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# INTERNATIONAL CERTIFICATION COMMISSION FOR POLIO ERADICATION IN THE SOUTH-EAST ASIA REGION

**PLAN OF ACTION** 

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#### 1. INTRODUCTION

In 1988, the World Health Assembly, the governing body of the World Health Organization (WHO), adopted the goal of global poliomyelitis eradication by the year 2000. The WHO Regional Committee for South-East Asia (SEA) endorsed the global goal in 1989 and reaffirmed the regional target of polio eradication by the year 2000.

In February 1995, WHO convened the First Meeting of the Global Commission for the Certification of the Eradication of Poliomyelitis. The Global Commission established the basis, principles, and essential criteria for global certification of poliomyelitis, basing its work in part upon that of the International Commission for the Certification of Polio Eradication (ICCPE) which had declared the eradication of polio from the Americas in 1994. The Global Commission has decided that certification should proceed on a regional basis, with establishment of ICCPEs which would review the documentation provided by national committees and, if appropriate, eventually certify the respective region(s) as polio-free<sup>1</sup>.

In December 1994, at its first Technical Consultative Group (TCG) Meeting, the Expanded Programme on Immunization (EPI)/SEARO, introduced a comprehensive strategy for achieving the eradication of poliomyelitis in the South-East Asian Region of WHO. The ongoing and successful implementation of this strategy should result in the interruption of wild poliovirus transmission throughout the Region by 2000 and confirmation of that achievement by the year 2003. As the necessary, supplementary immunization and surveillance strategies for achieving polio eradication have now been defined for South-East Asia, it is increasingly important to establish the mechanism for certifying that countries which report zero cases are in fact polio-free.

This paper outlines the Plan of Action for Certification of the Eradication of Wild Polioviruses from SEARO, which reflects the proceedings and recommendations of the Global Commission for the Certification of the Eradication of Poliomyelitis. The Regional Plan includes background information on the polio eradication initiative and a summary of the documentation that will be required from each country of the Region. Annexes 1 and 2 provide a proposed timetable for certification activities and an update on the progress towards the eradication goal in WHO/SEARO.

#### 2. DEFINITION OF POLIOMYELITIS ERADICATION

The definition of global polio eradication, as established by the Global Commission for the Certification of the Eradication of Poliomyelitis, is clearly targeted at wild poliovirus and not at the clinical disease it can cause: "The objective of the global polio eradication initiative is to eradicate all wild polioviruses."

For the purpose of regional certification, poliomyelitis eradication is based on clear evidence of the *absence of transmission of indigenous wild polioviruses*. Such transmission can and usually does occur as inapparent infections. Paralytic cases (one per 100 to one per 1000 infections) serve as a vital indicator of the continuing wild poliovirus spread, and, because of this, are very important to detect. As

supported by a mathematical modelling analysis and the experience of certification in the Americas, the period of freedom from paralytic poliomyelitis due to wild poliovirus infection should be at least three years before it could be said with reasonable certainty that eradication had been achieved. The existence of laboratory stocks of poliovirus without appropriate containment could potentially delay the certification of eradication.

The eventual interruption of wild virus transmission is possible because there is no natural animal reservoir for wild poliovirus; infected persons do not excrete the virus for more than a few weeks; and wild poliovirus does not survive in the environment for prolonged periods of time. However, experience in the Americas has shown that evidence for Regional Polio Certification can be considered as being sufficient, if:

- (1) There has been a failure to detect wild poliovirus over a period of not less than three consecutive years in the context of a surveillance system which is adequate to detect cases and the virus, if present;
- (2) A thorough country-by-country documentation of Programme activities and findings is available;
- (3) Cessation of poliovirus circulation has been determined by an independent international commission, and
- (4) Appropriate measures have been established to detect and deal with importations of wild poliovirus.

Surveillance for wild polioviruses is best implemented through a system that detects all conditions causing acute flaccid paralysis (AFP) in persons aged <15 years, plus suspected polio cases among persons of any age, and that incorporates clinical and virological investigations.

For certification purposes, such an "AFP Surveillance System" represents the most important component of all activities. It must be demonstrated that cases of AFP in people younger than 15 years, when they occur, would be identified, reported and investigated in a timely manner to demonstrate unequivocally that if wild poliovirus was present it would be detected.

#### 3. BACKGROUND – THE POLIO ERADICATION INITIATIVE

#### 3.1 Paralytic Polio, Polioviruses and Poliovaccines

Paralytic poliomyelitis can follow infection with any one of the three wild polioviruses, all of which are mainly transmitted faeco-orally. The disease is seasonal with peak transmission usually occurring in the hot, humid months. The poliovirus types 1, 2, and 3 differ in their epidemiological profiles, with type 1 being the most common cause of epidemics and having the highest ratio of paralysis to infection. There is no non-human host for polioviruses and they survive in a tropical environment for at most 1-3 months. Infected people do not excrete the virus for more than a few weeks, but excretion by immuno-compromised people can be for a much longer duration.

