 15 and 44 years.

Estimates<sup>1</sup> of worldwide STD have been made by WHO and are shown in Tables 1 and 2.

STD are not only a cause of acute morbidity in adults but may result in complications with sequelae such as infertility, ectopic pregnancy, urethral stricture, cervical cancer, premature mortality, congenital syphilis and foetal wastage, low birth weight and prematurity, and ophthalmia neonatorum<sup>2,3</sup>. STD also facilitate the transmission of human immunodeficiency virus (HIV)<sup>4,5,6</sup>. It has been the appearance of HIV and AIDS that has led to urgent reappraisal of STD control.

## STD in the Pacific

Little is known about STD health care seeking behaviour in the South Pacific although it is probable that the private and informal health sectors provide a very significant proportion in some countries<sup>7,8</sup>.

**“ Surveillance activities are often poor with inconsistent and unreliable reporting and without useful data analysis. ”**

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**Survey methods:** In the Pacific with its comparatively low incidence of AIDS and limited AIDS/HIV understanding and awareness, STD care and prevention is only now becoming a major public health issue. No overall assessment has been made of the STD situation and the public health programmes for control. In order to identify and develop its role the WHO Regional Office for the Western Pacific is undertaking such an assessment and as an initial step a brief questionnaire was sent to the countries for completion by the individual responsible for management of STD services. This paper is an excerpt of a report on the findings and can serve as a basis for recommendations on future actions. Where necessary, this report has been supplemented with information from recent mission reports.

Limited STD surveillance information is available from the disease surveillance reports made to WHO by the ministries of health. The rates of reported cases of gonorrhoea and syphilis, between 1983 and 1992 are shown in Table 3. It should be emphasized that, at best, these figures represent cases seen in the public system and reported to ministries of health. As cases from private practice are rarely included and reporting from public facilities is often unreliable, the numbers are likely to be a gross underestimate but may indicate trends over time. It is disappointing that the collection of STD data has been rather erratic and inconsistent.

Because of the poor quality of the data, it is not possible to draw clear conclusions on STD trends over the period. It is

Region	Total new cases/year (x 1000)	Cases/100 in 15 to 49 year olds
North America	3 000 - 5 000	2 - 3
Latin America & Caribbean	17 000 - 36 000	7 - 14
Western Europe	2 000 - 3 000	1 - 2
East Europe & Central Asia	7 000 - 18 000	3 - 8
East Asia & Pacific	10 000 - 18 000	1 - 2
South & East Asia	79 000 - 143 000	9 - 17
Australasia	160 - 480	1 - 4
North Africa & Middle East	5 000 - 10 000	4 - 7
Sub Saharan Africa	30 000 - 94 000	11 - 35
<b>Total</b>	<b>153 160 - 327 480</b>	<b>5 - 11</b>

**Table 1. Estimate of annual cases of curable STD worldwide**

Disease	New cases (millions)
Gonorrhoea	52 - 122
Chlamydial infection	29 - 72
Syphilis	10 - 24
Chancroid	5 - 7
Trichomoniasis	57 - 102

notable, however, that five of the countries which have been most consistent in reporting have shown a significant downward trend in rates of gonococcal infection. These countries are:

	<i>Reduction in rates of reported gonorrhoea cases between 1983-1992</i>
Australia	77%
Cook Islands	73%
Fiji	28%
French Polynesia	60%
Guam	86%

## Results

Questionnaires were returned by 19 (83%) of 23 countries. There was no response from three Pacific islands, Tokelau, Nauru and Wallis and Futuna. American Samoa sent materials on STD control and surveillance but did not return the questionnaire itself.

Only two countries reported having written STD action plans. Several others, however, have most or all of the components of an STD Programme. Almost all have some STD care activities in their AIDS Medium Term Plans. A selection of the components of STD programmes identified in the countries are shown in Table 4.

**Health care seeking behaviour:** In the great majority of countries there is a choice between public and private sector services. The exceptions are Niue, Tuvalu, Tokelau, Kiribati, and Marshall Islands. In all these countries, no private health services exist. Public sector STD services available varied but could include the categorical STD clinics, first level health care, family planning services and antenatal care clinics. Private services could include physicians, non-physician practitioners, 'quacks', pharmacists and in some places practitioners of traditional medicine.

