



REPORT

**INFORMAL NINTH MEETING OF THE SUBREGIONAL COMMITTEE
FOR CERTIFICATION OF POLIOMYELITIS ERADICATION
IN PACIFIC ISLAND COUNTRIES AND AREAS**

**Nadi, Fiji
9 May 2006**

Manila, Philippines
May 2006

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Convened by:

**WORLD HEALTH ORGANIZATION
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NOTE

The views expressed in this report are those of the participants in the Informal Ninth Meeting of the Subregional Committee for Certification of Poliomyelitis Eradication in Pacific Island Countries and Areas and do not necessarily reflect the policies of the World Health Organization.

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This report has been printed by the Regional Office for the Western Pacific of the World Health Organization for the participants in the Informal Ninth Meeting of the Subregional Committee for Certification of Poliomyelitis Eradication in Pacific Island Countries and Areas, which was held in Nadi, Fiji, on 9 May 2006.

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1. INTRODUCTION

An informal ninth meeting of the Subregional Committee for the Certification of Eradication of Poliomyelitis (SRCC) in Pacific Island Countries and Areas (PICs) took place in Nadi, Fiji, on 9 May 2006.

Considering the success of poliomyelitis (polio)-free certification and the established structures as a solid foundation for other disease control activities, the SRCC held its annual meeting during the 2nd workshop of the Pacific Immunization Programme Strengthening (PIPS) initiative, conducted 8-12 May 2006, as an opportunity to discuss requirements for maintaining polio-free status and recommendations for future activities with expanded programme on immunization (EPI) managers, in line with further systems integration.

The PIPS, launched in 2004, is a subregional coordination mechanism that supports national EPI programmes with regards to, among others, reviewing of programme performance and strategies used, sharing of best practices among countries and recommending new technical guidelines and strategies, if needed, for strengthening of EPI programmes within the context of national health systems.

1.1 Objectives

- (1) to review progress in maintaining polio-free status after certification;
- (2) to review and make a final classification of acute flaccid paralysis (AFP) cases reported during 2005 and 2006 (January to April) and still pending; and
- (3) to present a summary of conclusions and recommendations on requirements for maintaining polio-free status at the 2nd PIPS workshop.

1.2 Organization

The meeting was attended by three of the five members of the SRCC and a WHO secretariat (see Annex 1). Dr David Morens attended as a temporary adviser to WHO. The Chairperson requested Dr Morens to continue to serve as Rapporteur.

The Chairperson presented the status of AFP surveillance, maintenance of polio-free status and SRCC work (Annex 1), as well as summary conclusions and recommendations resulting from the 9th meeting at the PIPS workshop (Annex 2).

2. PROCEEDINGS

2.1 Global and regional overview of poliomyelitis eradication

2.1.1 Global status

In Africa, transmission of indigenous poliovirus has not been detected in Egypt or Niger for more than six months and appears to have been interrupted. Imported poliovirus was eliminated from 10 of the 15 African countries that had experienced importations since 2003 as a

result of a series of five coordinated polio immunization campaigns conducted in 25 countries under the auspices of the African Union. Following the resumption in October 2004 of nationwide polio immunization campaigns in Nigeria, the number of states in that country reporting poliovirus in 2005 declined by one-third and the number of polio cases fell by one-fifth (compared with 2004). The final total number for 2005 was 801 cases in 217 infected districts; as of 25 April 2006 there are 169 cases in 84 districts. Northern Nigeria constitutes the last reservoir of indigenous wild poliovirus in Africa and appears to be the only significant remaining reservoir of types 1 and 3 poliovirus concurrently in the world. Because of the heavy disease burden and risk of exportation, large-scale supplementary immunization activities (SIAs) with an appropriate combination of monovalent and trivalent oral polio vaccines are required every four to six weeks until poliovirus transmission is interrupted.

In Asia, India reported 66 polio cases in 35 districts in 2005 and, up to 25 April 2006, 22 cases in 13 districts. Since the introduction of monovalent oral polio vaccine type 1 (mOPV1), the locally circulating poliovirus has not been detected in any of the three remaining poliovirus reservoirs in Mumbai, and was further restricted to 14 of the 107 districts in Uttar Pradesh and Bihar. In Pakistan in 2005, only type 1 poliovirus was detected in 18 out of 126 districts (28 polio cases), with a 57% decline in the number of circulating wild poliovirus lineages compared with 2004. In Afghanistan, a few cases of paralytic polio due to types 1 and 3 polioviruses were detected in the southern region in 2005 (nine cases in eight districts). So far, there are four polio cases in two districts in Afghanistan and two cases in two districts in Pakistan. Wild poliovirus transmission in Afghanistan, India and Pakistan is now restricted to a single serotype, type 1 or 3, in any given geographical area. Large-scale SIAs that reach more than 95% of children in the infected areas with the appropriate mOPV are required every four to six weeks until poliovirus transmission is interrupted.

With the acceleration of wild poliovirus eradication, all countries must implement recommended activities for the biocontainment of wild polioviruses, enhance and sustain surveillance for circulating polioviruses and evaluate long-term polio immunization policy options. Multiyear and flexible financing commitments are needed to cover the unmet funding requirement of US\$ 750 million for 2006-2008, of which US\$ 200 million is immediately required for activities in 2006. These funds are needed to buy OPV, conduct polio immunization campaigns, implement emergency outbreak response, sustain highly sensitive disease surveillance, and provide technical support to Member States.