Immunity to polioviruses following natural infection is lifelong. The duration of immunity after vaccination is dependent on many factors, including the type of vaccine used and the number of doses administered. The oral poliovirus vaccine (OPV) mimics natural infection, inducing humoral immunity and secretory immunity in the gut. As with wild polioviruses, OPV may also spread to contacts. The

OPV seroconversion may be suboptimal in the tropics where as little as 70% of OPV recipients even after three doses may have type 3 antibodies. Very rarely can OPV be associated with paralysis in a recipient or a contact (up to one case for every 2.5 million doses administered). The inactivated poliovirus vaccine (IPV) achieves high levels of seroconversion but is not recommended for the eradication initiative while endemic transmission persists due to its high cost, inability to induce gut immunity and the need for injection.

#### 3.2 Strategies for Polio Eradication in Endemic Countries

WHO recommends the following strategies for eradicating poliomyelitis in endemic countries:

(1) **Routine Immunization Coverage:** Achieving a high routine immunization coverage with at least three doses of OPV significantly reduces the circulation of wild polioviruses. In polio-endemic countries, supplementary OPV is needed to interrupt the wild poliovirus circulation.

(2) **Supplementary Immunization Activities:** National immunization days (NIDs) are critical for interrupting the wild poliovirus circulation. During national immunization days, all children within a specified age limit (< 5 years) receive two doses of OPV one month apart in the low season for transmission, regardless of their pre- immunization status.

(3) Acute Flaccid Paralysis (AFP) Surveillance: For purposes of surveillance for polio, AFP is defined as 'any case of acute flaccid paralysis in a child aged less than 15 years, for which no other cause can be found. This would include diseases such as the Guillain-Barre Syndrome. AFP surveillance should be established in all endemic and recently-endemic countries to ensure that all cases of poliomyelitis are detected and to demonstrate that the surveillance system is capable of detecting and investigating all children with acute flaccid paralysis, and isolating and identifying polioviruses if they are present. Even in the absence of wild poliovirus circulation, surveillance systems should be expected to detect at least one case of AFP per 100,000 population < 15 years, due to conditions such as the Guillain-Barre Syndrome; transverse myelitis, and non-wild poliovirus enterovirus infections, including vaccine-associated polio paralysis (VAPP). The objective should be that at least 80% of AFP cases should have two stool specimens collected, 24 hours apart within 14 days of the onset of paralysis, and analyzed in a WHO accredited laboratory. An international laboratories for intratypic differentiation and special reference laboratories for yirus isolation, regional laboratories for intratypic differentiation and special reference laboratories for genetic sequencing. All network laboratories must be accredited.

(4) **'Mopping-up' Activities:** When the virus presence is reduced to focal areas of persistent transmission, special mopping-up activities should be organized. Mopping-up should include immunization as well as active case-search activities. This should be conducted on a house-to-house basis to boost the OPV coverage in areas with known or suspected wild virus transmission in the last 3 years, areas with inadequate surveillance to demonstrate the absence of wild polio virus, and areas with heavy migration or other activities where coverage cannot be maintained routinely. Such house-to-house activities should, at the minimum, be conducted multi-province-wide, target children younger than 5 years to be immunized (children under 15 years for case-search), and consist of two rounds - one month apart. Furthermore, they should be conducted in the low-transmission season.

# **3.3** Certification of Disease Eradication: The Smallpox Eradication Programme, and Polio Eradication in the Americas

Smallpox certification has provided experience in the certification of disease eradication in four areas of significance: (i) the lapse of time since the last known case of smallpox; (ii) the comprehensiveness of surveillance; (iii) the competence and diligence of the official certification committee reviewing national data, and (iv) the level of political support needed to comply with the certification criteria.

First, the experience during smallpox eradication eventually showed that after the last known case, no more than a year was required, with good surveillance, to confirm that eradication had been achieved. In practice, however, a two-year interval was observed. Polio presents a more difficult problem. The Global Commission has defined three years (with zero cases and effective surveillance) as the time needed for certification of polio eradication. The choice of three years was supported by a mathematical modelling analysis, and by the experience in the PAHO (Pan American Health Organization) countries.

It is important to note that even after certification, surveillance will need to be continued at normal performance levels until after global certification, and until after the cessation of immunizations worldwide. So long as other parts of the world remain infected, the risk of importations will continue. For smallpox and for polio, it is apparent that lesser the time which has elapsed since the last case, the more sensitive the surveillance programme must be. Given that chains of infection are not readily sustained in sparsely populated, inaccessible regions, the major focus should be on highly-populated areas.

Second, the quality of surveillance (after cases ceased during the smallpox programme) could be measured by the detection and investigation of cases of rash illness with fever and of chickenpox. This information was especially helpful to members of certification committees in providing convincing evidence that if smallpox virus existed, it would have been detected and reported. AFP surveillance serves this role in the polio programme.

Third, rigorous measures will be needed for polio certification. It will be important for SEAR Member countries to appoint national committees for the certification of polio eradication whose members do not have ties with national polio programmes (thereby maintaining the objectivity of the evaluation), and whose members have been properly briefed on the specific plans of action and accomplishments for the areas they are reviewing. Similarly, the members of the International Certification Commission for Polio Eradication in the South-East Asia Region (ICCPE), who are appointed by the Regional Director, SEAR, should not have any ties with the programmatic aspects of polio eradication.

