

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC



REPORT

**SEVENTH MEETING OF THE REGIONAL COMMISSION FOR THE CERTIFICATION
OF POLIOMYELITIS ERADICATION IN THE WESTERN PACIFIC REGION
Manila, Philippines, 25-26 October 2001**

Manila, Philippines
March 2002

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REPORT

**SEVENTH MEETING OF THE REGIONAL COMMISSION FOR THE CERTIFICATION
OF POLIOMYELITIS ERADICATION IN THE WESTERN PACIFIC REGION**

Convened by:

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NOTE

The views expressed in this report are those of the participants of the seventh meeting of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific Region 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 seventh meeting of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific Region, which was held in Manila, Philippines, from 25 to 26 October 2001.

SUMMARY

The seventh meeting of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific (RCC) was held in Manila, the Philippines, from 25 to 26 October 2001. The objectives of the meeting were to:

- (1) to review reports from all countries and areas on maintaining poliomyelitis-free status after the Western Pacific Region (WPR) has been certified as poliomyelitis-free;
- (2) to review progress of completion of phase 1 of laboratory containment of wild poliovirus infectious/potentially infectious materials; and
- (3) to make recommendations on requirements towards Global certification.

The meeting was attended by seven Commission members, the chairperson and vice-chairperson of the WPR Technical Advisory Group (TAG) on the Expanded Programme on Immunization and Poliomyelitis Eradication, and a secretariat.

The Commission noted that National Certification Committees (NCCs) continue to function and work effectively in all countries and areas and commended all countries for their continued high level of cooperation and for submitting progress reports of high quality in a timely fashion.

The Commission was impressed by the commitment and dedication exhibited by all countries and areas of the Region to continue activities for sustaining the poliomyelitis-free status post-certification. As a result, most countries are able to report on continued high-quality surveillance, immunization and laboratory containment activities. The Commission, however, recognized the decrease in available funding as the most important threat to continuing these activities.

Following the identification of circulating vaccine-derived poliovirus (cVDPV) in the Philippines, this emerging issue with significant relevance to the global and regional poliomyelitis eradication effort also received much attention during the Commission's deliberation.

The RCC noted the poliomyelitis-specific conclusions and recommendations of the recent meeting of the WPR TAG and regional polio laboratory network, and noted the recently proposed changes to the global action plan for laboratory containment of wild poliovirus infectious/potentially infectious materials.

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1. INTRODUCTION

The seventh meeting of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific Region (RCC) was held in Manila, the Philippines, from 25 to 26 October 2001.

1.1 Objectives

The objectives of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific Region at its seventh meeting were:

- (1) to review reports from all countries and areas on maintaining poliomyelitis-free status after the Western Pacific Region (WPR) has been certified as poliomyelitis-free;
- (2) to review progress of completion of phase 1 of laboratory containment of wild poliovirus infectious/potentially infectious materials; and
- (3) to make recommendations on requirements towards global certification.

1.2 Organization

The meeting was attended by seven commission members, the chairperson and vice-chairperson of the WPR Technical Advisory Group (TAG) on the Expanded Programme on Immunization and Poliomyelitis Eradication, and a secretariat. Dr P. Patriarca was unable to attend and offered to resign from the Commission due to increased professional commitments.

Annex 1 shows the timetable of the meeting, and Annex 2 contains the list of participants.

1.3 Opening ceremony

Dr R. Nesbit, Director of Programme Management, in behalf of Dr S. Omi, Regional Director, WHO Regional Office for the Western Pacific, opened the meeting and expressed satisfaction that during its sixth meeting, held in Washington, D.C., United States of America, 28-29 March 2001, the Global Certification Commission endorsed the report of the Regional Commission and concurred with its decision that the transmission of indigenous wild polioviruses has been interrupted in the Western Pacific.

Dr Nesbit expressed how the Regional Director supports the Commission's decision of requiring the national and sub-regional certification committees to continue to function until global certification is achieved and the continuation of annual meetings of the Regional Commission to review progress reports from all countries and areas on maintaining poliomyelitis-free status.

Dr Nesbit noted that following poliomyelitis outbreaks due to circulation of vaccine derived poliovirus (VDPV) in the Dominican Republic and Haiti in 2000 and 2001, the global poliomyelitis laboratory network implemented additional testing requirements for all polioviruses under investigation. Implementation of the new testing requirements for prospective virus investigations detected VDPVs in three cases reported by the acute flaccid paralysis (AFP) surveillance system in the Philippines, and Dr Nesbit stated that the Department of Health is currently enhancing surveillance to determine the extent of circulation of the viruses and subsequently decided on the extent of immunization response required.

Dr Nesbit elaborated that although not all factors are yet fully understood that may have led to this event in the Philippines, low routine vaccination coverage is one of the most important causes of

VDPV. He stressed that the findings do not alter the requirements for surveillance and immunization quality, though, but strongly reiterate what has been said for a long time. The emergence of VDPV underscores the need for maintaining AFP surveillance quality at standards required for certification and achieving and sustaining the high levels of population immunity in order to quickly detect and reliably guard against imported wild poliovirus and also possible circulation of VDPV.

Dr Nesbit continued that although most countries have completed the national inventory of wild poliovirus infectious and potentially infectious materials and several more are close to completion, four countries (Australia, China, Japan and the Philippines) require additional time due to the large number of laboratories to be searched and are encouraged to make every effort to complete the national inventory in 2002.

Dr Nesbit stressed that, however, completeness and accuracy of the process still need to be assessed and validated and mentioned that an informal meeting conducted in Geneva in October 2001 reviewed in great detail the global action plan, and required changes should also be reflected in the Regional process.

Dr A. Adams and Dr S. Yamazaki were requested to continue to serve as Chairman and Vice-Chairman, respectively, and Dr A. Salonga was requested to serve as Rapporteur.

2. PROCEEDINGS

2.1 Regional overview of the situation after poliomyelitis-free certification

2.1.1 Certification process

The Regional Commission submitted its report on certifying the Region as poliomyelitis-free to the Global Commission for the Certification of the Eradication of Poliomyelitis (GCC). During its sixth meeting, held in Washington, D.C., United States of America, 28-29 March 2001, the GCC reviewed and endorsed the report of the RCC. The GCC congratulated the Western Pacific Region on its achievement and concurred with the Regional Commission's finding that the transmission of indigenous wild polioviruses has been interrupted. The GCC was impressed by the detailed preparations made in the Western Pacific Region to assure that high-quality AFP surveillance, as well as appropriate levels of immunity against polioviruses in the population is maintained in all countries and areas of the Region.

The RCC requires the national and sub-regional certification committees to continue to function until global certification is achieved in order for the Regional Commission to fulfil its obligations to the Global Commission. This plan was endorsed by the GCC. The Regional Commission will continue to meet on an annual basis to review progress reports from all countries and areas with particular emphasis on progress with laboratory containment of wild poliovirus infectious/potentially infectious materials, ongoing high quality surveillance and timely analysis of surveillance data, maintenance of high immunization rates, high quality laboratory performance, capacity to respond to poliomyelitis cases if they are detected and evidence of continued political commitment.

The GCC recommended that progress reports should provide data on reported cases of vaccine-associated paralytic poliomyelitis (VAPP), which might serve as an additional indicator of the sensitivity of surveillance to detect and investigate acutely paralyzed children. Following the recent circulation of VDPV in Haiti, the Dominican Republic and the Philippines, any VAPP case should be properly scrutinized to determine whether it represents a unique event or a circulating VDPV. National progress reports should include details of the investigation of any AFP cases associated with VDPVs as well as evidence of an appropriate immunization response to any circulating VDPV. The GCC made clear that prior to global certification, all regions would need to ensure that updated country level data

is scrutinized and verified by the RCC. The GCC expects extended input of National Certification Committees (NCC) to verify updated national data prior to global certification.

2.1.2 AFP surveillance quality

The RCC as well as the TAG emphasized during their last meetings that AFP surveillance must not be allowed to fall in quality in the critical first year after regional poliomyelitis-free certification when wild poliovirus is circulating in neighbouring regions and there is a high risk of importation. For countries which were poliomyelitis endemic when the Regional initiative began, continued high quality AFP surveillance is required. Countries which were non-endemic at the beginning of the initiative will have to continue to conduct whichever method they used to document their poliomyelitis-free status, whether this is accomplished through AFP surveillance, enterovirus surveillance, a combination of both or through other indirect methods.

The annualized Regional non-polio AFP rate for 2001 was 1.15 per 100 000 population under 15 years of age (dataset as of 10 August 2001). Most countries achieved or exceeded the target so far, however, to date lower rates have been reported by Mongolia and Papua New Guinea.

Among the countries that were non-endemic at the beginning of the initiative and conduct AFP surveillance, non-polio AFP rates have remained at certification standards in most countries. Lower rates have to date been reported by Brunei Darussalam, the Pacific island countries and areas and Singapore.

In countries poliomyelitis endemic at the beginning at the Regional initiative, adequate stool specimen collection rates in 2001 are at certification levels except in Malaysia and Papua New Guinea. Rates in these two countries remain below the levels achieved in 2000.

2.1.3 Significance of polio-compatible cases

To assure highest possible sensitivity of surveillance activities to rapidly detect and respond to virus importations, it is necessary to continue carefully scrutinizing polio-compatible cases. Surveillance data should be monitored and mapped to allow early detection of clusters of compatibles and trigger further field investigations where appropriate. The number of polio-compatible cases reported in the Region decreased from 70 cases in 1997 to 12 cases in 2000.

Expert panels should continue to review all cases with inadequate stool specimens who either have residual paralysis or no follow up (died, lost to follow up) to determine whether or not these should be classified as polio-compatible.

WPR data as of 2 March 2001 showed that about 900 AFP cases with onset in 2000 (12.7%) were still pending final classification. On 30 May 2001, the number had decreased to 88 cases (1.3%). As of 20 October 2001, a total of 14 cases are still pending.

2.1.4 Timeliness of investigation and final classification

In order to avoid any delays in case investigation and final classification, all recently-endemic countries should analyze surveillance data down to the district level at least monthly. This analysis should include AFP surveillance and laboratory indicators.

The Global Technical Consultative Group for Poliomyelitis Eradication (TCG) recommended that the interval between onset of paralysis and receipt of final intratypic differentiation (ITD) results should be reduced to ≤ 60 days (target $>80\%$). Reasons for delays in ITD results should be analyzed in detail to identify and correct problems. Specifically, the time needed for each step in the process should be scrutinized to identify bottlenecks (e.g. time from onset to notification, notification to investigation, investigation to specimen collection, collection to receipt in the laboratory, and laboratory to reporting of results).