During 2005, 12 countries reported imported poliovirus and, for the first time, the number of polio cases in countries newly affected was higher than in countries endemic for the disease. The most recent importation occurred into Bangladesh and Nepal. Importation of wild poliovirus into Somalia resulted in 185 polio cases in 2005 and 19 cases to date in 2006.

Recognizing that 57% of all polio cases reported in 2005 have been from outbreaks in previously polio-free countries, the Advisory Committee on Polio Eradication (ACPE) undertook a detailed analysis of the response to such outbreaks between 2003 and 2005. The ACPE found that the risk of prolonged transmission and further national and international spread of poliovirus was related to: (1) the speed of the initial immunization response; (2) the geographical extent of the response; (3) the proportion of children vaccinated in the target population; (4) the use of mOPV; and (5) the total number of immunization rounds conducted.

The ACPE therefore issued standing recommendations to Member States for responding to circulating polioviruses in polio-free areas. It also issued recommendations to the WHO Director-General and the spearheading partners to support responses to polio outbreaks in Member States reporting polio cases due to imported viruses, and reaffirmed the measures countries at particularly high risk of importation could consider adopting in order to reduce that

risk. The effective implementation of these recommendations requires immediate recognition of any circulating poliovirus as a potential international health threat, and appropriate responses.

2.1.2 Regional status

A total of 6698 AFP cases with onset in 2005 were reported, resulting in an annualized non-polio AFP rate of 1.65 per 100 000 children under age 15. The adequate stool specimen collection rate was 88%. Poliovirus isolation and typing results were available within 28 days of receipt for 97% of specimens and all but one laboratory exceeded the target of 80%.

The non-polio enterovirus isolation (NPEV) rate was 9%, with several laboratories achieving rates at or below 5%, which maintains concerns about possible decreased virologic sensitivity. Measures continue to be taken to strengthen basic laboratory techniques where required. Intratypic differentiation (ITD) results were available within 14 days of receipt for 83% of poliovirus isolates of AFP cases. ITD results were available for 74% of AFP cases within 60 days of onset of paralysis and for 89% within 90 days of paralysis onset. Performance was again decreased, particularly due to shipment timeliness problems in China.

Standard ITD was applied to 431 poliovirus isolates from AFP cases and 241 poliovirus isolates from non-AFP sources. A total of 32 AFP isolates and 14 non-AFP isolates had discordant ITD results and were sequenced.

While no wild polioviruses have been detected since 1999, the surveillance systems for AFP cases were able to quickly detect episodes of vaccine-derived polioviruses (VDPV) in the People's Republic of China (2004) and the Lao People's Democratic Republic in 2004-2005. Reported routine immunization coverage with poliovirus vaccine has been maintained at levels similar to previous years, but serious immunity gaps continue to exist in some areas, as indicated by the recent VDPV episodes. SIAs with OPV have been further reduced, mainly due to lack of funding, and strong priority is being placed on strengthening routine immunization systems. However, progress is often slow. Particular OPV coverage problems exist in the Lao People's Democratic Republic, Papua New Guinea, several PICs (more details later in this report) and high-risk communities and populations in China and the Philippines.

The risk of wild poliovirus importation into countries in the Western Pacific Region continues, especially when polio outbreaks occur in close geographical proximity and in places with frequent population movements (e.g. the 2005 polio outbreak in Indonesia).

The polio laboratory network in the Western Pacific Region comprises one global specialized (Japan), two regional reference (Australia and China), 10 national and 31 Chinese provincial polio laboratories. All were reviewed for 2005 accreditation and are, except for the provincial laboratory in Tibet, currently performing under general WHO standards.

A type 3 VDPV (1% divergence in VP1) was identified from an adult AFP case in Japan (Nagasaki Prefecture) in 2005. From the epidemiological background, this index case was considered an intrafamilial contact infection. Type 3 poliovirus (with 0.7% divergence in VP1) was isolated from a healthy vaccinee (his daughter). The mutation site between index case and vaccinee on VP1 is almost identical. The virus was not isolated from another healthy contact (his wife). Additional laboratory, epidemiological and immunological investigations were conducted, but no indication was found for immuno-incompetence or circulation of the VDPV.

A type 2 VDPV (1.2% divergence in VP1) was isolated from a two-year-old boy in China (Anhui Province) who received four doses of OPV, with a last, fourth dose on January 2005. On 30 July, he developed a febrile illness and, two days later, AFP of the right leg. By August, his

left leg was also paralyzed. On examination on 15 October, 2.5 months after onset, the boy remained almost completely paralyzed, unable to sit or walk, and showed marked muscle atrophy and loss of deep tendon reflexes. The boy's village, as well as surrounding villages, reported high immunization coverage. Stool samples of 22 contacts of the case were cultured, but were all negative. The child appeared to be immuno-compromised, had low antibody titres against all three types poliovirus and continued to shed virus. Divergence in VP1 had increased to 2.33% in the type 2 VDPV isolated from a follow-up stool sample taken in October, and an additional type 3 VDPV was found, with 2.67% divergence, both findings indicating that these viruses are immunodeficient vaccine-derived polioviruses (iVDPV).