Unlike the smallpox eradication programme, regional commissions will certify complete Regions as being polio-free, after having monitored the progress of the programme over an extended period of time, rather than after one-time visits. Similarly, national committees will be established in all countries to review the documentation to be submitted to the, and to determine its completeness.

Finally, the interest and effort invested in the smallpox certification process varied greatly from country to country. In countries from which smallpox had recently been eradicated, great interest was shown in certification; whereas, in those in which the disease had been eliminated many years ago, certification was not considered by national health administrators and political figures to be a high priority. Governmental commitment towards active participation in certification activities will generate

a justifiable pride in the success achieved as well as in the role of government agencies, health staff and the public in that achievement.

As the polio certification progresses in SEAR, details of the process may be modified, but the essential features - adequate preparation, detailed documentation and verification of the evidence of freedom from poliomyelitis for at least three years, and the independence and authority of the certification team - must remain unchanged throughout. The lessons learned in Latin America confirm: that three years of time-lapse since the last polio case is sufficient to confirm that wild polio virus circulation has ceased, provided that effective AFP surveillance exists. Consistent expertise and leadership from the ICCPE, and strong commitment from governments in producing complete and accurate data on National polio eradication activities will all be critical for the certification of polio eradication in South-East Asia.

## 4. CRITERIA FOR CERTIFICATION OF POLIO ERADICATION

The Global Commission for the Certification of the Eradication of Poliomyelitis has stated that a WHO region can only be certified as polio-free after all countries comprising it fulfil the following three criteria:

- (1) No circulating indigenous wild polioviruses have been detected during a three- year period in which surveillance has been maintained at the level of performance needed for certification;
- (2) A National Committee for the Certification of Polio Eradication in each country has validated and submitted the certification documentation required by the ICCPE, and
- (3) Appropriate measures are in place to detect and respond to importations of wild poliovirus.

## 5. THE INTERNATIONAL CERTIFICATION COMMISSION FOR POLIO ERADICATION (ICCPE) IN WHO/SEAR

#### 5.1 Composition

The ICCPE is composed of eight persons with appropriate expertise and experience to evaluate the regional eradication of wild polioviruses (public health officials, virologists, epidemiologists, clinicians). Some have also had the benefit of serving previously as members of smallpox international certification commissions. However, they have not had direct responsibility for polio eradication activities in the Region.

The list of members of the International Certification Commission for Polio Eradication in the South-East Asia Region can be found in Annex 5.

The ICCPE members are appointed by the Regional Director, WHO/SEARO. The Commission is independent of regional EPI activities but a member(s) may on occasion attend relevant technical meetings such as the Technical Consultative Group (TCG) on EPI as observer. ICCPE will regularly communicate with the Global Commission through two members who serve on both certification bodies.

The Commission may conduct visits to Member States to: assess the progress towards polio eradication; ensure effective documentation, and verify the accuracy of the data collected. The RCCPE may also decide to make use of its members, individual competene to closely follow up on polio eradication activities and developments in individual countries.

#### 5.2 Terms of Reference

These are to:

- (1) Prepare a plan of action and timetable for certification of polio eradication in the SEA Region;
- (2) Define the documentation that will be required from each country of the Region to provide the basis for eventual certification of polio eradication;
- (3) Examine and approve the protocol for collection of national vaccination and surveillance data for certification of polio eradication. Operational responsibilities related to improvements in immunization and/or surveillance systems remain with the immunization and surveillance staff, and not with the ICCPE;
- (4) Encourage countries to constitute National Committees for Poliomyelitis Eradication and coordinate their activities. Individual members of ICCPE should attend selected meetings of National Certification Committees as associates, to offer suggestions and recommendations to National Committees, where appropriate;
- (5) Conduct site visits, as necessary, to review and/or verify the status of polio eradication activities in individual countries;
- (6) Review the polio eradication documents of each country on an ongoing basis, including verification and validation of data, and prepare a report on the findings on periodic basis to the Regional Director. Initially, ICCPE does not require separate reports from Member States, but will assess the progress by reports submitted to the TCG. The ICCPE may request national committees to scrutinize these reports before they are presented to it;
- (7) Inform the Global Commission, through its Chairman, or via the Secretariat, about the progress of eradication activities, bringing to attention unresolved issues;
- (8) Inform the Regional Director, WHO/SEAR, of any action required on the part of the WHO Secretariat and national authorities to ensure that certification will eventually be achieved;
- (9) Verify the inventory of wild polio virus status and their containment in secure facilities in the Region, and
- (10) If and when appropriate, certify the eradication of poliomyelitis from WHO/SEAR and to provide the Global Commission with the documentation necessary to endorse the regional certification as part of global polio eradication.

#### 5.3 Timetable

The members of the ICCPE were nominated by the Regional Director in January 1997. The first meeting of the ICCPE for Polio Eradication in the South-East Asia Region will be conducted in June 1997. Subsequent meetings will initially be held at least on an annual basis. A tentative time schedule for the regional certification process is outlined in Annex 1.