The TCG also stated that countries and areas must track the number and proportion of cases pending final classification after 90 days following onset of paralysis. Reasons for delays in classification should be identified and corrected. Particular scrutiny should be applied to ensuring timely laboratory results, follow-up (if appropriate) and expert group review.

AFP cases with a high index of suspicion (i.e. fever at onset, age < five years, asymmetrical paralysis, unvaccinated, minority group) should be prioritized for investigation. Specimens should be immediately transported to a network laboratory for priority processing, and should be tracked through to final results and classification. It is the responsibility of the investigating surveillance medical officer to ensure "hot cases" receive appropriate attention through final classification.

2.1.5 Stool specimen collection

The TCG reiterated that efforts should be made to maximize or maintain to obtain two adequate stool specimens. The principal aim of countries using the virological criteria should be to obtain adequate specimens from every case. Investigation and follow-up of cases with inadequate specimens should be prioritized. Detailed initial investigation within 48 hours, reliable 60-day follow-up and accurate documentation of such cases is essential to the classification work of the expert group.

The TAG stated during its last meeting that any future modification of surveillance standards can only take place under circumstances of consistently high quality performance of AFP and laboratory surveillance, together with supportive scientific evidence. The TAG requested that evidence from AFP surveillance and laboratory systems is to be presented on the question whether the Region can adopt a one-stool policy. Based on the Regional data, the percentage of poliovirus-positive AFP cases detected by the second stool but not the first stool is 14%; for data from 1996 to 2000, 14% with a range among countries from 0% to 42%. These results suggest a considerable loss in sensitivity by moving from a two- to one-stool policy.

2.1.6 Follow-up examination at 60 days

The TCG also confirmed that all AFP cases with inadequate specimens should undergo a 60-day follow-up examination. To monitor compliance with this recommendation, countries should track the 'proportion of AFP cases with inadequate stool specimens that have follow up' as a new indicator of surveillance quality. At least 80% of all such cases should receive follow up. Recognizing the need for some countries to prioritize cases for follow-up examination, countries should give highest priority to "hot cases", cases with no specimens and cases with specimens collected more than 30 days after onset of paralysis.

2.1.7 Surveillance for vaccine-derived polioviruses

Following recommendations of the global poliomyelitis laboratory network all poliovirus isolates, regardless of origin, should be forwarded to a WHO-accredited laboratory for ITD by at least two approved methods, one of which must be antigenic (ELISA preferred) and one molecular (probe hybridization or diagnostic PCR preferred). Isolates of AFP cases should be forwarded for ITD within 14 days after isolation.

All poliovirus isolates showing discrepant ITD results should be immediately sent to a global specialized laboratory (or a laboratory recognized by WHO as having the capacity to carry out poliovirus sequence analysis) for ITD confirmation and analysis of genomic sequence. Timeliness and reporting mechanisms were further discussed during the laboratory meeting.

The national/sub-national AFP surveillance systems should analyze AFP data on at least a monthly basis, looking for evidence of clustering of cases. All poliovirus isolates from identified clusters should be sent to a global specialized laboratory (or a laboratory recognized by WHO as having the capacity to carry out poliovirus sequence analysis) for ITD confirmation and screening for sequence analysis.

After the implementation of the new testing requirements for prospective virus investigations, three AFP cases associated with VDPV isolates were reported in the Philippines during 15 March to 26 July 2001. The first case patient, an eight-year old child from northern Mindanao island (500 miles south of Manila) with a three-dose vaccination history, had onset of paralysis 15 March 2001. A second child, aged two years old from Laguna province on Luzon Island (60 miles south of Manila) with a history of three doses of oral polio vaccine (OPV), had onset of illness 23 July 2001. A third child, 14-months old from Cavite province (25 miles from Manila and 45 miles north of Laguna province) with a history of two doses of OPV, had onset of paralysis 26 July 2001.

Characterization of isolates from the three cases revealed type 1 polioviruses derived from Sabin vaccine strain type 1, with a 3% genetic sequence difference between Sabin 1 vaccine and the VDPV isolates. The three polioviruses are not identical but are related closely to each other (>99% sequence homology); they also appear to share an identical recombination site with a non-polio enterovirus in the non-capsid region of the genome. In response to these cases, the Department of Health: (1) enhanced surveillance by active record review for AFP cases in hospitals and other health-care facilities in the affected and neighbouring provinces; (2) established surveillance for virologic investigations of aseptic meningitis at major health-care facilities; (3) conducted field investigations of clustered AFP cases to determine the extent of VDPV circulation; and (4) assessed polio vaccination coverage in these communities. The investigations have found no unreported cases, although a number of AFP cases remain under investigation. To interrupt VDPV circulation, a large-scale mass vaccination campaign with OPV is planned.

Wild poliovirus was last reported in the Philippines in 1993, and national vaccination rounds were last conducted in the Philippines in 1997 followed by regional rounds in 1998 and citywide rounds in 1999. Among the cities covered were Cebu, Davao, Manila, and Mindanao; however, coverage did not extend to the three provinces now reporting cVDPV cases. Reported routine OPV coverage with three doses of OPV has been approximately 80% nationwide since the early 1990s; however, coverage gaps are likely, particularly in slum areas.

In general, if there is evidence for circulation of VDPV, immediate consultation between Ministries of Health and WHO country, regional and global poliomyelitis eradication teams and laboratories involved should commence to conclude on implications and necessary actions to be taken.

The GCC concluded that the investigation and response to a circulating VDPV should be similar to that of an imported wild poliovirus. Contained transmission of a VDPV (i.e. cases for <1 year and limited geographic spread) has no impact on regional certification. Evidence of prolonged (>1 year) or geographically extensive VDPV circulation may postpone regional certification (in the regions not yet certified) or require re-evaluation of regional certification status (in the regions which have already been certified). The GCC will re-evaluate the implications of VDPV circulation further in the future.

2.1.8 Immunization activities

The TAG stated during its eleventh meeting that following interruption of transmission, annual full scale National Immunization Days (NIDs) are no longer recommended. However, high levels of population immunity must be maintained at all administrative levels to assure that possible wild poliovirus importations from endemic areas will not spread.

Routine immunization coverage with three doses of oral polio vaccine (OPV3) for infants has been maintained at high levels in most countries. However, slight decreases in coverage were observed in Cambodia and Lao People's Democratic Republic and generally low coverage levels continue in Papua New Guinea.

Supplementary immunization with OPV has been conducted in China for children under four years of age in high-risk areas of 11 provinces in December 2000 and January 2001 and again in 52 prefectures in seven provinces in March and April 2001 targeting almost seven million children.

Cambodia integrated OPV in its recent measles campaigns in high risk and remote areas. Lao People's Democratic Republic conducted supplementary OPV immunization in January and February 2001 in five border provinces.

2.1.8 Laboratory containment of wild poliovirus infectious/potentially infectious materials

It has been repeatedly emphasized that as circulation of indigenous wild poliovirus in the Region has been interrupted, the only known sources of wild poliovirus remaining are the Region's laboratories. Substantial progress has been made with laboratory containment of wild polioviruses and potentially infectious materials and was acknowledged by the RCC.

However, in order to complete Phase 1 of the containment process, the RCC urged all countries which have not yet done so to make every effort to complete national inventories before the next meeting of the Commission.

All countries have a national plan of action in place and identified a responsible body for the containment process. Twenty-seven countries have completed the national inventory and five countries (French Polynesia, Guam, Malaysia, New Caledonia and the Republic of Korea) are close to completing the national inventory. Four countries (Australia, China, Japan and the Philippines) require additional time due to the large number of laboratories to be searched and are expected to complete the national inventory in 2002.

Over 17 000 institutions and laboratories have so far been identified to be included in the search, however, not all have responded to the requests for information. Wild poliovirus infectious and/or potentially infectious materials have been identified in about 60 institutions/laboratories. Approximately 20% of the identified institutes/laboratories have already destroyed the materials.

2.2 Global certification overview

In 2000, there were 23 countries with indigenous wild poliovirus transmission. In 2001, this has been reduced to 11 countries. This is attributed to continuous acceleration of activities including a large increase in the number of immunization staff funded by the poliomyelitis eradication programme. Remaining constraints include accessing children in difficult areas, sustaining political support in countries, and a funding gap of US\$400 million for the programme globally.

A poliomyelitis outbreak occurred in Cape Verde Islands from August to December 2000 with 44 cases reported and wild poliovirus type 1 isolated from 11 cases. Sequence analysis revealed 98% similarity of the strain identified with wild poliovirus strains recently circulating in Angola. Seventy-three percent of the cases were under 15 years old and only 38% were fully immunized. Enhanced surveillance found clustering of AFP cases in mainly three islands. Cape Verde had not reported poliomyelitis cases for 15 years; however, routine immunization coverage has decreased and since 1995 has been below 80%. No supplemental immunization was conducted prior to this outbreak. Two rounds of mopping-up were conducted house-to-house in October and November 2000. The last poliomyelitis case had onset on 13 December 2000 and still had been missed by the supplementary immunization activities.

From 12 July 2000 to 8 February 2001, twelve laboratory-confirmed poliomyelitis cases attributed to VDPV type 1 were identified in the Dominican Republic. Of these, 11 (92%) case-patients were younger than seven years old, and the date of paralysis onset of the last case was 2 January 2001. All case-patients were inadequately vaccinated or unvaccinated. In Haiti, one confirmed poliomyelitis case attributed to VDPV type 1 was reported in an unvaccinated two-year old child with onset of paralysis on 30 August 2000.

The Ministries of Health of the Dominican Republic and Haiti conducted large-scale immunization responses and active searches for AFP cases to stop the circulation of VDPV.

The outbreak was made possible by very low immunization coverage with poor AFP surveillance that allowed continued viral circulation without detection. The outbreak was controlled by supplementary immunization with OPV. Prolonged circulation of OPV-derived polioviruses in areas of very low OPV coverage had been documented in only one other setting – type 2 VDPV circulated in Egypt for an estimated 10 years (1983-1993) and was associated with over 30 poliomyelitis cases.

The implications of circulating VDPV emphasize the need for high coverage and high-quality AFP surveillance. As noted above, a poliomyelitis outbreak due to VDPV should be treated in a similar way to the importation of wild poliovirus. Further research is being undertaken to look further at the implications of VDPV for the polio programme.

Among the 11 countries with wild poliovirus transmission in 2001, Yemen reported one case in February but had no virus isolation in 2000, and Mauritania reported one case in March 2001 with no virus isolation in 2000.

Although the last indigenous poliomyelitis case in the WHO European Region (EUR) was registered in November 1998, between March and May 2001, an outbreak of imported poliomyelitis was registered in Bulgaria after a 10-year polio-free period. Three cases of unvaccinated gypsy children were identified in two neighbouring districts in south-eastern Bulgaria; two cases were confirmed by isolation of wild poliovirus type 1 and the third case was confirmed based on clinical findings. The P1 isolated from the cases was genetically most closely linked to viruses isolated from northern India in 2000-2001.

