

**Pacific EPI Surveillance Newsletter  
Number 1**

**Introduction**

Over 50 hospitals in 20 Pacific island countries and areas (PICs) are participating in monthly surveillance and reporting of acute flaccid paralysis (AFP), suspect measles, and neonatal tetanus. This surveillance network includes all national and secondary hospitals in the PICs (excluding Papua New Guinea). The network was established in 1997 with these objectives:

- to ensure complete reporting and investigation of all AFP cases in children under age 15: this will allow the PICs to meet global criteria for certifying poliomyelitis eradication;
- to improve surveillance of measles: this will support accelerated efforts at measles control via high routine immunization coverage and measles mass immunization campaigns;
- to identify high risk areas for neonatal tetanus: so efforts can be targeted for the elimination of this disease; and
- to demonstrate the effectiveness of an alternative surveillance and response mechanism: this supplements the weekly or monthly passive systems now in place.

This active surveillance network was endorsed by an independent Subregional Committee on the Certification of the Eradication of Poliomyelitis in Pacific Island Countries and Areas. It provides the basis for documentation and action for meeting regional goals in controlling or eradicating polio, measles, and neonatal tetanus.

### National and Hospital Coordinators

Country	National Coordinator	Hospital Coordinators
American Samoa	Sylvia Tauiliili	Sylvia Tauiliili
Cook Islands	Ngavaevae Teokotai	Metua Taurarii
Fiji	Lepani Waqatakirewa	Lisi Tikoduadua, Shabnam Prakash, Jagdish Raj, E Rafai, David Whippy, Arieta Yavaca, K Vakawaletabua, Dr Tuiraki, Ami Chandra, Shivram Agasty, Suresh Nath, Ajesh Ishri, Falesene Salesa, Josaia Samuela, Pablo Romakin, Isimeli Tukana, Setareki Sowani, Joseph Etta, Frances Flores
French Polynesia	Laurence Gleize	Laurence Gleize, Marie-Paul de Barthez, Bernard Granger
Guam	Ronald Balajadia	Tom Knott, Derek S Wheeler
Kiribati	Ioanna Tekaa	Ioanna Tekaa
No.Marianas (CNMI)	Jon Bruss	Norma Ada
Marshall Islands	Kennar Briand	Lita Santos, Tin Soe, Mary Zessoulas
Federated States of Micronesia	Kidsen Iohp	Livingston Taulung, Louisa Helgenberger, Kino Ruben, Richter Yow
Nauru	Kiki Thoma	N Kumar
New Caledonia	Isabelle Missotte	
Niue	Mine Pulu	Mine Pulu
Palau	Caleb Otto	Caleb Otto
Samoa	Sally Betham	John Adams, Aleki Fuimaono, Ailao Imo
Solomon Islands	Raymond Mauriasi	Dan Adjei, Lipson Sisiolo
Tokelau	Tekie Iosefa	Tekie Iosefa
Tonga	Sunia Foliaki	Selina Fusimalohi, Sione Latu
Tuvalu	Tiliga Pulusi	Iupasi Kaisala
Vanuatu	Myriam Abel	Edward Tambisari, Timothy Vocor
Wallis and Futuna	Raymond Poirier	Raymond Poirier

The network depends on the active participation of 20 national coordinators, more than 50 hospital coordinators, and about 200 key paediatric clinicians in the 20 PICs. The time commitment of key clinicians is minimal, but crucial. Hospital and national coordinators are asked to commit up to an hour every month to this surveillance mechanism.

This report provides feedback to participating clinicians and to other interested parties on data provided by the network.

### Active Surveillance Reports

Every month, each hospital submits an active surveillance form signed by all key clinicians indicating the presence or absence of three conditions (AFP, measles, and neonatal tetanus) under surveillance.

**Monthly Active Surveillance Forms received by WHO (as at 15 December 1998)**

	1997	1998*
Number of forms expected	367	472
Forms received by WHO	273	328
% reporting	74%	69%

\* from 53 hospitals, through September 1998

**AFP Reports**

Acute flaccid paralysis in children can be caused by conditions other than poliomyelitis (e.g., Guillain Barré syndrome). In the absence of polio, AFP is known to occur at a background rate of about 1 case per 100,000 children under age 15 each year. Therefore, a good surveillance system for AFP should detect at least this rate.

All AFP cases must be reported and investigated promptly. Two stool specimens must be collected for testing for poliovirus and other viruses, ideally within 14 days of onset of paralysis, and the child must be re-evaluated after 60 days to determine if residual paralysis is present.

Twelve AFP cases were reported in 1997, achieving a rate of 1.33 per 100,000 children. For 1998, only 5 cases were reported by mid-December despite more comprehensive surveillance (non-polio AFP rate of 0.56/100,000). This may be due to random variations in occurrence of AFP, but does raise a concern that some cases may still be missed. Adequate stool collection rate (2 specimens collected within 14 days of onset of paralysis) is low.

**Compliance with AFP surveillance indicators, Pacific islands, 1997 - 1998**

AFP surveillance indicator	Target	1997	1998*
Completeness of reporting (53 reporting sites in 1998)	80%	74%	69%**
Non-polio AFP cases	10	12	5
Non-polio AFP rate	1 per/pour 100 000	1.33	0,56
Investigated cases (investigation form completed)	80%	100%	100%
Cases with a 60 day exam (check for residual paralysis)	80%	75%	20%
Adequate stool collection rate (2 stools within 14 days)	80%	25%	40%

\*as reported by 15 December 1998

\*\*as expected through September 1998

**Measles**

Despite fairly high immunization coverage, an average of 4 measles epidemics occurs in the Pacific every year. These outbreaks result in significant morbidity, some mortality, and high economic and social costs. In the period April 1997 to March 1998 significant measles virus transmission occurred, with outbreaks in 8 of 20 Pacific island countries/areas.

Two strategies can be used to interrupt measles virus transmission for an extended period (and eventually to eliminate, or even eradicate measles). One strategy is a routine two-dose measles schedule that achieves very high coverage (at least 95%) with both doses. Most countries have difficulty in achieving this, so an alternative is to maintain high coverage (at least 90-95%) with a single dose of vaccine, and give a supplemental dose to every child during a measles mass campaign. Such campaigns should be repeated every 4 - 5 years.

In 1997 and early 1998, 13 out of 20 Pacific island countries/areas had conducted full national campaigns (usually targeting children aged 9 months to 14 years), and 2 others (Marshall Islands, Palau) conducted partial ones. The successful results of these are noted below:

**Measles mass campaigns, 1997 – 1998**

Country, territory	Number immunized	Target	% coverage
Cook Islands	5 548	6 524	85
Fiji	204 604	251 109	81
French Polynesia	19 200	25 000	77
Kiribati	23 507	27 297	86
Nauru	2 540	2 540	100
New Caledonia	17 999	20 026	90
Niue	790	796	99
Samoa	72 344	74 470	97
Solomon Islands	124 611	153 757	81
Tokelau	568	568	100
Tonga	33 425	35 458	94
Tuvalu	3 033	3 033	100
Vanuatu	74 329	77 850	95
<b>TOTAL</b>	<b>582 498</b>	<b>678 428</b>	<b>86</b>

No cases of measles have been detected in the Pacific since March 1998. As countries make a determined effort to interrupt transmission over an extended period, surveillance for suspect measles becomes increasingly important. All suspect cases (defined as rash, plus fever, plus one or more of: cough, coryza, conjunctivitis) must be promptly reported and investigated.

We applaud the efforts of the many people in the Pacific who are helping to rid the world of poliomyelitis and, someday, of measles as well.

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