# 6. NATIONAL COMMITTEES FOR THE CERTIFICATION OF POLIOMYELITIS ERADICATION

National committees for poliomyelitis eradication will be convened in each SEAR country.

#### 6.1 Composition

Each national government will constitute its national committee. The national committee in each country will consist of a minimum of three people, one of whom shall be nominated as chairman and take the responsibility for liaisoning with the ICCPE.

Ideally, the national committee members should not have direct responsibility for polio eradication in their country. However, in some countries it may be both necessary and desirable to have a person from either the immunization services or disease surveillance Programme on the Committee. Therefore, a maximum of one national committee member may also be involved with the eradication effort, but this person must not serve as chairman of the committee. In India and Indonesia, the national committee(s) may consider the establishment of Sub-national committee(s) to assist the national committees with their functions. Programme Managers should act as the secretariat to national committees.

Like the ICCPE members, the national committee members shall also be persons who have the necessary expertise and experience to evaluate polio eradication activities in their country. The candidates will probably have a background in public health, epidemiology, virology, neurology or other related disciplines and have a stature consistent with the importance of this position. The selection of members of national committees is based on professional reputation and merits and is viewed as a rare and distinctive honour.

#### 6.2 Terms of Reference

These are to:

- (1) Guide national surveillance and immunization personnel with the preparation of the documentation required for certification of polio eradication;
- (2) Review the documentation provided for certification and inform the national surveillance and immunization personnel of additional requirements. Operational responsibilities related to improvements in immunization and/or surveillance systems remain with the national immunization and surveillance staff, and not with the National Committee;
- (3) Review the acute flaccid paralysis surveillance (AFP), as well as the surveillance of wild poliovirus and vaccination activities (routine and campaign);
- (4) Verify and validate national immunization and surveillance data by conducting site visits to hospitals, laboratories, outlying areas and other facilities or sites, as necessary;
- (5) Review all polio-compatible cases, as well as a random sample of cases that were discarded by the Expert Committee (See figure 3). All polio-compatible cases must have complete documentation of the reasons for being considered compatible, including details on the clinical, virological and epidemiological features of the case;

- (6) Review what actions have been taken by national staff to ensure that the wild virus transmission has been stopped.;
- (7) Have, at least once a year, formal discussions with the Expert Committee on classification of cases;
- (8) Identify areas of Programmatic weakness and suggest additional activities that will produce data required for certification;
- (9) Keep the ICCPE informed of the for progress of certification activities. A written summary of the progress towards certification, unresolved difficulties which may obstruct or delay the provision of essential data required for certification, and potential solutions to such obstacles should be submitted, as appropriate, and
- (10) Review and endorse the country report, prepared by national surveillance and immunization personnel, to be submitted to ICCP. This report would serve to document the interruption of transmission of wild poliovirus in the country and to recommend to the ICCPE that their country be considered for certification.

#### 6.3 Timetable

The Ministries of Health in all Member States should appoint their respective national committees for poliomyelitis eradication by September 1997. National committees, after having met, and having been briefed, should conduct initial meetings with national immunization and surveillance staff as soon as possible after being established. A briefing paper from each of the countries which are reporting zero polio cases will be expected for the second meeting of the ICCPE to be held in April 1998. A workshop on the preparation of documentation for certification will be organized for chairpersons of the national committees as soon as possible after their appointment. (Annex 2 outlines the proposed timetable).

# 7. OVERVIEW: PLAN OF ACTION FOR CERTIFICATION OF POLIO ERADICATION IN SOUTH-EAST ASIA REGION

The certification of polio eradication in South-East Asia will be the decision of an 8-member ICCPE composed of public health authorities, physicians and scientists (see para 5.1). The ICCPE will base its decision upon the review of polio eradication documentation provided by national committees for poliomyelitis eradication of all Member States. The national committees for poliomyelitis eradication of any country will have no authority to certify it as being polio-free, but will recommend that such certification be made by the ICCPE, in coordination with the Global Certification Commission.

The 10 countries of the South-East Asian Region can be considered as endemic, recently-endemic, or non-endemic. In general, the countries are categorized as follows:

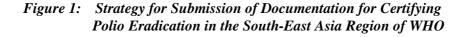
- (1) **Endemic:** Countries with virological and/or epidemiological evidence of indigenous wild poliovirus circulation within the past three years: Bangladesh, Democratic People's Republic of Korea, India, Indonesia, Myanmar, Nepal and Thailand.
- (2) **Recently-endemic:** Countries with virological and epidemiological evidence of having interrupted the indigenous poliovirus circulation for a period between 3- 5 years: Sri Lanka.