In the WHO Southeast Asia Region (SEAR) wild poliovirus circulation in India was limited to the states of Uttar Pradesh and Bihar with a main wild poliovirus transmission focus in western Uttar Pradesh near the capital of New Dehli. Surveillance quality in all other recently-endemic countries in the Region appears to have reached certification standards.

In the WHO Eastern Mediterranean Region (EMR), wild poliovirus circulation continues in Afghanistan, Egypt, Pakistan, Somalia and Sudan. Transmission in Pakistan appears to be still relatively widespread and surveillance systems in Somalia and Sudan are likely to still underestimate transmission. In the WHO African Region (AFR), wild poliovirus was isolated in 2001 in Ethiopia, Mauritania and Nigeria.

Further improvements are observed in the quality of AFP surveillance in terms of completeness of reporting whereas the improvements in adequate stool specimen collection are relatively slower. Geographic priorities continue to be Angola, Democratic Republic of Congo, Egypt, Ethiopia, Nigeria and Pakistan. Identifying high-risk districts through surveillance and targeting them with high quality supplementary immunization remains one of the essential approaches in eliminating poliomyelitis from countries where it is still present.

2.3 Progress reports from each country and area on maintaining poliomyelitis-free status after certification

All countries, including the Pacific island countries and areas, provided a comprehensive progress report, and summary presentations were made to the Commission. All progress reports and presentations to the Commission are available on CD-rom.

2.3.1 Cambodia

Poliomyelitis eradication activities, specifically AFP surveillance, continue at high-level quality in Cambodia. The last case of wild virus-associated polio was found near Phnom Penh in 1997.

AFP surveillance indicators remain at high levels, with very high rates of AFP cases identified and the proportion of AFP cases with adequate stool specimens just below the expected 80%. Additional activities to increase the sensitivity of surveillance include active search for AFP cases in

low-performing areas, monitoring of AFP case clusters, especially where Sabin virus is found in case stool specimens, and conducting special re-investigations where such clusters occur. The programme has closely investigated and followed up three VAPP cases, all with polio-compatible residual paralysis. All polioviruses isolated from these VAPP cases are at least 99% similar to Sabin virus.

Routine reported OPV3 coverage remains low in Cambodia; while the Global Alliance for Vaccines (GAVI) funds to strengthen routine immunization services will become available, these improvements will take time. Supplementary OPV immunization, conducted also in conjunction with supplementary measles campaigns, has reached about 20% to 25 % of children < five years.

2.3.2 China

AFP surveillance quality in China remains high with all provinces and most prefectures (except some sparsely populated prefectures in the far west) with non-polio AFP rates (1.9 cases per 100 000 0-14 year old population in 2000 and January to July 2001), and adequate stool collection exceeding certification requirements (93% of AFP cases in 2000, and 89% of AFP cases in January to July 2001).

The China Polio Laboratory Network continues to function well with the Regional Reference Laboratory at the Chinese Academy of Preventive Medicine (RRL/CAPM), and 30 of the 31 provincial laboratories fully accredited. In 2001, the RRL/CAPM and all provincial laboratories passed the proficiency test. The provincial laboratories continue to be accredited by RRL/CAPM on a biennial basis, with half of the laboratories accredited each year.

Given the very large number of polioviruses isolated and typed by the laboratory network (886 isolates in 2000), the new recommendations for intensified surveillance of VDPVs will significantly increase the network's workload, particularly for the RRL/CAPM, which will have to greatly increase its capacity to conduct sequencing and sequence analysis of large numbers of isolates. Staff of the Centers for Disease Control and Prevention (CDC) in Atlanta, United States of America and the National Institute of Infectious Diseases (NIID) in Tokyo, Japan are currently conducting training at the RRL/CAPM on use of the ELISA ITD assay, genomic sequencing and sequencing analysis. Resources for laboratory equipment needed to implement the new laboratory guidelines, however, have not yet been identified; these include a high-speed automated sequencer, EIA meter and washer, and sequencing reagents.

While overall reported immunization coverage remains high, there are pockets of low coverage, particularly in remote and poverty areas and in floating populations in large cities. Large-scale supplementary immunization activities (SIAs) are needed for the foreseeable future to ensure the high levels of population immunity needed to interrupt transmission of imported wild polioviruses and circulation of VDPVs. SIAs will target areas bordering poliomyelitis-endemic countries, areas with low coverage or weak AFP surveillance, and areas with large numbers of floating population. SIAs planned for the winter 2001/2002 and spring 2002 will immunize an estimated 28 million children 0-3 years old (one third of the total children in that age-group). While funding for the 2001/2002 SIAs has been identified [CDC and the Japan International Cooperation Agency (JICA)], no operational funds have been identified to date.

There has been considerable progress towards completion of the national inventory for laboratory containment. All relevant ministries, with the exception of the Ministry of Education and the Biological Products Institutes, have completed data collection, and it is anticipated that these agencies will complete the inventory by the end of 2001. The quality of the data in the inventory has not yet been evaluated.

The China NCC will continue to meet annually to review the status of poliomyelitis eradication in China. Clarification is needed from the GCC and RCC as to whether the terms of reference for the NCC should include consideration of VDPV circulation, in addition to circulation of wild poliovirus.

2.3.3 Lao People's Democratic Republic

AFP surveillance reporting completeness and timeliness from the 18 primary reporting sites continue to be maintained at a high level. For 2000, reporting completeness was 93% and reporting timeliness was 85%.

Investigations of reported AFP cases continue to be maintained at the highest standard. In 2000, 100% of the 70 reported AFP cases were investigated, 60 (86%) of them within 14 days of onset. Sixty-day follow-up was completed for 38 (54%) of cases. All reported cases with inadequate stools received 60-day follow-up.

Case investigation timeliness continues to be excellent. In 2000, 21% of reported AFP cases were investigated within 48 hours of onset, and 100% within 7 days of onset.

Of considerable concern is the fact that if reports of old cases are found (e.g. during a record review that is part of active searching), they may not be investigated. If they are not investigated, they are not entered into the AFP database. This may help explain why the adequate stool rate has been maintained at 80% or higher. Normally, in a country with as many remote districts and villages as are found in Lao People's Democratic Republic, it would be expected that the adequate stool rate could fall below 80% since cases in remote locations would not likely be reported and investigated in time for adequate stools to be collected.

The laboratory component of the AFP surveillance system continues to be excellent. One hundred percent of reported AFP cases had two stools collected, and 81% had two stools collected within 14 days of onset. As noted above, there is concern that this rate may be artificially high because some cases that are detected very late are not entered into the surveillance database.

For 2000 the non-polio AFP rate for children under the age of 15 (with three cases still pending final classification) was 2.9. For children under the age of five years, it was 4.6. Surveillance monitoring information for 2001 indicates these same high standards are being maintained. AFP reporting in 2001 is less than in 2000, but by mid- September, 39 cases were reported, for an annualized AFP rate of 2.3.

During 2000, eight clusters of AFP cases were identified and investigated in eight provinces, using the definition of two or more cases in the same district having dates of onset within two months of one another.

Final classification of the three remaining pending cases for 2000 is not yet official.

Routine immunization coverage has generally remained at the same level since 1994, when supplementary activities related to the first OPV NIDs enabled routine coverage to be boosted. In 2000, routine coverage may actually have declined somewhat, but this change may be more related to a different method of estimating coverage than to an actual deterioration of coverage.

Reported coverage using the administrative method continues to show respectable nationwide coverage. For 2000 the official reported coverage was 58% for BCG, 52% for DPT3, 57% for OPV3, and 60% for measles. Because of relatively low coverage for OPV3 in children under the age of five years, the Lao People's Democratic Republic EPI recognizes the need for continued supplementary immunization activities. SIAs will be needed to maintain reasonably high coverage in areas considered to be at highest risk for wild poliovirus importation, and in areas of suspected low AFP surveillance performance.

In January and February 2000, SIAs for OPV were conducted in 13 of 18 provinces, representing 64 of the 142 districts in the country. The target age group was all children under the age of five years. Estimated coverage in the target area was about 90%. In January and February 2001, SIAs for OPV

were conducted in seven of 18 provinces, representing 39 of the 142 districts. Again, the target age group was all children under the age of five years. Estimated coverage was high (85% to 90%).

At the time of certification, 26 of 27 institutes, centres and laboratories at national and provincial levels had responded to survey questionnaires regarding the possible storage of wild polioviruses or materials that might contain wild polioviruses. On the basis of the 26 questionnaire responses, and inspection visits to the main laboratories in the country, it was concluded in October 2000 that no wild poliovirus infectious or potentially infectious materials were being maintained in the country. Since certification at the end of October 2000, the one unreturned questionnaire has been received (from Bokeo Provincial Laboratory). This questionnaire confirms that the Bokeo laboratory does not have, and has never had, a freezer as part of its equipment. Unless otherwise instructed by the RCC, Lao People's Democratic Republic considers that it has addressed outstanding laboratory containment issues/questions.

2.3.4 Malaysia

The NCC continues to function and did not only review the progress report presented but continues to review major areas of concern in activities related to post-certification, to monitor and address problems in order to sustain poliomyelitis-free status and deliberate and support implementation of recommendations made by the WHO TAG and the RCC.

Surveillance for AFP cases appears to be well established in Malaysia now with distribution of reporting sites corresponding with population density of the country. The non-polio AFP rate was maintained at high levels achieving 1.7 per 100 000 children under age 15 in 2000 and an annualized rate of 1.4 in 2001 to date. All states except one are achieving and maintaining certification quality standards.

Adequate stool specimen collection is maintained at about the same level as last year, but the required rate of 80% can still not been achieved. To supplement this sub-optimal performance, all AFP cases are being reviewed by the expert panel to ensure that clinical investigation and management results concur with a final diagnosis other than poliomyelitis. All AFP cases with onset in 2000 and 2001 to date have a final clinical diagnosis available. Only one AFP case with onset in 2000 did not have a follow-up result available and the percentage of cases with follow-up in 2001 is already 89% at this time.

The national poliovirus laboratory continues to function at very high performance levels and has been fully accredited under WHO standards since 1998. An analysis was performed for possible vaccine-derived polioviruses, but all polioviruses isolates from AFP cases since 1997 were reported Sabin-like.

National coverage for three doses of oral poliovirus vaccine has been maintained at over 90% since 1996, and this rate is also achieved by all 120 districts in 2000. Reported lower coverage in Kuala Lumpur attributed to a large proportion of immunizations given by the private sector and not included in the coverage reports has been assessed by a coverage survey conducted in 2000, and the results confirmed that 89% of children had completed their third dose of OPV and DPT before the age of one.