**Cost of STD treatment:** STD treatment at public clinics and hospitals is free for nationals with the exception of French Polynesia and New Caledonia where patients may be asked to pay depending on income, and the Northern Mariana Islands where patients pay for treatment but contacts are treated free of charge.

**Training of health care workers:** As can be seen in Table 4, eight countries reported training activities. Unfortunately the questionnaire did not distinguish between basic and post basic training.

**Screening and case finding:** Fifteen countries reported an official STD screening/case finding policy. The exceptions were Kiribati, Tuvalu, the Solomon Islands and Tonga. The Solomon Islands and Tonga, however, did mention testing of

Table 3. Reported cases of STD in the Western Pacific region 1983-92

Countries	Reported incidence of gonorrhoea/100 000 population												Reported incidence of syphilis/1 00 000 population											
	1983	84	85	86	87	88	89	90	91	92	1983	84	85	86	87	88	89	90	91	92				
Australia	69	56	48	41	23			15	16		23	14	22	22	10			0	0	0	0	15		
Cook Islands	156	273	180		265	276		138	89	42														
Fed. States of Micronesia					253	185	342		160					1			1		1		0			
Fiji	211	236	272	205	183	193	172	137	150	152	75	74	113	83	68	80	119	87	100	75				
French Polynesia	461	630	491	380	227	149	111		145	184	178	173	61	21	14	19	19	2	6					
Guam	414	566	468	470	335	260	151	460	205	59		1	6		4	4	4	3	7	1				
Kiribati				100		48		164																
New Caledonia			205	297	217	269	238	213	154	119			285	298	148	130	127	168	158	138				
New Zealand	59	54	44			12	0.0				2	2	2		1									
Northern Mariana Islands					110	176	390	287	39	153					22	8	43	7	22					
Niue																								
Palau																								
Papua New Guinea	541	619	584	688	636	567	618	549	337		187	215	230	232	232	195	148	99						
Samoa	27	34	19	8		9	10		49	69		1	1			0								
Solomon Islands	90	60	23		60	67		388	175	120						62								
Tonga	43	32	41	3				13	39															
Marshall Islands					538		584		185	80				113	265			372	123					
Tuvalu		25	38	75	63	50	63														13			
Vanuatu	202	266	145	254	186	125		37	137	182	1	3	3		1									

**Table 4. Components of STD programmes in Pacific countries**

Country	STD action plan	Treatment guidelines	Partner notification policy	Training	No. of STD clinics	Availability of drugs *
Australia		+	+	+	51	A
Cook Islands		+		+	0	
Federated States of Micronesia	+	+	+	+	4	E
Fiji				+	1	
French Polynesia					0	A
Guam	+	+			1	A
Kiribati		+	+	+	0	E
Marshall Islands		+	+		0	E
New Caledonia		+	+		0	
New Zealand		+	+	+	30	A
Northern Mariana Islands		+			0	
Niue					0	
Palau		+			0	
Papua New Guinea		+	+		19	
Samoa		+			1	E
Solomon Islands		+			0	E
Tonga		+	+		0	
Tuvalu				+	0	
Vanuatu			+	+	1	
<b>Total (%) n = 19</b>	<b>2(10)</b>	<b>12(63)</b>	<b>9(47)</b>	<b>8(42)</b>	<b>8(42)</b>	<b>9(47)</b>
+ Indicates a positive response						
* Relates to the availability, in the public system, of drugs currently effective against penicillin resistant gonococcal infections: 'E' indicates inclusion of at least one effective drug in an essential drug list; 'A' indicates effective drug(s) available but no essential drug list.						

specific groups under a separate heading. Several countries mentioned that the official policy was not always carried out, often because of shortages of human and other resources. This is also reported in recent mission reports. Table 5 summarizes official screening/case finding policies.

Screening for syphilis is available to antenatal clinic (ANC) attenders in 14 countries (76%). As can be seen from Table 5, fifteen countries (79%) screen all blood from donors for syphilis. The exceptions are Papua New Guinea, Kiribati, Tuvalu and Vanuatu.

**Reporting and surveillance:** All countries reported some form of STD surveillance. There were, however, a very wide selection of reporting systems and a very generally stated opinion that received data was unreliable with under report-

ing and/or misclassification. As might be expected, Australia and New Zealand were most likely to have reliable systems. In many countries it was a nominal passive universal reporting system. There was no mechanism to encourage data reporting or feedback of analyzed information.