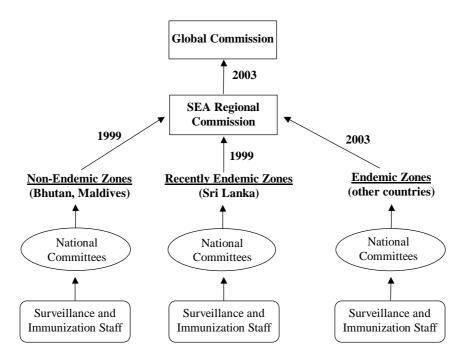
(3) **Non-endemic:** Countries with virological and epidemiological evidence of having interrupted the indigenous wild poliovirus circulation more than five years ago: Bhutan and Maldives.

The South-East Asia Region as a whole will not be certified as polio-free until all countries demonstrate the interruption of wild poliovirus transmission for at least three years, in the presence of adequate surveillance. No certification of individual countries will be considered until the entire Region, including all countries, is certified. The certification process, however, will begin immediately, with the appointment of national committees for poliomyelitis eradication in each country and the preparation of the documentation that will be required.

In order to facilitate the workload of the ICCPE, non-endemic countries (Bhutan, Maldives), and a recently-endemic country (Sri Lanka) will be requested to submit their documentation for certification for review by the ICCPE in 1999. This will allow sufficient time for countries to receive the feedback from the ICCPE, and to revise their certification strategy, if needed.

Figure 1 outlines the strategy and timetable for the submission of documentation from each National Committee for the Certification of Polio Eradication for review by ICCPE.





The National Certification Committees will be responsible for working with the national immunization and surveillance personnel in their respective countries to verify the documentation needed to prove that polio has been eradicated. Upon verification, the documentation will be forwarded to ICCPE for consideration. As noted above, *ICCPE will only consider certification of polio eradication in the Region after all Member States have reported zero cases of paralysis due to wild poliovirus for at least three years, in the presence of adequate surveillance.* 

# 8. ESSENTIAL CRITERIA ON WHICH THE CERTIFICATION OF POLIO ERADICATION WILL BE BASED

Regional certification of polio eradication will only be considered when there has been no evidence of indigenous wild poliovirus transmission for a period of at least three years during which surveillance has been maintained at the level of performance needed for certification. For the certification process, no evidence of indigenous wild poliovirus transmission will mean no cases of acute flaccid paralysis (AFP) associated with wild poliovirus and no indigenous wild polioviruses detected by other appropriate surveillance activities.

The eradication of wild poliovirus in a country can only be confirmed when the performance of the surveillance system has met the specific standards set by the Global Commission. For countries with established Acute Flaccid Paralysis Surveillance Systems and polio laboratory services, there are standard indicators that are used to monitor performance (Annex 3). While the indicator targets were originally designed for strengthening the AFP surveillance systems, a subset are being used in the certification process.

In exceptional circumstances, the ICCPE may consider data based on alternative surveillance activities to confirm the eradication of wild poliovirus circulation in countries, or areas of countries, where AFP surveillance does not meet the level of performance established for certification. Because of their small population size, these exceptional circumstances apply to Bhutan and Maldives, where certification will rely heavily on the quality of the "zero" reporting system, special hospital record reviews, and on immunization campaigns conducted and synchronized with the neighbouring polioendemic countries. However, certification in any country will always require incontrovertible evidence that national surveillance systems and laboratory services can detect and respond to wild poliovirus circulation.

#### 8.1 Quality AFP Surveillance

#### 8.1.1 Requirements for AFP Surveillance in Polio-Endemic and recently Endemic Countries

#### (1) Main Indicators:

The Global Commission for Polio Eradication has stated that five indicators should have precedence in demonstrating that an AFP system meets the level of performance required for certification. In the South-East Asia Region, national AFP surveillance systems should meet the specified performance levels for a minimum of 36 months prior to certification. The indicators and performance levels that are required are as follows:

# • At least 80% of the reporting units report regularly, and in a timely fashion, even if no case of AFP occurs ("zero reporting")

*Comment:* There must be documented evidence that at least 80% of the regular (weekly or monthly) surveillance reports that health facilities are expected to submit, are received on time by national surveillance authorities.

# • The AFP surveillance system should detect a non-polio AFP rate of <sup>3</sup> 1 case per 100 000 population aged less than 15 years

**Comment:** Countries should detect at least one case of non-polio acute flaccid paralysis (non-polio AFP) per 100 000 population aged less than 15 years. Achieving this level of performance indicates that a surveillance system would probably be sufficiently sensitive to detect paralytic poliomyelitis cases due to wild poliovirus, should they occur. In order to ensure that the national AFP rate does not obscure local weaknesses in the surveillance system, the AFP rate in each province or prefecture should be examined, with the target again being > 1 case per 100 000 population aged less than 15 years.

A panel of experts should be convened on at least a quarterly basis to make the final classification of AFP cases as confirmed polio, discarded as non-polio, or polio-compatible (based on the virological classification system. All polio compatible<sup>\*</sup> cases must have complete documentation of the reasons for being considered compatible, the investigations to rule out wild poliovirus circulation in the area of the case and the possible clinical diagnosis. All AFP cases discarded as non-polio should have a final diagnosis.