The process of laboratory containment of wild poliovirus infectious and potentially infectious materials is progressing well, and of the 451 laboratories from 419 agencies and institutions involved in the search, over 90% have returned the required questionnaire. Materials searched for were listed to date in the inventories of eight facilities and have either been destroyed or transferred to the national poliovirus laboratory, which operates under bio-safety level 2/polio conditions. To assess the containment process, inspection visits have been made to 24 government and private laboratories. With several non-respondents to be followed up and additional laboratories to be visited, it is expected that the national inventory will be finalized by the end of 2001.

2.3.5 Mongolia

In 2000, 1128 (94.3%) of 1196 weekly AFP reports were received, and 17 AFP cases reported resulting in a non-polio AFP rate of 1.95 per 100 000 aged under 15. Seventy-six percent of the cases were reported within 14 days of onset and had two adequate stool specimens taken. All cases were investigated within 48 hours of report, and 94% had a follow-up examination after 60 days of onset. The expert committee reviewed all cases and discarded them as non-polio AFP.

The national poliovirus laboratory was fully accredited in 2000 but accreditation in 2001 is still pending as the results of the annual proficiency test are not yet available and the laboratory did not meet the required levels for stool specimen tests conducted and timeliness of results available. No poliovirus of any kind was isolated from a clinical specimen in 2000 or 2001 to date. There were no VAPP or VDPV cases in the country.

Routine immunization services continue to perform very well with reported OPV3 coverage in 2000 at 94%. All aimags achieved a coverage of at least 80% and 83% achieved a coverage greater than 90%. Supplementary immunization with OPV was conducted in 2000 in Umungovi and Govi-Altai aimags targeting 13 627 children zero to five years old. Reported coverage was 94%.

The national inventory for laboratory containment of wild poliovirus infectious/potentially infectious materials has been completed, and all materials identified were destroyed on 1 October 2001 following an order of the Minister of Health.

2.3.6 Papua New Guinea

In general, AFP surveillance activities have continued to be satisfactory through 2000 and 2001. The two full time surveillance staff are contributing to maintaining – and in some cases, improving – the surveillance indicators despite major difficulties with telecommunication and changes of peripheral and clerical staff.

Routine surveillance site reporting was 100% in 2000, but so far in 2001 the figures are less favourable, with only 78% of reports received on time. While the problem of poor telecommunications is beyond the control of the surveillance officer, they have made concerted attempts to contact the new site officers, and it is anticipated that total reporting coverage should approach – or even reach 100% for 2001 although the timeliness of reporting will clearly be less than this.

While there has been improvement in reporting within 14 days (although the total number reported as of the end of September 2001 was only 12), there has been a disappointing fall in the proportion of cases investigated within 48 hours – though it should be noted that the proportion investigated within 14 days in the highest so far achieved and the proportion of cases with one sample within 14 days and two samples within 28 days are both 75%. The issue of appropriate investigation is being addressed through regular telephone contacts and visits. There is clearly a need to regularly remind those in the reporting sites – and in particular the paediatricians – of the need for obtaining and sending stools within the first 48 hours of admission.

Sixty days follow-up was relatively low in 2000 and the final figure for 2001 is not yet available.

The AFP rate for 2000 was 1.33 per 100 000 under age 15 with two poliomyelitis compatible cases (one had no stool sample taken, and was last to follow-up, the other had one sample taken [negative] but died before a second sample could be taken). Rates were >1 for all regions. The rate for 2001 is obviously not known but is expected to reach 1 or more. So far no polio compatible cases have been detected.

Possible “clusters” were reported in 2000 and 2001. Both were investigated and found to be non AFP.

Retrospective record searches were carried out in all provinces – including Bogainville in 2000 and in 16 provinces (including West Sepik, and Western provinces bordering Irian Jaya) in 2001.

Although the national poliovirus laboratory has not yet had the 2001 proficiency test, it scored 100% in 2000. One case of Sabin poliovirus type 1 was isolated from an AFP patient. However this patient had received OPV the day before the stool sample was collected, and at follow-up was improving.

There have been concerns expressed at the risk of importation, firstly by cross border movement between Irian Jaya (Indonesia) and Papua New Guinea; and secondly through air and seaports. The small migration from Irian Jaya and subsequent resettlement in Papua New Guinea early this year appears to have been adequately supervised, with immunization and search for AFP cases. The risks of importation by sea or air remain – but the quality of surveillance is such that cases would be detected, and an appropriate outbreak response made.

The influx of boat people from Afghanistan, Iraq and other countries from regions not yet certified as poliomyelitis-free is of considerable concern, and it is imperative that all incoming children are immunized and active surveillance instituted.

Of very major concern is the continuing low immunization coverage. The reasons for the low coverage are many and complex, but include shortage of vaccines, difficulties in distribution, and poor vaccine storage facilities. The situation was not helped by the departure of the national EPI manager. A major effort to rebuild the cold chain and its equipment has resulted in the replacement of 85% of the equipment. Distribution of vaccines has been centralized. A high-level EPI review team is expected in November 2001, and it is anticipated that their visit will result in strategies to improve the current situation.

No supplementary immunization activity was carried out in 2000 or 2001. It had been anticipated that routine coverage would increase significantly in 2001. Such was not the case, and as a result the country has experienced (and is still experiencing) a widespread measles epidemic through 2000 and 2001. Supplementary immunization activities are planned for 2002. These plans would be based on the suggestions of the EPI review team.

An unfortunate and unforeseen outcome of the declaration of a poliomyelitis-free Papua New Guinea in October 2000 was the mistaken belief among some health workers that immunization against poliomyelitis was no longer necessary. This mistaken belief has now, hopefully been corrected, but this experience in Papua New Guinea and the lessons learned may be of benefit to other countries.

2.3.7 Philippines

A total of 279 AFP surveillance sites are accredited countrywide. Completeness of reporting in 2001 is 91%. From 1 January to 15 October 2001 a total of 252 AFP cases were reported throughout the country. The expected number of AFP cases for the same period is 236 with a non-polio AFP rate of 1.07 per 100 000 children below 15 years of age.

Of the 252 reported AFP cases, 235 has been investigated so far and 213 were investigated within 48 hours of report with a completeness of investigation of 93% and timeliness of investigation of 84%.

In addition, of the 248 reported AFP cases, 223 cases (88%) had two stools specimens collected; 209 of these cases (82%) had at least one specimen collected within 14 days from onset and 195 cases (77%) had the two specimens collected within two weeks from onset.

Among the best performing regions, the National Capital Region, the most densely populated in the country, presented a marked and consistent improvement according to both major performance

indicators in 2000 and 2001, as compared to previous years (1997-1999) or to any other year since AFP surveillance was established. Fifteen of the 17 cities of the National Capital Region present AFP rates equal or above 1 per 100 000 children under 15 years of age, and 14 of the 15 cities with high AFP rate performance present stools specimen collection rates equal or above 80%. National Capital Region is considered a model for the improvement of surveillance for the poorer performing regions.

Of the 16 regions of the country, regions 1, 2, 7, 11 and 12 present the lowest AFP rates in the period, and of these group regions 2 and 12 show low or very low stool specimen collection rates. In addition, regions 4, 5 and Caraga, despite the higher AFP rates, present quite low stool specimen collection rates. The major constraint factors for these low performance areas have been identified, and activities for improvement have been recommended.

The National Expert Panel continues to review all AFP cases entered in the system during quarterly meetings. Following the detailed review of all clinical, laboratory and epidemiological data available, most of the cases can be discarded as non-polio cases. In 2001, no polio compatible cases have remained so far. However, three VDPV-associated cases were confirmed for the first time in the Philippines as already described in the Regional overview.

Accreditation provides documentation that the laboratory has the capability and capacity to detect, identify and promptly report wild polioviruses that may be present in clinical and environmental samples. In 1999, the RITM Laboratory was assigned a provisional accreditation status due to the delay in reporting the results within 28 days. The laboratory made efforts to meet these criteria and other laboratory performance indicators thereafter. Two new bio-safety cabinets were provided in 2000 through GOP funds for handling infectious and potentially infectious materials under the WHO required BSL2/polio standards. The laboratory has been regarded as fully accredited for 2000 and 2001.

Coverage for the fully immunized child (FIC) was reported to be 86% in 2000 with four regions remaining below 80%. Thirty percent of districts had FIC coverage less than 80% (48 out of 163). Thirty-eight percent (62 out of 163) of districts reported OPV3 coverage of which 42% percent (26 out of 62) reported coverage less than 80%.

Difficulties in acquiring the report from the devolved health units led to the issuance of Department Circular No. 289-1 dated 26 September 2000 entitled, "*Inclusion of BCG, DPT1 to DPT3, OPV1 to OPV3, Hepatitis B1 to Hepatitis B3 and Measles vaccine coverage in the FHSIS reporting to commence in January 2001.*" The next year's update report should reflect OPV3 coverage up to the city and provincial level. Only a few regions were able to submit partial/complete OPV3 coverage data for 2000.

Several factors including changes in the procurement system have led to lack of EPI vaccines in the field, although these were mostly for antigens other than OPV. Due to unavailability of cash in 2000, the Vaccine Independence Initiative with UNICEF was not renewed. A loan was made by the World Bank for the procurement of vaccines for 2000. However, in the end procurement was made using funds from the government. This caused the delay in the procurement of vaccines intended for use in 2001. The delivery of these vaccines is expected to arrive by November 2001.

High quality AFP surveillance in important areas of the Philippines and advancements in laboratory sequencing of poliovirus isolates were sensitive enough to detect VDPV type 1 from three cases in the Philippines confirmed of VDPV circulation. Although reported FIC coverage from these areas are high: Cagayan de Oro City (92%), Cavite (98%) and Laguna (99%), validation by quick survey revealed FIC > 80%. The Philippines VDPV cases suggest that VDPV seems to be able to circulate and cause diseases among susceptibles in reported highly vaccinated areas. The need for an effective and extended immunization response (intensified SNIDs with high quality mopping up in high risk areas) cannot be overstated.

The number of laboratories to be involved in the containment process increased to a total of 2655 as additional laboratories (unlisted) were identified during the course of follow up and coordination. As of 30 September 2001, 2051 (77.3%) laboratories had responded. Responses were reviewed for completeness and reliability. Laboratories indicating storage of any poliovirus or enterovirus materials were contacted to validate correctness of response. Review of the responses made to the screening questionnaire showed that a majority of the laboratories collect stool and throat swabs specimens for diagnostic purposes. However, these specimens are not kept in storage longer than one year nor frozen for further studies. These laboratories reported autoclaving, incineration and chemical treatment as methods of decontamination prior to discard.