Surveillance problems which were mentioned included:

- absence of clear guidelines on surveillance and reporting, centrally in the ministries of health and peripherally at the reporting sites;

- inconsistencies of reporting regulations;

- logistic problems in collecting and compiling information such as transport difficulties or staff shortages;

- lack of motivation/resources/time in hospital facilities with late and/or incomplete returns;

- responsibility for collection of data lying outside the STD programme;

- lack of knowledge of where STD patients actually seek treatment;

- poor diagnostic criteria and/or capability; and

- absence of or poor reporting by private practitioners and pharmacists.

As forward planning and programme management are dependent on a continuous assessment of the STD situation, surveillance is an area where technical support is urgently required.

**Perceived constraints on STD management:** Respondents were requested to identify the three most important problems related to STD management in their countries out of a list of nine possibilities (see key to Table 6). Two respondents failed to complete this section, one gave more and three less than the three priority constraints requested. There was remarkable uniformity in the constraints identified. Most gave lack of appropriate health care seeking behaviour

Table 5. Official case finding and screening policies in Pacific countries

Country	Case finding				Screening	
	Gonorrhoea testing §		Syphilis serology		blood donors	others
	sex workers*	other	sex workers*	ANC attenders		
Australia	+			+	+	military conscripts
Cook Islands				+	+	
Fiji				+	+	
French Polynesia	+		+	+	+	military conscripts
Guam	+		+		+	immigrants
Kiribati						
Federated States of Micronesia		- pre-employ - students - food handlers - premarriage		+	+	- pre-employ - students - food handlers - premarriage
Marshall Islands		family planning clinic attenders		+	+	pre-employ
New Caledonia				+	+	military conscripts
New Zealand				+	+	
Northern Mariana Islands				+	+	
Niue					+	
Palau				+	+	
Papua New Guinea				+		students
Samoa				+	+	
Solomon Islands					+	pre-employ
Tonga				+	+	
Tuvalu						
Vanuatu				+		
<b>Total (%); n = 19</b>	<b>3(16)</b>	<b>N/A</b>	<b>2(10)</b>	<b>14(76)</b>	<b>15(79)</b>	<b>N/A</b>
+ indicates a positive response						
§ the method of testing was not defined						
* includes prostitutes, massage parlour employees, bar girls, etc						
N/A Not applicable.						

(37%), inadequate surveillance mechanisms (37%), and poorly functioning partner notification (58%). Access and quality of care were not identified as problems although this may be related to the wording of the key questions.

It is interesting that lack of drugs (5%) and affordability of treatment (0) were uncommonly perceived constraints al-

though, as Table 4 shows, only 47% of countries reported that effective drugs were available. This may be partly explained by the emphasis in the questionnaire on public STD services and the fact that the questionnaires were often completed by officials of the Ministry of Health who may not always be aware of conditions at clinic level.

**Table 6. STD management problems identified by the countries in the Pacific**

Country	Priority constraints (see key below)									Others
	a	b	c	d	e	f	g	h	i	
Australia					+	+	+			
Cook Islands			+	+		+	+			
Federated States of Micronesia										
Fiji			+	+		+				
French Polynesia					+		+			
Guam					+	+			+	
Kiribati			+	+	+					
Marshall Is					+	+	+			lack of chlamydia tests
New Caledonia					+	+	+			
New Zealand						+	+			performance in the private sector variable
Niue										no STD cases since 1987
Northern Mariana Islands							+			
Palau					+	+	+			
Papua New Guinea					+	+	+			
Samoa					+	+			+	
Solomon Islands										
Tonga	+		+	+						
Tuvalu				+		+	+			
Vanuatu					+	+	+			
<b>Totals</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>11</b>	<b>2</b>	<b>0</b>	
<b>(%); n = 19</b>	<b>(5)</b>	<b>(0)</b>	<b>(21)</b>	<b>(26)</b>	<b>(37)</b>	<b>(37)</b>	<b>(58)</b>	<b>(10)</b>	<b>(0)</b>	

*Key:*  
a lack of effective drugs  
b patients cannot afford STD treatment  
c government doctors do not have sufficient knowledge and skills to manage STD  
d government nurses do not have sufficient knowledge and skills to manage STD  
e although STD services are available and affordable, patients come late for treatment or not at all  
f inadequate STD reporting system  
g contact tracing does not function well  
h insufficient resources for STD screening  
i laboratory tests not always reliable  
+ indicates a positive response

The opportunity to specify other problems was only taken by two respondents. Table 6 summarizes this section.