- At least 80% of reported AFP cases should be investigated within 48 hours of the case being reported to the level which is responsible for conducting investigations
- All virus isolation tests, including negative results, must be performed by laboratories accredited to the Global Polio Laboratory Network

*Comment:* All AFP stool specimens and other diagnostic specimens must be processed by a laboratory which is accredited as part of the global network of laboratories for polio eradication. All polioviruses isolated by laboratories not accredited within the network must be confirmed by a network laboratory. Special care should also be taken to ensure that transportation of specimens to laboratories is handled according to standards.

# • At least 80% of AFP cases should have two adequate stool specimens examined in an accredited laboratory and a follow-up examination for residual paralysis after 60-days of the onset of paralysis

*Comment:* Adequate stools are defined as two samples collected at least 24 hours apart, 0-14 days after the onset of paralysis, arriving in the laboratory with ice present (or still-frozen ice packs), and sufficient in quantity (size of two adult thumbs) for complete analysis, and accompanied by proper documentation.

After the Region has been certified as having eradicated polio, and after data have shown that there is no added value of a 2nd specimen, collection of one stool specimen (instead of two) from AFP cases can be considered.

(A more detailed list of indicators can be found in Annex 3).

<sup>&</sup>lt;sup>\*</sup> Polio-compatible cases are indicative of a surveillance weakness in that insufficient laboratory samples were collected for definitive classification (see case classification system in documentation).

#### (2) Basic Surveillance Strategies in Endemic and Recently-Endemic Countries:

The following strategies have proven to be adequate to achieve the above-mentioned targets:

**Immediate reporting by all health facilities:** As recommended by the Technical Consultation on Global Eradication of Poliomyelitis (Geneva, 28 April 1997), the highest priority for AFP surveillance should be the immediate reporting of AFP cases from all health facilities, and ensuring a mechanism for prompt investigation of each case report.

**Zero reporting by all health facilities or by a network of selected reporting sites:** For AFP, at least one reporting source needs to be identified in each district (or comparable small geopolitical unit) and the distribution of reporting sites should be representative of the geography and demography of the country. Health centres are identified as the primary reporting sources because cases of AFP are commonly encountered there for diagnosis, treatment or rehabilitation.

Each reporting source is required to report weekly to the district, provincial, and national level, whether AFP cases have occurred or not, after having checked the records in the facility. Under such a "zero" reporting system, all reporting units must submit a weekly report, even if zero cases of AFP were seen. This facilitates supervision of reporting sites, and poor reporters can be more rapidly identified. Weekly reporting to the national level is the ultimate target for surveillance systems to achieve.

In normal circumstances, zero-reporting is performed by a designated staff member of the hospital or health facility that acts as reporting site.

Active surveillance: Active surveillance requires establishing a mechanism for conducting regular (i.e. weekly) visits to health care facilities (by staff not employed by the facility) to identify and investigate unreported cases of AFP. During such visits, hospital and patient records are scanned for AFP cases, and physicians interviewed. When a new AFP case is found, the same is investigated and two stool samples collected. Active surveillance sites should include at a minimum: paediatric hospitals, infectious disease hospitals and referral hospitals with paediatric wards. Documentation on the completeness and timeliness of the active surveillance visits will be required to support the certification process.

In countries where the routine AFP surveillance system cannot meet the requirements for certification, a nationwide active surveillance system may be needed.

**Close review of all polio-compatible cases:** Polio-compatible cases should be closely evaluated by national EPI and/or surveillance personnel to determine whether they could have been caused by a wild polio virus.

Such an evaluation should entail a review of the following characteristics:

- clinical features of the case, including possible alternative diagnoses,
- epidemiological features (case from a high-risk area, clustering of similar cases),
- virological features (other viruses found, contact specimen, specimen double-checked,).

When indicated, action for further epidemiological evaluation should be taken, such as investigations of the cluster, active search for additional cases and stool surveys, etc. A mop-up campaign may have to be organized in the area, to ensure that there is no (further) wild virus transmission.

National certification committees and ICCPE will closely examine the data to determine whether the case could have been caused by a wild virus.

**Line listing:** All AFP cases that are identified, need to be fully documented, and entered in a linelisting. The line-listing should contain appropriate details of any cases which meet the criteria for AFP. The purpose of line-listing is to ensure that cases are fully investigated and followed up.

#### (3) Additional Surveillance Strategies in areas with poor surveillance and/or at high risk:

The ICCPE may require additional surveillance activities if the standard of AFP surveillance is not homogeneous throughout a country. For example, while all areas will need to document efficient and complete reporting and investigation of suspected cases, in large geographical areas (i.e. states or provinces) the non-polio AFP rate and the percentage of AFP cases with two adequate stool specimens should reach certification standards. Also, certain areas may require heightened surveillance due to characteristics which put them at a high risk of the ongoing, unrecognized wild poliovirus circulation, such as:

- borders with countries which are known to be polio-endemic;
- minority populations which have frequent contacts with similar populations in polio-endemic countries;
- underdeveloped health care services which result in low immunization coverage (less than 80% OPV3 coverage) and incomplete disease reporting (AFP reporting rate below 1 per 100 000 children under 15 years and stool collection indicator below 80%), and
- laboratory-confirmed polio cases occurring within the last three years in areas with poor surveillance.