Particularly in view of the polio outbreak in Indonesia (303 wild poliovirus cases plus 46 VDPV-associated cases in 47 districts in 2005 and two polio cases in 2006 to the end of April), several regional activities were undertaken in 2005 to enhance wild poliovirus preparedness, including:

- (1) regular information sharing with national programmes through the EPI country officers, WHO representatives (WRs) and National Certification Committee (NCC) chairpersons, usually in individualized communications to encourage questions and discussions (In the PIC this is being done through the Pacific Public Health Surveillance Network [PPHSN]);
- (2) targeted strengthening of AFP surveillance in key countries like China (reduction of stool specimen shipment time), the Philippines (establishing a core group of national EPI surveillance monitors to strengthen supportive supervision at lower levels) and Papua New Guinea (field visits to conduct active AFP searches);
- (3) technical support to update wild poliovirus importation preparedness plans in key countries (including Malaysia and the Philippines);
- (4) a mission to Malaysia to conduct an in-depth review of all relevant AFP surveillance and polio immunization data and work towards short-term and mid-term activities to strengthen AFP surveillance in the areas concerned;
- (5) technical planning support for OPV SIAs conducted in southern Mindanao, the Philippines, in late August and September, synchronized with Indonesia National Immunization Days (NID) dates, while the WR/Philippines also provided ongoing support to work on strengthening routine immunization, to be intensified in other high-population-density/high-risk areas;
- (6) targeted OPV mop-up immunization in Cambodia (October) and Viet Nam (November and December), the extent of SIAs in high-risk populations in China in the winter season 2005/06 being dependant on external funding available;
- (7) close collaboration between the Regional Office for the Western Pacific and the Regional Office for South-East Asia, including technical support being provided to NID planning in Indonesia, and close coordination with the United Nations Children's Fund (UNICEF) Regional, as well as country offices; and
- (8) preparation of an emergency protocol for the EPI Western Pacific Regional Office, if any Member State were to report importation.

Approval of the new set of International Health Regulations (IHR) by the WHO World Health Assembly (WHA) in May 2005 has established roles for countries and WHO in identifying and responding to public health emergencies and sharing information about them.

WHO country offices, together with the Global Outbreak Alert and Response Network (GOARN), provide operational support to countries in identifying and responding to disease outbreaks. The purpose of the IHR is to ensure the maximum protection against the international spread of diseases, while minimizing interference to world travel and trade. They include a list of diseases whose occurrence must be notified to WHO, including polio, smallpox and severe acute respiratory syndrome (SARS).

It has been agreed, and is supported by several episodes of circulating VDPV in recent years, that continued use of the live attenuated polioviruses contained in OPV after interruption of global transmission would ultimately be incompatible with eradication. Safely stopping the use of OPV will require:

- confirmation of interruption of wild polioviruses (i.e. global certification of eradication);
- appropriate containment of all polioviruses in laboratories and vaccine-production facilities;
- continued poliovirus surveillance and notification capacity that meet international standards globally;
- a WHO/UNICEF managed stockpile of mOPV, with internationally agreed mechanisms for use; and
- processes for synchronously stopping OPV use globally.

Preparations for worldwide polio-free status are increasingly important as the world moves closer to the global interruption of wild poliovirus circulation. An important aspect of those preparations is effective laboratory containment of all wild poliovirus infectious and potentially infectious materials to ensure that wild polioviruses are not reintroduced into the world after interruption of transmission. Detailed documentation from countries demonstrating that all laboratories with such materials have been identified will be required for global certification of polio eradication. Preparing for the synchronous cessation of OPV use will require appropriate containment of all poliovirus strains.

The ability to document the quality of containment activities will be essential to Member States in providing a comprehensive record and assessment of activities implemented to date. It will also provide national and regional authorities with a high degree of confidence in the containment process, against which important decisions on future polio immunization policies can be made. Data collected on the first phase of containment, and the capacity to maintain it in an active and accessible form, will be required for some years to come, and will form the core body of information used to determine the activities necessary in later phases of the containment process. Future poliovirus laboratory containment requirements will be defined in a 3rd edition of the WHO Global Action Plan, which is currently under preparation.

There are currently six countries in the Western Pacific Region holding wild poliovirus infectious and/or potentially infectious materials; Australia, China, Japan, New Zealand, the Philippines and the Republic of Korea. Plans are developed to at least destroy materials in the Philippines shortly.

In preparation for the 11th meeting of the Regional Certification Commission (RCC) meeting in December 2005, WHO conducted an external review of national submissions, modelled after the successful approach used in the WHO Regional Office for Europe. All laboratory containment quality assessment reports submitted underwent external review by several senior containment experts and, after consolidation of their conclusions on the

thoroughness and reliability of the national surveys and inventories, findings were presented and recommendations made to the RCC in a standard summary sheet.

Work sheets were provided, with checklists to systematically evaluate whether the country had satisfactorily addressed each described area, following the guidelines for documenting the quality of Phase I wild poliovirus laboratory containment activities and the best-practice model, which had identified six key elements:

- (1) Strong political endorsement and support for containment.
- (2) A realistic national plan of action.
- (3) An effective containment coordinator and national task force.
- (4) A comprehensive national laboratory list.
- (5) A high-quality laboratory survey.
- (6) A complete and active national laboratory inventory.

A reviewer's summary sheet was provided to record overall conclusions and recommendations. An informal meeting of the key external reviewers was conducted to consolidate findings and make recommendations to the RCC, and to clarify other key general points for the RCC's consideration.

The RCC concluded that the PIC (as well as 12 other Member States) had successfully completed Phase I laboratory containment (national/sub-regional survey and inventory) and congratulated all on that major achievement.

The RCC recommended that countries should regularly update their national inventories to reflect any change in laboratory status, which may include either the addition or destruction of wild poliovirus materials, including VDPV.

Countries should identify laboratories on the national database that, by nature of their virology activities, are at risk of having virus stocks that may be mislabeled or inadvertently contaminated with wild poliovirus. As Phase II draws closer, such laboratories will need to confirm that their stocks are wild-poliovirus-free.