Two (.001%) laboratories reported to have wild poliovirus and/or potentially infectious materials in storage. Two other institutions reported to store potentially infectious materials and visits were made to document the search and validate the inventory of materials listed.

2.3.8 Viet Nam

Viet Nam continues to maintain a high standard of AFP surveillance. In 2000, the total number of reported AFP cases was 470, and AFP rate per 100 000 children under 15 year of age was 1.53. Ninety-three percent of reported AFP cases had adequate stool specimen collection. Even after the declaration of poliomyelitis-free free status, a good surveillance has been maintained; from the beginning of 2001 until September 2001, 235 AFP cases were reported with 93% of cases having adequate stool samples.

All levels of the surveillance system, from communes to provinces, were regularly monitored by supervisors for each level, including those with zero reporting. Active searches for unreported AFP cases have been implemented in all provincial and district hospitals. Areas with sub-optimal surveillance indicators were targeted for active searches, training programmes for health care workers and follow-up by regional and national staff. At the national level, a monthly AFP surveillance meeting was organized for the surveillance and laboratory staff to analyze current data and to plan the response activity if necessary. In addition to active surveillance by district and provincial EPI staff in health centres and hospitals, active searches under direct supervision by national or regional EPI staff were also conducted.

In 2000 and 2001, a total of seven AFP cases with poliovirus isolates were reported from seven different provinces. All these stool samples were correctly typed by the national laboratories, and all sent to NIID for ITD. In response to the detection of these isolates, active surveillance was conducted by regional staff in the reporting provinces to look for potential unreported AFP cases.

Routine coverage for OPV among children under one year of age was maintained as high as 96% in 2000. In 2000, all provinces achieved a routine coverage more than 90% except three provinces, and even in these three provinces the coverage was over 80%. SNIDs were conducted in December 2000 in 155 districts of 24 provinces which border with China, Cambodia and Lao People's Democratic Republic, targeting 1.6 million children under the age of five years. This is to ensure a high coverage with OPV in these remote borderline areas and prevent potential importation of wild poliovirus and circulation of VDPV. SNIDs covered entire target areas with fixed immunization posts and mobile immunization teams in high-risk areas. The reported coverage was as high as 98.7% among the target population.

For laboratory containment, visits to major laboratory to monitor the containment were performed periodically whenever possible by the provincial preventive medicine centres and by regional and national staff. Since October 2000, second round visits were performed in a number of laboratories. No infectious or potentially infectious materials for poliovirus were identified so far in the visited laboratories. The second-round inventory process is still going on in other provincial preventive medical centres and general hospitals and is expected to be completed by December 2001. The National Polio Laboratory, Pasteur Institute, Ho Chi Minh City, should be encouraged to maintain inventories for original stools, extracts, isolates and potentially infectious materials in the freezers.

2.3.9 Australia

In an effort to sustain the momentum of the poliovirus eradication initiative, the Department of Health and Aged Care held a Strategic Planning Workshop on Poliomyelitis Eradication in Australia on 15 and 16 February 2001 in Canberra. The aim of the workshop was to develop a draft action plan that outlined the next stage in Australia's efforts towards achieving the goal of global eradication of poliomyelitis. The workshop also considered the future role of the NCC and the Polio Expert Committee and agreed that it was necessary for both of these committees to continue until the global eradication of poliomyelitis was achieved.

During 2000, the coordination of clinical AFP surveillance was transferred from the Department of Health and Aged Care in Canberra to the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Melbourne. Routine monthly notifications of AFP cases have continued through the Australian Paediatric Surveillance Unit (APSU), with approximately half of all AFP notifications made directly to VIDRL.

In 2000, 47 suspected AFP cases were investigated and 45 classified as non-polio AFP whereas two cases were discarded as non-AFP after review by the expert panel. This results in a non-polio AFP rate of 1.3 per 100 000 aged under 15. Eighty-eight percent of cases had a follow-up examination available, but collection of adequate stool specimens remained low at 30%. This trend in reporting and stool collection has continued during the first half of 2001.

The poliovirus reference laboratory at VIDRL, as a part of the WHO Western Pacific Regional network of poliovirus laboratories, functions as the national poliovirus laboratory for Australia, the Pacific island countries and Brunei Darussalam. The laboratory also serves as a regional reference laboratory and receives specimens and isolates for ITD of poliovirus isolates from the national laboratories of Hong Kong (China), Malaysia, New Zealand, Papua New Guinea, the Philippines and Singapore. The laboratory also re-tests AFP specimens for the Papua New Guinea national laboratory as part of an ongoing assessment of quality control.

The poliovirus reference laboratory achieved a score of 100% for proficiency tests during 2000 for nucleic acid probe hybridization (NAPH) and in 2001 for poliovirus isolation and identification, and ITD of poliovirus isolates by ELISA, NAPH and diagnostic PCR. The laboratory has been fully accredited under WHO standards for several years.

Since AFP surveillance commenced in Australia in 1995, only a single previous poliovirus had been isolated from an AFP case in 1996. This case was subsequently diagnosed as transverse myelitis.

The differential diagnosis of the two cases from September 2000 included infant botulism, and this diagnosis was confirmed by the polio expert committee, following laboratory isolation of the *Clostridium botulinum* organism in one case and toxin in the other. The third poliovirus isolation from an AFP case was in April 2001 with all three serotypes identified. *C. botulinum* type B organism and toxin were isolated from faeces, and a diagnosis of infant botulism was confirmed by the polio expert committee. Retrospective sequencing of the viral genomes from the three cases has commenced at VIDRL.

An isolate received from an environmental laboratory via a state reference laboratory in 1999 did not react with the Sabin probe by NAPH and tested as non-Sabin-like in the ELISA, indicating a wild poliovirus. Subsequent investigation, including partial sequencing of the VP1 region by the CDC determined the isolate to be a contaminant of the W2 Koprowski strain that had been used in the laboratory for cell sensitivity controls.

As noted previously, retrospective sequencing analysis of all polioviruses from AFP cases from 1999 to 2001 has begun at VIDRL.

At the end of June 2001 (age calculated at 31 March 2001), coverage rates for OPV was 93.9% for children aged 24 months to less than 27 months (an increase of 11.2% from 31 March 1998 when the first report for this cohort was released).

For laboratory containment, the Department of Health and Aged Care reviewed the strategies recommended by the participants in the February Strategic Planning Workshop and following further discussions with VIDRL, decided this approach would not produce the required results. This was due to concerns related to insufficient incentives and penalties to ensure all laboratories participate according to the Regional Commission requirements. Therefore, it was decided to consider alternative options.

The alternative decided on is to complete the containment task by linking the laboratory containment of wild poliovirus with general guidelines being developed for laboratory infection containment through the Laboratory Infection Containment Working Party.

The Laboratory Infection Containment Working Party is convened by the Public Health Laboratory Network and the Communicable Diseases Network Australia (CDNA) and reports to the National Public Health Partnership. The advantage of this proposal is that a sustainable framework will be developed for future containment requirements such as the containment of wild poliovirus strains that is required under Phase 3 of the WHO containment plan.

At their meeting on 26 September 2001, the CDNA accepted the proposed 'Guidelines for the Laboratory Containment of Pathogenic Micro-Organisms'. The Public Health Laboratory Network and the Laboratory Infection Containment Working Party have agreed that the proposed guidelines will be used to implement the laboratory containment of wild poliovirus. Further development of the proposed 'Guidelines for the Laboratory Containment of Pathogenic Micro-Organisms' will occur at an industry-wide workshop in November 2001. Following this workshop, detailed guidelines will be developed for the continuation of the laboratory containment process of wild polioviruses.

2.3.10 Brunei Darussalam

From 1997 until September 2001 a total of six AFP cases were reported to the Disease Control Unit. All six cases (100%) were reported within 14 days of onset of paralysis and all investigated within 48 hours of being notified. The time lag between onset of paralysis and notification for the six ranged between one to 11 days with the average lag period being 3.7 days. As for the "60-day follow-up" the level achieved is 80% (five out of six cases). Four cases fully recovered while one child still had residual paralysis. The remaining one case (reported in 1999) died two week short of the scheduled 60-day follow-up date. The NCC, which also served as Expert Panel, reviewed the six AFP cases, and all have been classified as non-poliomyelitis AFP.

Based on this performance until year 2000, the overall non-polio AFP rate was 1.38 per 100 000 populations below the age of 15 years and 3.25 per 100 000 populations below the age of five years. Five of the AFP cases notified were from Brunei/Muara district, the most densely populated district in the country. There was no clustering of AFP cases noted. The remaining one case was from Belait district (the child developed AFP while visiting relatives in Bandar Seri Begawan and was admitted to RIPAS Hospital). All AFP cases had adequate stool specimens taken which were analyzed at the Regional Reference Laboratory. For five cases laboratory results for negative for poliovirus, the sixth case revealed non-polio enterovirus (NPEV).

Reported OPV3 coverage nationally has been maintained at over 95% since 1990. All four districts reported OPV3 coverage above 96% in 1999.

The national laboratory inventory of wild poliovirus infectious/potentially infectious materials was established in 2000 and no materials were identified. The NCC is continuing to update this inventory on a regular basis until global eradication is achieved, and all heads of the laboratories included were informed of the regional and national laboratory containment plans. All

medical/biological laboratories are requested to upgrade their facilities to the bio-safety level 2/polio, if they have not done so under the National Plan of Action for Laboratory Containment.

The NCC continues to play its role as the monitoring body to oversee that all aspects of the National Plan of Action continue to be implemented and maintained at the highest standard as well as recommending any additional appropriate activities where necessary.

2.3.11 Hong Kong (China)

The AFP surveillance system continues to function effectively. The non-polio AFP rate in 2000 was 1.9 per 100 000 under 15 years and the annualized rate for 2001 at the end of September was 1.2 per 100 000 under 15 years. The Government Virus Unit, the designated poliovirus laboratory for Hong Kong, has remained fully accredited under WHO standards since 1997.

The laboratory inventory for wild poliovirus infectious/potentially infectious materials was established in 2000, and the two laboratories that had such materials have destroyed them satisfactorily. Since then reminder letters have been sent to research laboratories reminding them to keep Hong Kong's coordinator for laboratory containment informed if clinical specimens are to be imported from countries where poliomyelitis is still endemic. Through this mechanism, six poliovirus vaccine strains have been identified from one research laboratory in 2001, and they were destroyed under official witness.

The NCC continues to function and meet on a regular basis. In February 2001, the NCC and the Department of Health organized a special forum to declare Hong Kong's poliomyelitis-free status. The Secretary of Health and Welfare officiated the occasion, which was attended by 170 esteemed members of the medical profession. The NCC chairperson and other speakers delivered presentations, and the forum was a timely and useful boost to sustain awareness and commitment to poliomyelitis eradication activities after certification.