In these high-risk areas, or where the standard of AFP surveillance is low, additional surveillance activities may be required to demonstrate the absence of wild poliovirus circulation. Examples of such additional surveillance activities are:

**Strengthening of the Active Surveillance System:** Intensified active surveillance activities, with focus on major hospitals and referral centres, should always be the first step in areas where surveillance indicators fail to reach the expected standards. Orientation of private physicians and briefing sessions in major health facilities, should be considered as instruments to improve the results of active surveillance.

**Stool specimens from contacts of AFP cases:** Generally, contact investigation of AFP cases is not recommended, except in special circumstances. In particular, stool samples should be collected from contacts of AFP cases in any of the following cases:

- if samples cannot be collected from the AFP case itself,
- if the AFP case is detected 1-3 months after the onset of the paralysis,

- if the case occurs in an area where few cases are detected due to either the local geography/demography or a poor surveillance infrastructure,
- in areas with polio-compatible cases

Ideally, samples should be collected from at least five to ten contacts aged less than 5 years of age. A separate investigation sheet to document specimens taken from contacts should be introduced.

**Stool surveys:** Although generally not recommended, in geographic areas where AFP reporting and investigation is unreliable and there are known contacts with polio-endemic areas (i.e. due to large minority populations, traditional trade routes, religious pilgrimages), stool surveys may be required as supportive evidence in demonstrating the absence of ongoing wild poliovirus circulation due to either imported or indigenous virus. Stool surveys however should only be interpreted in conjunction with other evidence of the absence of wild poliovirus.

The most appropriate target age group for stool sampling will depend upon the local epidemiology of polio and the routine and supplementary OPV immunization activities which have been conducted. Usually, surveys should target non-vaccinated children aged less than 5 years. It should be noted that up to 3000 negative stool samples could be needed for negative results to be of any statistical significance.

**Other surveillance activities:** As the eradication initiative progresses, other appropriate surveillance activities may be defined for ensuring the elimination of the ongoing wild poliovirus circulation in high-risk areas.

Examples are "key informant reporting" or "active market searches". Such community-based activities should as much as possible be integrated into the surveillance of other diseases of public health importance (e.g. neonatal tetanus).

Another example of alternative surveillance activities are "active searches during mop-up operations". Mop-up operations are explained under para 8.3. During such searches, highest priority should be given to the identification of AFP cases with onset within 2 months prior to the search.

# 8.1.2 Quality Requirements for AFP Surveillance in non-endemic countries with limited populations: Bhutan and Maldives

Non-endemic countries (Bhutan, Maldives) which do not have sufficiently large populations to produce statistically valid numbers of expected AFP cases, must submit their proposed documentation for certification to the ICCPE by 1999 to ensure there is sufficient time to receive feedback from the Commission and to revise their certification strategy, if needed.

In non-endemic countries with small populations, the regular AFP surveillance strategies (see above) may not yield enough information to document the absence of poliovirus. These non-endemic countries are advised to implement the following strategies, in order to establish polio-free status:

"Zero" case reporting system: Zero reporting [see description under para 8.1.1(2)] will be the most important source of data in non-endemic countries.

**Immediate reporting system:** As in endemic countries, all health facilities in non-endemic countries should report immediately all AFP cases; a mechanism for the immediate investigation of each reported case also needs to be put in place. [Also see para 8.1.1(2)].

**AFP search through record reviews of paralyzed children:** Periodic, retrospective reviews of records of childhood paralysis cases should be conducted by non-hospital staff in all of the paediatric hospitals, rehabilitation centres, infectious disease hospitals, referral hospitals and general hospitals with paediatric and neurology wards. The reviews of records should be conducted at a minimum of every six months and cover at least the three year period immediately prior to certification. Ideally, the attending physicians, such as paediatric neurologists, neurologists and paediatricians should also be interviewed.

A line-listing of paralysed children detected through record reviews should be maintained, with full details of any cases which meet the criteria for AFP. Any previously unreported AFP cases which are subsequently detected should be fully investigated through a follow-up examination for residual paralysis and, if within two months of the onset of paralysis, collection of two stool specimens. The collection of contact specimens may be warranted if the case is detected 1-3 months after the onset of paralysis.

All previously unreported AFP cases which are detected through record reviews should be classified by an expert committee. The case investigation and follow-up forms from these cases should be available for review by the National Committee for the Certification of Polio Eradication and by the ICCPE.

**Synchronized activities with neighbouring countries:** In order to reduce the risk of virus spread resulting from importations, campaigns synchronized with those of neighbouring countries should be organized in border areas. Specimens from contacts of AFP cases can be collected. Other activities may have to be implemented, especially where populations across borders constitute one epidemiological block due to frequent migration, intensive cross-border trade activities and the like.

**High OPV coverage under the routine immunization programme:** Documentation should be prepared, which demonstrates very high coverage by district with at least three doses of polio vaccine among the general population and high-risk groups.