Wild-poliovirus containment, Phase II, will be implemented when one year has passed since the last isolation of wild poliovirus. Preparing for Phase II has been an integral part of Phase I and will be ongoing until Phase II is implemented. The current description of Phase II in the Global Action Plan 2nd edition is incomplete in view of the recent goal to stop routine post-eradication use of OPV. Accordingly, Phase II and Phase III activities will be revised in the forthcoming 3rd edition of the Global Action Plan.

The RCC noted that the new Phase II and III requirements will likely include a framework for country-specific laws, regulations or edicts that prohibit the retention of wild poliovirus except in government-approved facilities with biocontainment conditions accredited by national and international bodies. The RCC urged WHO Headquarters to disseminate the proposed 3rd Edition early in 2006 in order to provide countries with sufficient time for response and national planning.

2.2 Maintaining polio-free status in the Pacific island countries and areas

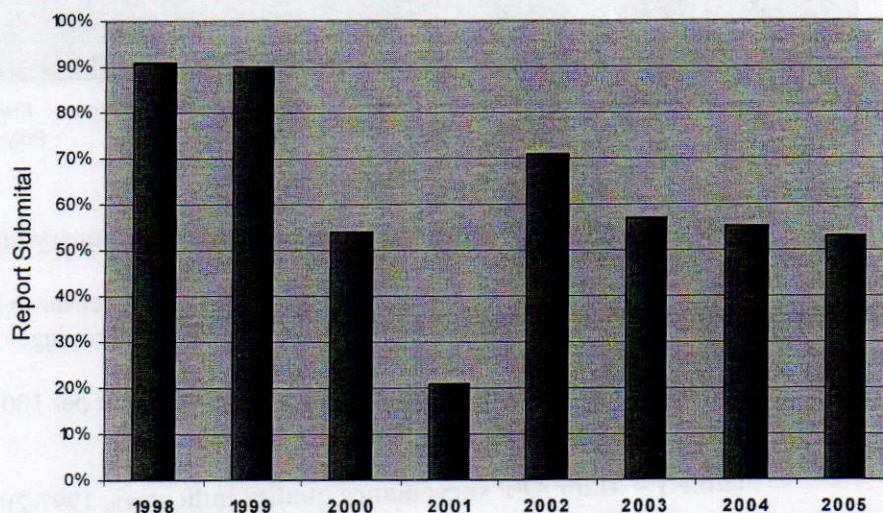
2.2.1 Quality of AFP surveillance

The hospital-based active surveillance (HBAS) network structure remains unchanged from previous years. It still includes 58 hospitals distributed among 20 countries and areas, and active involvement of 20 national coordinators, 58 hospital coordinators and over 200 key paediatric clinicians. The reporting mechanism in most countries continues to require a copy of the completed monthly active surveillance form to be sent from the hospital coordinator to the national coordinator and copied to WHO at least every three months. Monthly reporting is being encouraged, particularly in the context of surveillance for measles and rubella and, starting in 2004, the use of email for report submission has been initiated.

2.2.2 Monitoring completeness of reporting from reporting sites

The overall report submission rate for 2004 was 55%, and 53% in 2005 (Figure 1), which, while still below peak reporting rates in the lead up to polio-free status, is encouraging in that it points to a trend of stabilization of reporting performance above the low point achieved in 2001 (21%).

Figure 1 – HBAS monthly report submission, 1998-2005



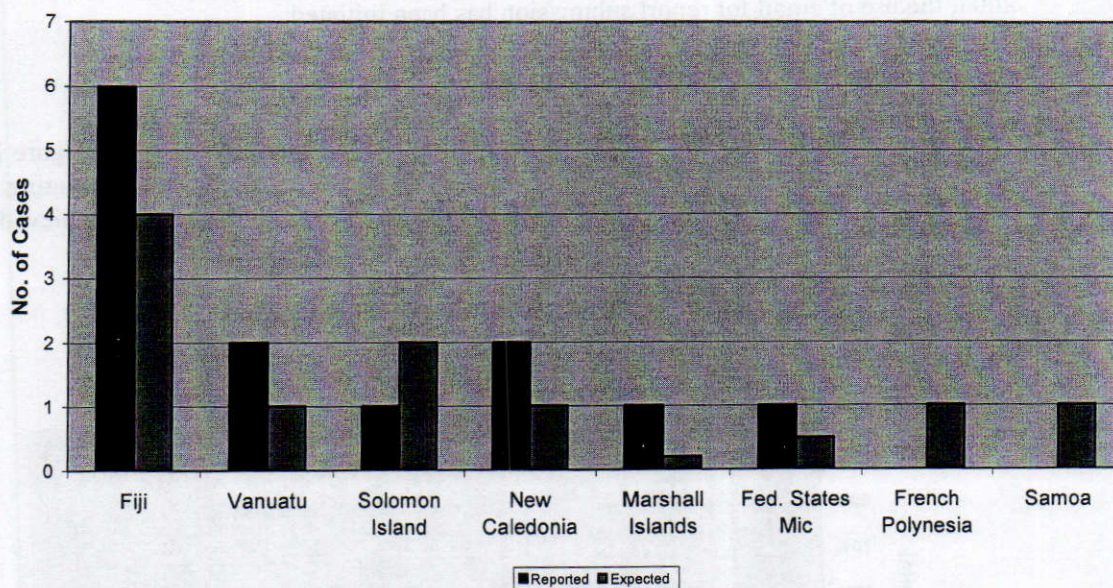
Of the 58 reporting sites, 29% provided full reports for 2004 and 16% for 2005, while 28% provided no reports in 2004 and 26% in 2005. It is gratifying to note that full reporting appears to be improving in Fiji (which comprises the largest number of sites and greatest target population), which increased to 62% in 2005 from 51% in 2004.