2.3.12 Japan

The NCC continues to meet on a regular basis to review and oversee strategies conducted to maintain the poliomyelitis-free status and ensure timely detection of imported wild poliovirus.

The laboratory of enteroviruses at NIID has been performing as the national poliovirus laboratory since 1962. A nationwide network of 71 district public health laboratories (DPHL) under the coordination of NIID continues to function well. In 2000, 993 samples from 15 prefectures were tested for polioviruses and other enteroviruses.

OPV 3 coverage had been maintained over 95% for many years. A decline in 2000 was due to two children developing disease after OPV immunization in the same prefecture. One child even died two weeks after vaccination. Although comprehensive investigations conducted found no relationship between the vaccine and the syndromes, immunization was temporarily stopped but resume during the fall. The preliminary coverage data in spring 2001 seem to improve.

In July 2000, a post-polio eradication affairs committee was established to oversee all issues arising after polio eradication, including laboratory containment. A national coordinator was appointed by the NCC to oversee the containment process. In August 2000, a web site was established to provide information on polio eradication and laboratory containment. A coordinator was appointed for the laboratory listing and survey process and a staff representing a private firm specializing in administrative affairs, was recruited to manage the administrative tasks of the survey, namely requesting and collecting replies from laboratories and organizing all the responses.

Laboratory containment activities are organized into two simultaneously occurring activities: (1) creation of a national list of laboratories; and (2) survey of biomedical laboratories. In order to create a national list of laboratories, a list of the following government agencies having jurisdiction over institutions operating laboratories was created:

- Defense Agency
- Ministry of Education
- Ministry of Agriculture, Forestry, and Fisheries
- Science and Technology Agency
- Ministry of International Trade and Industry
- Ministry of Health and Welfare, Health Policy Bureau
- Ministry of Health and Welfare, Infectious Disease Control Division, Health Service Bureau
- Ministry of Health and Welfare, Department of National Hospital
- Ministry of Health and Welfare, Pharmaceutical and Medical Safety Bureau

Under each of these government agencies, a request was sent from NIID to identify those organizations under their jurisdiction that operate laboratories. This list was compiled and 16 mid-level departments under the government agencies were identified. A request was made to each of these 16 mid-level departments to identify the institutions with laboratories that operate under their jurisdiction.

A total of 1769 institutions with laboratories were identified in this process; and in order to complete the national laboratory list, each of these institutions was requested to identify the names of laboratories they were operating. Replies received from institutions up to October 2001 identified 6357 biomedical laboratories to be surveyed. Thirty-seven institutions storing wild polioviruses and seven institutions storing potentially infectious materials have been identified so far.

The challenge will be to validate the list of laboratories to ensure that the various government ministries have included all of the types of laboratories identified in the Global Action Plan. Crucial for further success will also be to increase the response rate. Response rates from some institutions identifying laboratories have been less than 50%, and substantial follow-up is required. Priority should be given to the remaining universities and hospitals. Some ministries have not yet identified any laboratories under their jurisdiction.

It is recognized, however, that some sectors have achieved a 100% response rate such as the Ministry of Health and Welfare Post Quarantine, Ministry of Health and Welfare National Institutions, Defence Agency Hospitals, and the Defence Agency Medical College.

2.3.13 Macao (China)

One year after the certification of eradication of poliomyelitis, no significant change in the political and social-economic status in Macao happened. The population in Macao has readily access to health care services including free basic immunizations.

Three AFP case among 100 000 population under 15 years of age were detected and had adequate stool samples. No poliomyelitis or poliomyelitis compatible cases have been identified among them.

A high level of oral polio vaccine immunization coverage has been sustained over the past 10 years. In 2000, 91.8 % of all children at their first birthday were immunized with three doses of trivalent polio vaccine. Polio immunization is part of the routine immunization provided throughout the health care system and the high coverage rate will be sustained in future years.

In summary, the NCC believes that, after poliomyelitis-free certification was acquired, poliomyelitis-free status was maintained and the health system in Macao has the ability to detect any importation of wild poliovirus and to prevent its spread in the population. In addition, the committee feels that high polio immunization coverage and reliable surveillance will be sustained until global poliomyelitis eradication of polio has been achieved.

2.3.14 New Zealand

In 2000, 1804 (92%) of 1950 expected AFP reports were received and 14 AFP cases reported resulting in a non-polio AFP rate of 1.8 per 100 000 aged under 15. Sixty-four percent of the cases had two adequate stool specimens taken. The expert committee reviewed all cases and discarded them as non-polio AFP. Nine cases were diagnosed as GBS, two as transverse myelitis and one was classified as trauma case.

The national poliovirus laboratory was again fully accredited in 2001 and continues to coordinate the country's enterovirus laboratory network. The annual number of specimens processed in the national poliovirus laboratory is about 2000, ranging from stool, CSF, respiratory, biopsy/autopsy, skin, urine and genital specimens. Isolation and typing results from the other four virology laboratories are reported weekly to the national poliovirus laboratory.

Routine immunization services continue to perform well with reported OPV3 coverage in 2000 at 85%. The country has decided to shift to IPV immunization in February 2002, though.

After development of a national plan of action and establishment of a laboratory containment taskforce (LCTF), the Ministry of Health compiled a comprehensive database of laboratories including hospitals, research and educational institutions, Crown research facilities, selected environmental laboratories operated by local governments and selected private sector organizations. The LCTF reviewed the database to ensure that all the laboratories likely to hold infectious material were included.

After pilot testing a draft letter and questionnaire at selected laboratories, detailed letters and survey forms were sent to all facilities in the database. An additional letter was also sent to the chief executives of larger institutions and representative organizations asking that a senior person be made responsible for reporting to the Ministry of Health on behalf of the institution/organization.

All returned checklists were reviewed, collated and filed by the Ministry of Health. If there was any concern about the validity of a laboratory's response, telephone contact was made in order to check the response to ensure the accuracy of their survey return. Late returns were also followed up by telephone to ensure compliance.

Telephone contact was made with those facilities that returned positive responses to discuss both the nature and condition of storage and the intended use of the specimen. An offer was made to test and/or replace existing poliovirus strains with well-characterized Sabin strains for laboratories intending to retain polioviruses for teaching and research purposes.

A communication strategy was developed to ensure that those working with or who have stored poliovirus samples were aware of the role of the LCTF. They were also encouraged to notify the Ministry of Health as an additional safeguard.

The survey was sent to 107 organizations, and 153 individual completed questionnaires had been received by August 2001. Ten laboratories were confirmed as having polioviruses or potentially infectious materials in storage.

2.3.15 Pacific island countries and areas

To achieve high quality performance of the AFP surveillance system, 58 reporting sites and about 200 key paediatric clinicians are participating in monthly active surveillance. This provides comprehensive coverage in the Pacific (one reporting site for every 18 000 children). A high percentage of the expected monthly forms were returned to WHO until late 2000, from which point reporting to WHO has declined (although delinquent reports may be with hospital or national authorities). Steps are underway to re-establish a high level of reporting.

Since 1997, the Pacific island countries have met the target AFP reporting rate. Cases have been distributed across the Pacific, and no significant silent areas have been noted. A recent decline in cases is being monitored to determine if this represents a normal fluctuation in reports or a decrease in the sensitivity of the system. Hospital coordinators will be asked to undertake an internal retrospective record review to further assess completeness of reporting.

The stool collection rate has fallen short of the target of 80% of cases with two adequate specimens collected within 14 days of paralysis onset. However nearly all cases do have stools obtained (other than retrospective record review cases), and there has been steady improvement in this indicator.

Case investigation and 60-day follow-up are adequate.

Because the Pacific has regularly met the criterion standard for AFP reporting, no special studies or surveillance have been conducted other than retrospective record reviews. Given the importance of a high standard of surveillance, and the possible drop in AFP case reports in 2001, hospital coordinators will be asked to conduct an internal retrospective record review to seek cases which may have been overlooked.

The Pacific island countries accepted VIDRL, Melbourne, Australia, as the destination for all samples. Support from the VIDRL has been excellent. VIDRL has been meeting all standards for quality assurance.

Immunization coverage rates in the Pacific are generally high (about 86% coverage overall), and there are no known significant pockets of under-immunized children. The countries of greatest concern in this regard are Nauru, and selected areas in the Federated States of Micronesia and the Solomon Islands. Although supplemental immunization activities have not been indicated (except for measles elimination), the possibly increasing influx of refugees may require supplemental immunization in the future in selected areas.

The Subregional Certification Committee considers the Pacific at low risk of importation, and to have significant additional barriers to re-establishment of wild poliovirus circulation. The Committee notes and endorses the renewed emphasis on surveillance for AFP until global certification and beyond, and further endorses continued vigilance and response.

Four areas of concern to the Subregional Certification Committee are:

- Decline in routine monthly reporting from hospital surveillance sites
- Problems with adequacy and timeliness of stool collection
- Lower immunization coverage in a few countries
- AFP cases missed by the hospital-based active surveillance network

To support sustaining poliomyelitis-free status after certification, the hospital-based active surveillance network has already been modified to support conditions other than AFP. Several interventions are proposed to ensure that this surveillance system is sustained.

In the laboratory containment exercise, questionnaires returned by higher-risk laboratories indicate that only a few have the capacity to store specimens over a long term, and none of these have stored stool specimens. Follow-up is planned to gain more detailed information from two laboratories and to sustain surveillance of stored laboratory specimens until global eradication is confirmed.

2.3.16 Republic of Korea

The AFP surveillance in the Republic of Korea has been in operation since July 1998 with 70 reporting hospitals under the coordination of the National Institute of Health (NIH). In order to supplement this regular AFP reporting system, a prospective AFP study was introduced at five major

hospitals in Seoul in November 1999. To evaluate the sensitivity of patient examinations at hospitals for possible cases of poliomyelitis, a retrospective chart review was conducted in the same five major hospitals in Seoul for 1997 to 1999. All suspected and reported AFP cases have results of follow-up examinations available and have been reviewed by an expert panel. So far, all cases were discarded as non-polio AFP, and no poliomyelitis compatible case was found.

The NCC has reviewed all AFP cases detected through surveillance activities for the final classification and has met regularly to discuss issues related to the national documentation of poliomyelitis eradication.

The National Poliovirus Laboratory was fully accredited in 2000 under WHO standards. Accreditation for 2001 is still pending, but the score for this year's proficiency test was again 100% as in 2000. The National Poliovirus Laboratory is also operating nation-wide enterovirus surveillance, and all polioviruses detected through the enterovirus surveillance mainly targeting aseptic meningitis patients will be isolated and identified at NIH. Hand-foot-mouth disease/herpangina surveillance with virological testing was started in 2001. In general, all samples tested for poliovirus regardless of source (AFP surveillance, enterovirus surveillance, environmental surveillance) are examined in the National Poliovirus Laboratory, and all polioviruses isolated are sent to RRL in Japan for ITD.