**WHO support:** The STD programme areas where respondents considered WHO would be most useful are summarized in Table 7. All countries except Australia had at least one area where technical support was perceived to be of value. The needs covered most of the components of an STD programme although training was by far the most common stated priority (58%). One third stated a need for support in funding activities.

## Conclusions and recommendations

This survey together with review of recent mission reports has provided a limited overview of STD services in Pacific countries<sup>7,8,9</sup>. There is evidence of increasing interest in the development of STD programmes as a major intervention in preventing HIV transmission. Many constraints are revealed but the most relevant are the deficiencies in programme planning, monitoring and evaluation. The very important input of the private sector was clear and any training activities should take this into consideration.

There is discrepancy between the constraints listed by the respondents and the stated priorities for WHO support. This may be accounted for by a perception, by the respondents, that the main role of WHO is training and by the current emphasis in the regional activities for STD training material production and promotion of STD case management based on syndromic diagnosis.

STD surveillance has a major function in the planning and management of STD programmes and is revealed by this survey to be generally weak in the Pacific. This questionnaire has served to indicate areas where additional information is required in order to give support to countries in developing National Programmes for STD prevention and care appropriate to the present AIDS era.

Table 7. Most useful STD programme areas for WHO support in the Pacific

Country	Areas of support requested Technical Support for:								
	Training	Diagnosis	Reporting/ surveillance	Treatment guidelines	IEC*	Programme guidance	Screening/ case finding	Partner notification	Funding for:
Australia	No support required for all the above								
Cook Islands	+	+							
Federated States of Micronesia									
Fiji	+	+		+					
French Polynesia	+			+					research
Guam	+								screening
Kiribati	+								drugs
Marshall Is					+				
New Caledonia	+			+					
New Zealand			+						
Northern Mariana Islands					+				chlamydia surveillance pilot study
Niue		+	+						
Palau					+				
Papua New Guinea		+					+	+	
Samoa	+				+				screening & Partner Notification
Solomon Is		+		+	+				
Tonga	+								training & drugs
Tuvalu	+				+				facilities & equipment
Vanuatu	+	+		+					
<b>Total (%) n = 19</b>	<b>11 (58)</b>	<b>5 (26)</b>	<b>2 (10)</b>	<b>5 (26)</b>	<b>6 (31)</b>	<b>0 (0)</b>	<b>1 (5)</b>	<b>1 (5)</b>	<b>7 (37)</b>

+ indicates a positive response

\* Information, Education and Communication

## References

1. WHO. *Policies and Principles of STD Control*. Office of Sexually Transmitted Diseases, Global Programme on AIDS, WHO; September 1995.
2. Meheus A, Schultz KF and Cates W. Development of prevention and control programmes for sexually transmitted diseases in developing countries. In: Holmes KK, Mardh P-A, Sparling PF et al, *Sexually Transmitted Diseases*. McGraw-Hill, 2nd Edition; 1990.
3. Meheus A. and Piot P, Provision of services for sexually transmitted diseases in developing countries. In: Oriel JD. and Harris JRW (editors). *Recent Advances in Sexually Transmitted Diseases*, Churchill Livingstone; 1986.
4. Greenblatt RM, et al. Genital ulceration as a risk factor for human immunodeficiency virus infection. *AIDS*, 1988; 2:201.
5. Potterat JJ. Does syphilis facilitate sexual acquisition of HIV? *JAMA*, 1987 258:473.

6. Kreiss J., et al. Role of sexually transmitted diseases in transmitting human immunodeficiency virus. *Genitourinary Med*, 1988; 64:1.
7. Gallwey J. Unpublished mission report, WHO Regional Office for the Western Pacific; 1993.
8. Gallwey J. Unpublished mission report, WHO Regional Office for the Western Pacific; 1993.
9. WHO. *Care and Prevention of STD in the Western Pacific Region*. WHO Regional Office for the Western Pacific; 1995. □



*Poster distributed to nighclubs, hotels and dancehalls by the Papua New Guinea National AIDS Committee*

**“ For many women (especially those from traditional societies), being assertive and getting their men to wear condoms is a ludicrous idea. ”**

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