Individual country reporting performance is provided in Annex 4.

2.2.3 Non-polio AFP rates in 2004 and 2005

For 2004, the non-polio AFP rate was 1.2/100 000 under age 15.

For the 13 AFP cases detected since the SRCC meeting in October 2004, the country breakdown was Fiji (6), Vanuatu (2), New Caledonia (2), Solomon Islands (1), Marshall Islands (1) and the Federated States of Micronesia (1). Of the larger population centres, only Fiji, New Caledonia and Vanuatu reported at least the expected number of AFP cases, while Solomon Islands appears to have underreported (see Graph 1).



Graph 1 – Reported versus expected AFP cases by country in 2004

For 2005, the number of AFP cases was so small (5) that all sites appear to be underreporting, although zero reporting through the HBAS system is improving.

The PIC have achieved the expected detection rate of one AFP case per 100 000 children under 15 years of age for all years except 2002 and 2005 (see Table 1).

Table 1 – Main AFP surveillance quality indicators, 1997-2005

Year	Non-polio AFP rate 100,000 < 15 yr	% reported w/n 14 days of onset	% with 60 day follow up	% with 2 specimens w/n 14 days of onset	% inadequate stools with follow up
1997	1.2		67%	25%	56%
1998	1.1		82%	36%	86%
1999	1.3		82%	18%	78%
2000	2		79%	32%	77%
2001	1.1		64%	36%	43%
2002	0.8		43%	29%	60%
2003	1.2		91%	50%	80%
2004	1.2	62%	100%	62%	100%
2005*	0.45	0%	60%	0%	60%

* dataset as of 28/04/06

2.2.4 Adequate stool specimen collection

Since the SRCC meeting in October 2004, a further 13 AFP cases have been detected (two pending from the last meeting, eight in 2004 and five in 2005). Of the eight additional cases in 2004, seven had stool samples collected, but only two were taken within 14 days of paralysis onset and arrived at the laboratory in good condition. Three patients had their stool samples collected late (19, 67 and 52 days), for one patient the volume was inadequate, and for one patient the stool specimen arrived at the laboratory at a warm temperature. The overall adequate stool specimen collection rate for 2004 was 62%.

For the five cases from 2005, only three children had stool samples collected; four of the five were taken after 14 days of paralysis onset. Therefore, the overall adequate stool specimen collection rate for 2005 is currently 0%.

2.2.5 60-day follow-up of AFP cases

Of the 13 AFP cases detected since the last SRCC meeting, 11 cases have had their 60-day follow-up examination completed. For two cases with onset probably in late 2005, information received, including 60-day follow-up, is still incomplete (no case investigation form).

2.2.6 Review of cases and final classification

The SRCC has reviewed 13 AFP cases since they last met in October 2004 (two cases pending from the SRCC meeting [2004-05 and 2004-07] and 11 cases identified since then). All cases were reviewed electronically, with discussion by email.

Case Number	Country	Classification category
2004-05	Solomon Is	discarded- 4
2004-07	Fiji	discarded- 5
2004-09	Marshall Is.	discarded- 3
2004-10	Vanuatu	discarded- 3
2004-11	Fiji	discarded as NOT AFP
2004-12	New Caledonia	discarded- 4
2004-13	Micronesia	discarded- 4
2004-14	New Caledonia	discarded- 5
2004-15	Fiji	discarded- 5
2004-16	Fiji	discarded as NOT AFP
2005-01	Wallis and Futuna	discarded - 3
2005-02	Solomon Islands	discarded - 3
2005-03	Fiji	discarded - 4

In 2006 (up to end April), seven AFP cases have been reported with onset this year, but the information available for most of the cases is still very incomplete; for three cases investigation forms have yet to be received. Only the case from Fiji has had adequate stool samples taken, but laboratory results are still pending. The follow-up result is available for the case from New Caledonia (no residual paralysis) and one of the three cases reported from Solomon Islands has died. Based on this situation of limited information, the SRCC has only classified one case and has kept all others pending. Details of the deliberations are included in Annex 5.

2.2.7 Implementation of the 8th Pacific SRCC meeting recommendations

Most action points from the 8th SRCC meeting have been implemented and are summarized below:

- (1) The HBAS system manual was reviewed, updated and distributed to all 58 HBAS reporting sites, both in hard copy and on CD. This was the first major update of the original AFP/EPI Surveillance Folder developed by WHO in 1997. Key amendments were:
 - an updated AFP case investigation form that should be easier to follow;
 - a new acute fever and rash (AFR) case investigation form that replaces the original "suspected measles" case investigation form, and is more inclusive of similar diseases, such as rubella and dengue;
 - a new neonatal tetanus (NT) case investigation form;
 - a new AFR laboratory request form;
 - updated specimen shipping guidelines that reflect changes in the United Nations in shipped substance classifications; and
 - contact details for all WHO offices, PPHSN and both the polio and measles laboratories at the Victoria Infectious Disease Reference Laboratory (VIDRL) in Australia, and the Pacific LabNet Level 2 laboratories in Fiji, Guam, French Polynesia and New Caledonia.