The Republic of Korea has almost completed phase 1 of laboratory containment of wild poliovirus infectious/potentially infectious materials. After sending screening forms to 244 institutes, universities and hospitals, there have been replies from all places. Only two laboratories were found to have relevant samples. These laboratories were requested to complete an inventory form and sent the completed form to the national coordinator. All relevant samples are stored under at least BSL 2/polio conditions. All the information was listed in the national inventory. A copy of the national inventory was also given to the NCC and will be sent to the Ministry of Health and Welfare to keep on file for future reference when Phase 2 begins. This inventory will be regularly reviewed and updated until global certification of eradication is achieved.

Immunization levels have been sustained at 90% to 95% (estimated) since the 1980s. Results of a seroprevalence study of poliovirus antibody which has been conducted in 1999 has shown that more than 82% of the primary school children in Kyunggi province which surrounds the capital city Seoul, northwestern area of the Republic of Korea are fully immune to poliovirus type I, II, III. Seropositive rates for each Sabin type 1, 2, 3 were 94.4%, 96.6% and 86.6%, respectively. This level of immunity is thought to be high enough to prevent an outbreak of poliomyelitis in case of importation of wild type poliovirus. National polio immunization will be continued in order to maintain high levels of coverage and population immunity.

2.3.17 Singapore

On 29 October 2001, the day the Western Pacific Region was declared poliomyelitis-free, a press release was issued to the local media, to inform the public of the significant milestone and remind them to continue to support the national childhood immunization programme for poliomyelitis.

After the certification of poliomyelitis-free status, letters were also sent to paediatricians and neurologists in the public and private sectors, to inform them of the good news and to remind them to remain vigilant for poliomyelitis cases and to continue with the pre-certification surveillance activities.

All acute care hospitals in the public and private sectors have been requested to notify all cases of AFP and to take two consecutive stool samples for virus isolation taken 24 to 48 hours apart and within 14 days of onset of paralysis.

In addition, the public hospitals have also been requested to submit monthly returns on number of cases seen for each of the diseases defined by the NCC as "at risk" diagnoses for AFP, irrespective of whether AFP was present or not.

The Epidemiology and Disease Control Division of the Ministry of Health has also been conducting monthly checks on all hospitals for any possible cases of AFP through the national computer database of all hospital discharges in Singapore.

The adequate stool specimen collection rate was satisfactory in 2000. In 2001, the rate has been low. However, as there was good quality clinical and laboratory data available, the NCC was able to easily and reliably review and discard the cases with inadequate stool specimens.

The National Laboratory has continued to achieve a full score of 100% in WHO proficiency tests for the isolation of enteroviruses and remains fully accredited.

Poliomyelitis immunization coverage in infants has remained high. In 2000, immunization coverage for infants was 90%.

The national coordinator implemented Phase 1 of the Action Plan for Laboratory Containment in November 1999. The national search to identify laboratories that may have stored wild poliovirus infectious or potential infectious material was successfully completed. From the national search, only one laboratory (a diagnostic and research laboratory at the National University of Singapore) was identified to have stored infectious wild poliovirus material. The laboratory has since destroyed the infectious material according to WHO guidelines for destruction of such materials.

The national inventory has been updated and three new research agencies have been included in the inventory.

3. CONCLUSIONS

The Commission noted that NCCs continue to function and work effectively in all countries and areas and commended all countries and areas for their continued high level of cooperation and for submitting progress reports of high quality in a timely fashion.

The Commission was impressed by the commitment and dedication seen in all countries and areas of the Western Pacific Region to continue activities for sustaining poliomyelitis-free status post-certification. As a result, most countries and areas are able to report on continued high-quality surveillance, immunization and laboratory containment activities. The Commission, however, recognized the decrease in available funding as the most important threat to continuing these activities.

Following the identification of circulating VDPV in the Philippines, this emerging issue with significant relevance to the global and regional poliomyelitis eradication effort also received much attention during the Commission's deliberation.

The RCC noted the poliomyelitis-specific conclusions and recommendations of the recent meeting of the WPR TAG and regional polio laboratory network, and noted the recently proposed changes to the global action plan for laboratory containment of wild poliovirus infectious/potentially infectious materials.

3.1 Maintaining high quality surveillance and immunization activities

The Commission commended all countries and areas for aiming to sustain poliomyelitis-free status through continued high-quality poliomyelitis eradication activities. As a result, AFP surveillance and immunization activities have, in most countries and areas, remained at or close to certification quality.

The Commission, however, noted that the sensitivity of surveillance remains sub-optimal at the sub-national level in some countries and areas. Also, routine OPV3 immunization at the national and

sub-national level, as well as the extent of supplementary immunization activities, may not provide sufficient population immunity in all high-risk groups to prevent the spread of imported wild poliovirus, or the emergence of circulating neurovirulent vaccine-derived poliovirus.

The Commission urged all countries to continue efforts to reach and maintain sufficient levels of surveillance quality at national and sub-national levels, and to improve and maintain high, uniform routine immunization coverage, as well as to conduct supplementary OPV immunization programmes wherever necessary.

The Commission is concerned that, following poliomyelitis-free certification in 2000, there are misconceptions in some countries and areas that immunization with OPV is no longer needed and urges countries and areas to effectively counteract these misconceptions.

The Commission expressed concern that the anticipated decrease in funding for poliomyelitis eradication may prove to be a serious threat to sustain poliomyelitis-free status in the Region. The Commission continued to acknowledge the crucial role played by the regional Interagency Coordinating Committee (ICC) and all poliomyelitis eradication partner agencies in achieving poliomyelitis-free status in the Region, and encourages all partners to assure the necessary funding to maintain poliomyelitis-free status.

The Commission fully endorsed the additional AFP surveillance requirements recommended by the WPR TAG, especially recommendations on:

- the need for regular, timely review, analysis and use of surveillance data at national and sub-national level,
- the requirements for ITD of all isolated polioviruses,
- further reducing the interval between onset of paralysis and communicating final ITD results, and
- the need for timely final AFP case classification.

In view of the recently identified poliomyelitis outbreak due to circulating VDPV in Haiti and the Dominican Republic and the emergence of cVDPV in the Philippines, the Commission believes that the terms of reference of the Regional Commission must be broadened to include the consideration of VDPV circulation and its potential implications for Regional certification.

The Commission noted the implications of the recently identified episode of cVDPV in the Philippines for AFP case classification. Under the currently used virological case classification scheme, AFP cases are discarded as non-polio, confirmed (if wild virus is isolated), or classified as 'polio-compatible'. However, the virological classification scheme does not allow to properly classify AFP cases associated with VDPV. The Commission requested the WHO Regional Office for the Western Pacific secretariat, in conjunction with WHO Headquarters, to revise and adjust the classification scheme, including the reporting requirements, accordingly.

3.2 Progress in laboratory containment of wild poliovirus infectious/potentially infectious materials

The Commission noted that the WPR has further progressed towards completing phase 1 of the Regional Action Plan for Laboratory Containment of Wild Poliovirus Infectious/Potentially Infectious Materials.

The Commission again urged all countries and areas, which have not yet done so, to complete phase 1 of laboratory containment as soon as possible.

The Commission reminded all countries that the GCC recently restated its decision that prior to global certification, all regions will need to provide data demonstrating full implementation of phase 2 activities of the Global Containment Action Plan.

The Commission endorsed the WPR TAG's recommendation to the WHO secretariat to develop methods and work with countries and areas to validate the completeness and accuracy of laboratory containment.

The Commission noted the proposed revisions of the global action plan for laboratory containment and requested the WHO Regional Office for the Western Pacific secretariat to amend the regional action plan for laboratory containment accordingly.

3.3 Country specific conclusions

3.3.1 Cambodia

- (1) The Commission commends Cambodia on the exceptional quality of the country update report.
- (2) The Commission encourages the programme to assure that the emerging private health sector in Cambodia is sufficiently involved in AFP surveillance.
- (3) The Commission notes the potentially negative effects of the ongoing transition period for integrating health service reforms on maintaining high quality surveillance and immunization in Cambodia.
- (4) In view of the low routine OPV3 coverage, the Commission considers it as particularly important to assure that, until global certification is achieved, all high-risk groups and areas are sufficiently covered by annual SIAs.
- (5) The Commission notes that this will require careful review and identification of high-risk groups, and possibly to further increase the proportion of children < five years covered by two rounds of OPV SIAs.
- (6) The Commission commends Cambodia for addressing the need for specific screening for vaccine-derived poliovirus, and urges all partners involved (Ministry of Health, WHO at country and regional level, as well as laboratories) to assure rapid and thorough work-up of all poliovirus isolates found.
- (7) Finally, the Commission emphasizes that sufficient funding to sustain surveillance activities should be assured.

3.3.2 China

- (1) The Commission commends China on the sustained high level of performance of the AFP surveillance system, including the China Polio Laboratory Network, the continued commitment to conduct supplementary immunization activities, and the substantial progress on laboratory containment.
- (2) The Commission expresses its confidence that the national action plan for containment of wild poliovirus infectious and potentially infectious materials will be implemented on schedule.
- (3) The Commission notes with satisfaction the high priority given by the Government to implement recommendations for intensified surveillance of vaccine-derived polioviruses including:
 - (a) concurrent ITD testing of all poliovirus isolates with an antigenic assay (ELISA recommended), in addition to the molecular PCR-RFLP assay currently being used;
 - (b) retrospective ELISA screening of all poliovirus isolates through 1998; and
 - (c) forwarding of all poliovirus isolates showing discrepant ITD results (molecular ITD Sabin-like and ELISA ITD non-Sabin-like) to a global specialized laboratory (or a laboratory

recognized by WHO as having the capacity to carry out poliovirus sequence analysis) as soon as possible for ITD confirmation and analysis of genomic sequence.

- (4) The Commission recommends that provincial health departments also consider poliomyelitis when classifying AFP cases that have Sabin-virus isolated from stool specimens.
- (5) The Commission is impressed with the extent of SIAs already conducted in 2001 and encourages Regional and global polio partners to support China in procuring the necessary operational funds to maintain the necessary level of SIAs.
- (6) The Commission encourages the programme to particularly target SIAs hard-to-reach children in the 'floating population', as well as children in remote and border areas.