In addition, the manual can be accessed on the PPHSN website to allow for wider dispersal, more rapid updating, and greater integration with PPHSN activities. It is hoped the site will allow both WHO and PPHSN in the future to provide improved feedback to the Pacific Region on issues surrounding EPI diseases surveillance for polio, measles, rubella and tetanus. The HBAS folder and the accompanying surveillance forms can be accessed at: <http://www.spc.int/phs/PPHSN/Surveillance/HBAS.htm>

- (2) Between November 2004 and November 2005, the WHO EPI Technical Officer (South Pacific) visited Cook Islands, the Federated States of Micronesia, Kiribati (three times), the Northern Mariana Islands, Samoa, Solomon Islands (twice), Tonga, Tuvalu (twice) and Vanuatu (twice). During all visits, HBAS reporting performance was reviewed with the national and hospital coordinators, outstanding reports followed up and updates given to staff on the current status of the global polio eradication initiative.
- (3) WHO conducted a successful trial to use email for reporting under the HBAS system. The trial commenced in October 2004. It involves the WHO Suva Office sending an automated email to each of the HBAS national coordinators on the first day of every month requesting them to advise if cases of AFP, AFR or NT have or have not been detected in any of their HBAS reporting sites within the preceding month, and if so, how many. Replies via email are required to reach WHO by the 7th of the month. WHO and PPHSN collate and review country email reports and provide a summary to all Pacific countries via PacNet-Restricted (email list server for senior Ministry Health personnel in the Pacific) by the 10th of the month. This is intended to act as an early alert for Pacific countries of emerging events (e.g. measles or rubella outbreaks) and allow individual countries to enhance their surveillance activities accordingly. The PacNet-Restricted posting contains the following information:

- countries reporting for that month;
- whether any AFP or AFR cases have been detected (including zero reports); and
- additional information regarding laboratory confirmation (if available).

For simplicity, the trial initially (October 2004 to March 2005) targeted countries with only one HBAS reporting site. Cook Islands, the Northern Mariana Islands, Palau and Tuvalu agreed to participate.

Initial trial results were encouraging. All participating countries provided at least one report via email during the trial period. The overall report submission rate (within seven days of the start of the month) for the six-month period was 38%. This figure increases to 54% and 75% if reports within 10 and 20 days of the start of the month, respectively, are included. No cases of AFP or AFR were reported from any of the trial countries during the period. Tuvalu's performance was the highest, with five reports submitted within 10 days for the six-month trial.

Following the presentation and discussion of the trial results at the WHO/UNICEF PIPS workshop in Noumea, New Caledonia, in May 2005, there was endorsement by immunization managers that the use of email for HBAS report submittal should be expanded immediately to all Pacific countries that have only one reporting site under the HBAS system (and email access). This commenced in July 2005, and monthly email alerts and reporting are now being used for communication between WHO/PPHSN and American Samoa, Cook Islands, Kiribati, Northern Mariana Islands, Nauru, Niue, Noumea, Palau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna. This brings the number of PICs using email reporting for HBAS monthly reporting to a total of 12 out of 20 (or 60%).

The retrospective record review (RRR) protocol was finalized and distributed to all HBAS reporting sites as part of the HBAS manual update. Only one RRR was conducted in Kiribati between October 2004 and October 2005, which failed to identify any missed cases of AFP.

2.2.8 Quality of immunization coverage

Immunization coverage is generally high across most PICs, but not all of the high reported coverage rates are considered accurate. Most countries are reporting third dose polio vaccine coverage rates in excess of 80%, but 2004 immunization coverage reports have yet to be received from American Samoa, French Polynesia, New Caledonia, Vanuatu, and Wallis and Futuna (see Annex 6).

Kiribati and Samoa both reported third dose polio vaccine coverage for 2004 that was significantly below the previous years' coverage. However, this probably does not reflect an abrupt decline in EPI performance. Country visits by the WHO secretariat to both countries in 2004 and early 2005 identified problems with immunization coverage assessment methodology, especially the use of inconsistent/incorrect denominators, and it is likely that both countries have been overreporting immunization coverage rates for a number of years.

Immunization coverage surveys were conducted in Fiji and Solomon Islands in 2004/2005. The third dose polio coverage rate for Fiji (nationally) was 76%, with little variation across the three administrative divisions of the country. For Solomon Islands, the coverage survey was not representative of the whole country, but it basically found that only 50% of children were being fully immunized before reaching their second birthday.

2.2.9 Supplementary immunization activities

No SIA for polio were carried out in any PIC during 2005. Tuvalu conducted a measles-rubella (MR) vaccine SIA as part of rubella vaccine introduction that targeted all males and females from one to 35 years with MR vaccine only.

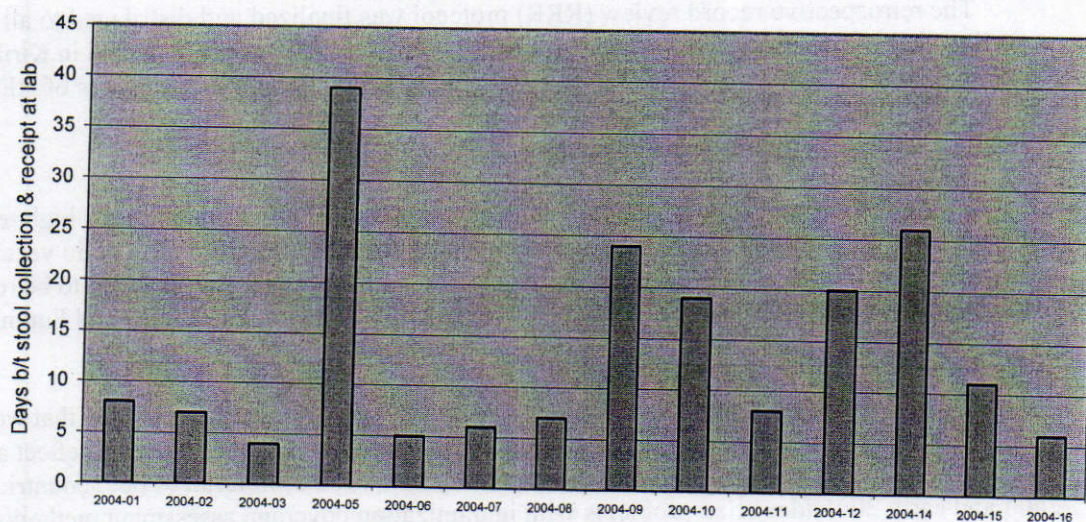
Measles SIA are expected to occur in Solomon Islands (one to four years of age) and Vanuatu (one to nine years) in the first half of 2006. Kiribati will also undertake a measles/rubella vaccine SIA for all children (one to 15 years) and women of child-bearing age in 2006, but the timing is yet to be determined.