3.3.3 Lao People's Democratic Republic

- (1) The Commission commends Lao People's Democratic Republic on the quality of the country update report.
- (2) The Commission is very concerned that there are still three AFP cases pending classification from 2000 and urges the NCC to make final classification as soon as possible.
- (3) The Commission notes that since Regional certification of poliomyelitis-free status no NCC meetings with a quorum of members were held and encourages the NCC to again commence meeting on a regular basis as this provides not only excellent opportunities to review the status of AFP cases still to be classified but also to discuss the current status of surveillance and immunization activities.
- (4) The Commission is impressed with the AFP surveillance performance generally and at provincial level facilities as indicated by key indicators. The Commission notes with concern, however, that AFP surveillance at district level facilities may not yet be optimal and encourages the programme to put more emphasis on AFP surveillance at district facilities given the fact that a high proportion of the population lives in remote areas.
- (5) The Commission recommends that visits to district facilities and the results of active searches be systematically documented and included in future annual country progress reports. The Commission trusts that any previously unreported cases detected are investigated and added to the national AFP database.
- (6) The Commission fully endorses the additional AFP surveillance requirements recommended by the WPR TAG, especially recommendations on the need for regular, timely review, analysis and use of surveillance data at national and sub-national level and further reducing the interval between onset of paralysis and communicating ITD and encourages the programme to immediately send all stool specimens to the institution serving as the national poliovirus laboratory for the country.
- (7) The Commission respects the Ministry of Health's decisions on how it wishes to organize its various activities, but is of the opinion that the organizational separation of immunization and surveillance activities may lead to some important missed opportunities for increasing the sensitivity of the AFP surveillance system.
- (8) The Commission appreciates being informed of Lao People's Democratic Republic realities regarding the difficulty of achieving high OPV3 coverage. Given these realities, the Commission encourages the programme to consider conducting supplementary immunization activities in early 2003 to raise immunization levels in selected areas of the country.

3.3.4 Malaysia

- (1) The Commission commends Malaysia for all efforts made to sustain poliomyelitis-free status, including the ongoing activities to maintain AFP surveillance and promote laboratory containment.

(2) While most states have reached equally good levels of AFP surveillance, the Commission encourages the Ministry of Health to continue working with the remaining low-performing states to improve surveillance quality.

(3) The Commission urges that frequent exchange and travel between Malaysia and poliomyelitis-endemic countries on the Indian subcontinent remains an important concern.

3.3.5 Mongolia

(1) The Commission commends Mongolia for maintaining high-quality polio eradication efforts.

(2) The Commission urges the Government of Mongolia and other poliomyelitis eradication partners, including the Regional laboratory network, to strengthen the national poliovirus laboratory.

3.3.6 Papua New Guinea

(1) The Commission commends Papua New Guinea for aiming at sustaining poliomyelitis-free status through a strong focus on continued quality polio eradication activities.

(2) The Commission is very concerned that there is still no national EPI manager appointed and considers that this situation must be addressed with urgency.

(3) The Commission is concerned about the continued very low immunization coverage in Papua New Guinea and urges the programme to immediately identify and implement effective strategies to increase coverage to and maintain at high levels at national and sub-national levels.

(4) The Commission welcomes the report of the international EPI review in Papua New Guinea as a means of identifying the strengths and weaknesses of the EPI, and improving the international collaboration with the government in improving the programme.

(5) While surveillance quality in some areas seems sufficient, the Commission encourages the programme to aim at meeting all main quality indicators (i.e. timely stool specimen collection) and for field and laboratory surveillance activities to specifically address the need to screen for potential neurovirulent vaccine derived polioviruses.

(6) The Commission reminds all poliomyelitis eradication partners in Papua New Guinea to counteract the misconception among politicians and health workers that OPV immunization is no longer required following polio-free certification.

3.3.7 Philippines

(1) The Commission notes the impressive and exemplary activities currently being conducted in the Philippines to respond to the recently identified first episode of cVDPV in the WPR. The Commission requests the NCC to submit an intensive report on surveillance and immunization response on the detection of cVDPV in the Philippines by May 2002.

(2) The Commission was particularly impressed by the remarkable performance of AFP surveillance in the National Capital Region from 2000 to 2001, which should serve as a model for other regions in the country.

(3) The Commission urges that it will be particularly important to rapidly improve AFP surveillance quality in all low-performing regions and provinces to assure that continued circulation of VDPV would be identified, wherever it may be occurring.

(4) The Commission also urges that high-quality surveillance will be essential in 2002 to monitor whether or not the large-scale supplementary immunization response planned for the first quarter of 2002 has interrupted VDPV circulation.

(5) The Commission reiterates that surveillance quality needs to be maintained at certification levels at least until global certification is achieved to ensure that imported wild poliovirus would be reliably detected as long as transmission may occur in any part of the world and continue screening for potential VDPV occurrence.

3.3.8 Viet Nam

(1) The Commission commends Viet Nam for continued high-quality activities to sustain polio-free status, in particular the supplementary surveillance activities and the attention paid to investigating and documenting details of all Sabin-virus associated AFP cases.

(2) The Commission encourages Viet Nam to continue efforts to improve surveillance quality, particularly in low-performing provinces.

3.3.9 Australia

(1) The Commission commends Australia on its efforts to develop an action plan on sustaining polio-free status after certification and particularly notes that activities are being coordinated to further strengthen the quality of AFP surveillance.

(2) The Commission encourages the programme to have all AFP cases notified through the system reviewed and classified by the expert panel on a regular basis.

(3) The Commission is very concerned that after activities for laboratory containment of wild poliovirus infectious/potentially infectious materials had successfully started using several innovative methods, documented progress in 2001 appears very low and previous momentum may have been lost.

(4) The Commission requests Australia to refocus on poliovirus infectious/potentially infectious laboratory containment activities and provide the Commission with an update every six months.

3.3.10 Brunei Darussalam

The Commission commends Brunei Darussalam for continued implementation of activities to maintain polio-free status and is impressed with the high quality of surveillance, immunization and laboratory containment activities conducted in the country.

3.3.11 Hong Kong (China)

The Commission commends Hong Kong for continued implementation of activities to maintain its poliomyelitis-free status and is impressed with the high quality of the surveillance, immunization and laboratory containment activities.

3.3.12 Japan

(1) The Commission commends Japan for continued implementation of activities to maintain its poliomyelitis-free status.

(2) The Commission notes that an essential function within the national programme but also for the global polio eradication initiative is carried out by the Global Specialized Poliovirus at the Laboratory National Institute of Infectious Diseases and encourages to ensure the required level of funding in order for the laboratory to meet its ever increasing workload.

(3) The Commission particularly commends the Government of Japan for its exemplary approach towards implementing laboratory containment activities, which could serve as a model for containment activities in other industrialized countries with large numbers of laboratories.

(4) The Commission urges that the complexity and large scope of containment activities in Japan require appropriate funding, and careful assessment and validation of the completeness and accuracy of the process.

3.3.13 Macao (China)

The Commission commends Macao for continued implementation of activities to maintain its poliomyelitis-free status and is impressed with the high quality of the surveillance, immunization and laboratory containment activities.

3.3.14 New Zealand

The Commission commends New Zealand for continued implementation of activities to maintain its poliomyelitis-free status and is impressed with the high quality of surveillance, immunization and laboratory containment activities conducted in the country.

3.3.15 Pacific island countries and areas

The Commission commends the Pacific island countries and areas for continued implementation of activities to maintain polio-free status, and particularly endorses the recommendations of the Subregional Certification Committee to ensure that a high standard of AFP surveillance is achieved and sustained.

3.3.16 Republic of Korea

The Commission commends the Republic of Korea for continued implementation of activities to maintain its poliomyelitis-free status and is impressed with the high quality of surveillance, immunization and laboratory containment activities conducted in the country.

3.3.17 Singapore

The Commission commends Singapore for continued implementation of activities to maintain its poliomyelitis-free status and is impressed with the high quality of surveillance, immunization and laboratory containment activities conducted in the country.

4. FUTURE MEETING OF THE REGIONAL CERTIFICATION COMMISSION

The next meeting of the RCC will be held during the last quarter 2002, tentatively in conjunction with the next meeting of the WPR TAG.

TENTATIVE TIMETABLE

Time	Wednesday, 24 October (Informal Pre-meeting)	Time	Thursday, 25 October	Time	Friday, 26 October
0900-1200	Meeting of WHO Secretariat <ul style="list-style-type: none"> Briefing on issues to sustain the poliomyelitis-free status of the Western Pacific Region Discussion on country presentations 	0800-0820	REGISTRATION 1. Opening ceremony <ul style="list-style-type: none"> Welcome remarks by the Responsible Officer Opening remarks by the Acting Regional Director Self-introduction Election of officers Group photograph 	0800-1000	Continued: review of country reports on sustaining poliomyelitis-free status Countries non-endemic at the beginning of the initiative: Hong Kong, China; Japan; Macao, China; New Zealand, Republic of Korea; and Singapore - Pacific Island countries and areas
		0820-0900	<ul style="list-style-type: none"> Address of the Chairman, Dr Anthony Adams 2. Regional overview of the situation after poliomyelitis-free certification of the Western Pacific Region 3. Global certification overview		
		1000-1030	<i>COFFEE BREAK</i>	1000-1030	<i>COFFEE BREAK</i>
		1030-1200	4. Review of country reports on sustaining poliomyelitis-free status (a) Cambodia (c) Lao PDR (b) China	1030-1200	Continued: RCC members continue to review and discuss the country reports
1200-1400	<i>LUNCH BREAK</i>	1200-1330	<i>LUNCH BREAK</i>	1200-1330	<i>LUNCH BREAK</i>
1400-1530	Meeting of Regional Certification Commission (RCC) Members and WHO Secretariat	1330-1500	Continued: review of country reports on sustaining poliomyelitis-free status (d) Malaysia (f) Papua New Guinea (e) Mongolia	1330-1430	5. Conclusions and recommendations 6. Additional requirements to sustain the poliomyelitis-free status of the Western Pacific Region 7. Future activities of the Regional Certification Commission
		1500-1530	<i>COFFEE BREAK</i>	1430-1500	Closing ceremony
		1530-1700	Continued: review of country reports on sustaining poliomyelitis-free status (g) the Philippines (h) Viet Nam (i) Countries non-endemic at the beginning of the initiative: Australia and Brunei Darussalam		
		1700	Regional Director's Reception		



REGIONAL OFFICE FOR THE WESTERN PACIFIC
BUREAU RÉGIONAL DU PACIFIQUE OCCIDENTAL

SEVENTH MEETING OF THE REGIONAL COMMISSION
FOR THE CERTIFICATION OF THE ERADICATION OF
POLIOMYELITIS IN THE WESTERN PACIFIC REGION

WPR/ICP/EPI(5)/2001/IB/2
15 October 2001

Manila, Philippines
25-26 October 2001

ENGLISH ONLY

INFORMATION BULLETIN NO. 2

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