2.2.10 Laboratory surveillance

Laboratory testing for AFP cases continues to be conducted at the regional reference laboratory, VIDRL in Australia. As in previous years, support from VIDRL continues to be excellent and the laboratory continues to forward case investigation forms received with stools to the WHO Regional Office in Manila and the WHO office in Suva, Fiji, to support case data management and tracing.

A key issue for stool collection in 2004 was the delay between stool collection and receipt at VIDRL. In many instances this was in excess of 20 days (see graph 2) and the problem was highlighted with national and hospital coordinators at the Pacific EPI meeting and during country visits by the WHO Secretariat.

**Graph 2 – Time taken between stool collection and receipt at laboratory
(Includes cases later discarded as not AFP.)**



2.2.11 Detection and response to importations

The WHO Western Pacific Regional Office has updated the generic plan of action for the "Response to Importation of Wild Polio Virus in the Pacific Islands" (Annex 7), which was endorsed by the SRCC. This was distributed to all EpiNet teams in the Pacific, and is also available on the PPHSN website at: <http://www.spc.int/phs/PPHSN/Outbreak/Polio.htm>

It is important that importation of wild poliovirus is included in the EpiNet team guidelines dealing with disease outbreak responses and delineation of responsibilities and activities, and that they are reviewed now and updated as required (with future re-examination at least annually). WHO hopes that these updated generic guidelines will provide assistance to national governments and EpiNet teams in reviewing current national guidelines for disease outbreak response.

2.2.12 Laboratory containment of wild poliovirus infectious and potentially infectious materials

The PIC subregional inventory was completed in 2002. The inventory does not contain any laboratory holding wild poliovirus infectious or potentially infectious materials.

During its meeting in September 2003, the SRCC requested the WHO secretariat to re-assess subregional laboratory compliance by requesting follow-up information on specimen storage and receipt from high-risk laboratories, identified to date as the Institut Pasteur (New Caledonia), the Institut Louis Malardé (French Polynesia) and the Guam Naval Medical Hospital. Follow-up requests were sent to these laboratories in 2004, with the replies received from the Institut Pasteur and the Institut Louis Malardé both indicating that they do not have any biological material meeting the criteria of potentially wild-poliovirus-infected samples. No response has yet been received from Guam Naval Medical Hospital and WHO will continue to follow this up.

As mentioned, the RCC concluded that the PIC have successfully completed Phase I laboratory containment (national/subregional survey and inventory) and congratulated all on this major achievement.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Background and context: preventing poliomyelitis reintroduction into the Pacific

Critical occurrences and setbacks during the past two years, namely the exportation of polio from countries with extensive circulation (e.g. Nigeria) to countries that had previously achieved polio control, and the consequent reintroduction of poliovirus circulation into polio-free areas in close proximity to the Western Pacific Region (Indonesia), lend a new urgency to PIC polio control efforts.

The SRCC believes that the PIC has been and remains at risk of reintroduction of polio circulation, and that to prevent this from occurring it is important to support and reinvigorate ongoing control efforts at multiple levels.

Many of the action points below reflect the Committee's concern that a high degree of vigilance must be supported by renewed commitment to preventing poliomyelitis reintroduction, requiring efforts on several fronts, including, among other efforts, maintaining high population immunity against polio, identifying coverage gaps and filling them and bolstering AFP surveillance.

3.2 Wild poliovirus importation preparedness

The SRCC welcomes the development (with the Committee's endorsement) of a generic protocol for responding to wild poliovirus importation (including response to VDPV detection), which is posted on the PPHSN website, and recommends that this protocol be widely studied and used in prevention planning.

Because the SRCC notes the limited development of national wild poliomyelitis preparedness plans in the Pacific to date, it strongly encourages all PICs to adopt the generic plan, with additions and modifications where necessary to meet national requirements. The SRCC requests WHO to develop follow-up mechanisms with PICs on adoption of national preparedness plans.

While acknowledging the potential competition for limited resources, the SRCC believes that current activities for pandemic influenza preparedness provide an opportunity for synergy and support of AFP activities. This may also be the case for measles outbreak preparedness. Such opportunities for catalytic efforts, resource sharing and integration should be sought, with the aim of broadening public health capacity in the control of poliomyelitis and EPI/other diseases.

In this context, the SRCC notes with great satisfaction that, in its recent resolution on Regional measles elimination and hepatitis B control target dates (Regional Committee Meeting [RCM] Resolution WPR/RC56.R8), the Regional Committee also urged Member States to maintain polio-free status by sustaining high quality AFP surveillance and high immunization coverage of polio vaccines. Statements such as this are important because they recognize the overarching goal of controlling all such childhood diseases by comprehensive and coordinated approaches, and also imply the desirability of coordinated approaches when feasible.

3.3 Motivating PIC leadership in polio prevention/control efforts

The SRCC believes that greater national ownership of polio eradication initiative (PEI) activities in the Pacific is needed, especially in the (future) lead-up to OPV cessation, but also at this time when fatigue on the part of clinicians and hospital coordinators has set in. The SRCC considers this a particularly important advocacy area for the Committee itself, and urges the WHO secretariat to join it in advocating forcefully for renewed and sustained efforts to control polio and improve AFP surveillance activities.

3.4 Polio immunization

Events of the past several years (poliovirus exportation to polio-free countries, and the increasing detection of VDPV circulation in areas with suboptimal coverage against polio) underscore the important lesson that the key to polio control, and ultimately polio eradication, is achieving and maintaining high levels of poliovirus immunity in communities worldwide, including the PICs. The SRCC recommends that, in future communications with PIC coordinators and managers, as well as health directors and other officials, these facts be shared and reinforced repeatedly.

Routine immunization coverage in some Pacific islands is insufficient, and limited poliovirus transmission could be established were an importation to occur. All PICs are strongly encouraged to maintain high OPV coverage, to address in-country coverage differences, and to develop strategies and plans to immunize any segment of the population that is found to be underimmunized.

In support of these efforts, regular analyses of district and health centre coverage data should be conducted so that appropriate responses may be undertaken

3.5 AFP surveillance

As noted above, importations of wild polioviruses from areas with circulation cannot be prevented, and immunity gaps may not be easy to fill in the short term. It is imperative, therefore, that PICs maintain high quality AFP surveillance

The SRCC emphasizes the central role of national coordinators in conducting and facilitating all aspects of surveillance, reporting and complete case investigation, and endorses efforts on the part of WHO to support, encourage and actively communicate with these coordinators.

The SRCC also recommends that efforts be strengthened to keep hospital directors informed about relevant HBAS aspects and issues.

The SRCC recommends that, if countries experience less than the expected number of AFP cases, performance should be validated through targeted RRRs, assisted by WHO when necessary. A standard review protocol, available in the updated HBAS folder, has been endorsed by the Committee and should be used for this purpose.

The SRCC notes with concern that real improvements in HBAS reporting have not yet been reflected in improved AFP case identification, case investigation, stool shipment and 60-day follow-up, and that there is a need to reinvigorate AFP surveillance efforts in all PICs.

Because maintaining the support of key clinicians is becoming more difficult as the target date for global polio elimination continues to be delayed, and as busy clinicians increasingly question why they need to spend time reporting a disease that has disappeared from the Region, the SRCC recommends that it and the WHO secretariat seek any and all opportunities to stimulate clinicians to identify and report AFP cases, including inservice days and regular communications.

3.5.1 HBAS Manual

As the HBAS Manual has been updated and translated into French (after SRCC endorsement of revised PEI-relevant components), the SRCC encourages its wide use by EPI managers, and by national and hospital coordinators (copies can be obtained through the WHO secretariat as needed, and online at: <http://www.spc.int/phs/PPHSN/Surveillance/HBAS.htm>).

3.5.2 HBAS reporting

To sustain improved HBAS reporting and visibility, the WHO secretariat should continue to provide feedback on HBAS reporting performance, to be posted monthly on PacNET. Restricted and relevant updates on global polio eradication should be regularly placed on PacNET.

3.5.3 AFP case classification

The SRCC considers ongoing email discussions with the WHO secretariat satisfactory for final AFP case classification, and recommends that this mechanism should be continued in the future. A majority vote should continue to be used if not all SRCC members can reply, and, as has been the case, concurrence of the Chairperson should always be sought.

3.5.4 Laboratory testing of stool samples from AFP cases

The SRCC expresses its sincere appreciation to the VIDRL for its continuous outstanding support and collaboration in PIC AFP surveillance and polio control efforts, and encourages the laboratory to maintain its high degree of support during the critical coming years.

3.6 Wild poliovirus laboratory containment

The SRCC thanks the PIC for their help in completing Phase I (laboratory survey and inventory), as confirmed by the RCC in December 2005.

The SRCC requests the WHO secretariat to communicate findings, quality acknowledgement and future requirements (Phase II) to all PICs in the name of the SRCC, through appropriate communication channels.

The SRCC also requests the WHO secretariat to propose a structure for provision of future updates to the Committee.

3.7 Integration of SRCC work

The SRCC welcomes the opportunity to hold its annual meeting in conjunction with the PIPS workshop in order to have direct contact and exchanges with national EPI managers and coordinators; such interaction provides an important opportunity to strengthen regional efforts, and is considered by the Committee to provide a significant opportunity to improve polio control efforts in the Region.

The SRCC requests the WHO secretariat to strengthen the Committee's communication with national and hospital coordinators on relevant certification aspects (i.e. RCC conclusions and recommendations).

3.8 Future activities of the SRCC

The SRCC wishes to continue to meet on an annual basis, not only to fulfil its reporting responsibilities towards the RCC, but also to enable it to provide targeted guidance to PICs on maintaining quality poliomyelitis immunization and surveillance activities and to conduct/confirm final AFP case classification in its capacity as the PIC expert panel.

The SRCC continues to emphasize that maintaining the enormous success of polio-free certification and building a solid foundation for other disease control activities is a remarkable achievement of the many key clinicians, hospital coordinators, national coordinators and EPI personnel involved in surveillance and immunization. The SRCC expresses its thanks and gratitude for their considerable efforts to ensure that all children in the Pacific are protected from this crippling disease, as well as other communicable conditions.