**Supplementary OPV immunization activities:** Supplementary OPV immunization activities should be organized in those geographical areas or among those populations where the OPV3 coverage is less than 80%.

**Extend the age group for AFP surveillance:** Extending the age group for AFP surveillance from 15 years to 45 years will provide further information that polio virus is not endemic in these small countries.

The ICCPE will make the final decision as to the acceptability (for certification of polio eradication) of evidence documenting the absence of wild poliovirus circulation in non-endemic countries which do not meet the established criteria for AFP and poliovirus surveillance. Even in the presence of data suggested above, however, the ICCPE or Global Commission may require additional evidence.

#### 8.2 Accredited Laboratories

To ensure a consistently high level of laboratory performance and competence in the global initiative to eradicate poliomyelitis, a network of accredited poliovirus laboratories has been established under the auspices of WHO. The results of all stool samples from AFP cases, diagnostic specimens

from other cases and alternative surveillance activities that are submitted as evidence supporting polio eradication must be from, or verified by, a WHO-accredited laboratory.

Accreditation provides documentation that the laboratory has the capacity to detect, identify, and promptly report wild polioviruses from clinical specimens.

The accreditation status of each network laboratory is reviewed annually by WHO and is based on proficiency testing and laboratory performance during the immediately preceding 12 months.

Accreditation of laboratories is based on the following six items:

- (1) Laboratory results on ≥ 80% of AFP specimens are reported to appropriate surveillance and immunization personnel within 28 days of receipt.
- (2) Virology tests are performed on  $\ge 150$  specimens per year.
- (3) The non-polio enterovirus (NEPV) isolation rate from all stool specimens from AFP cases is  $\geq 10\%$ .
- (4) The accuracy of poliovirus detection and identification among all virus isolates is  $\ge 80\%$ .
- (5) The score on the most recent WHO-approved proficiency test is  $\ge 80\%$ .
- (6) The score from the on-site review of laboratory operating procedures and practices is  $\ge 80\%$ .

Based on the above six criteria, laboratories will be rated. Accreditation will only be given to laboratories achieving acceptable standards. Laboratories achieving less than 80% on the (combined) score will be placed on a provisional status. The Regional Laboratory Coordinator and the staff from these laboratories, work together to improve the status of the laboratory, and take the following actions:

- effective immediately, all stool samples are double-checked in a reference laboratory. Results obtained by the reference laboratory are to be considered as the "gold standard".
- improvements based on the recommendations of the review should be implemented as soon as possible. This may include additional training sessions for technicians, changes in laboratory procedures, managerial improvements, and others.
- re-evaluation can be provided, when required.
- once the minimal passing score is reached, the laboratory may be re-accredited.
- laboratories that consistently fail to reach the minimal requirements for a two-year period should be thoroughly reviewed, and accreditation could be permanently withdrawn.

#### 8.3 Immunization Activities

**Routine immunization activities:** Data on the yearly routine immunization activities and coverage figures need to be reviewed, including the geographical distribution of such activities, as well as the results (coverage), by geographical area (province, district, etc.). Such data analysis should provide the Commission with an overview of the weaknesses of the routine immunization programme, and highlight areas of poor immunization coverage.

**Supplementary immunization activities:** An overview on polio vaccination campaigns, organized as National Immunizations Days (NIDs) and Sub-National Immunization Days (SNIDs), should be reviewed by the Commission. Basic data should at least include the number of children targeted, the number of children vaccinated, the geographical areas covered, methodology used (mobile teams, fixed posts, house to house visits,...), and problems encountered. Particular attention should be given to coverage figures, special activities, and problems encountered in those geographical areas where routine immunization coverage is reported as, or can be considered as, being low. In countries where NIDs or SNIDs have been discontinued, the rationale for such discontinuation should be closely examined.

**Mop-up immunization activities:** Mop-up immunizations should be initiated in the final phases of the Polio Eradication Programme, and should be implemented in areas that are at that stage still considered to be at high risk for transmitting poliovirus. Normally, mop-up operations are conducted as a house-to-house campaign and cover very large selected areas. Criteria to determine where mop-up immunizations need to be organized are:

- (1) Areas with proven wild poliovirus case(s) in the past three years.
- (2) Areas with poor surveillance (AFP reporting rate below 1/100 000 children; "adequate" stool collection rate below 80%).
- (3) Areas known to have migrating populations, especially with contact with areas where wild poliovirus is still endemic.
- (4) Areas with low immunization coverage rate (OPV3 below 80%).

Mop-up operations are to be organized in addition to, and not in replacement of, NIDs.

Reports on these activities (to be incorporated in the certification document) should be prepared describing the number of children < 5 years of age targeted for immunization, number or percentage immunized with OPV, and the number of house holds visited.

#### 8.4 **Reports on Other Strategies**

Other strategies for certification important for the final report of a country would include: establishment of a "rumour register", publicity campaigns, and a system for incentives. The incentive system is not been readily accepted in all countries, because some national health authorities fear that it would establish a precedent with regard to the reporting of other diseases. In fact, no evidence to support this view has been found. Indeed, the smallpox experience established that incentives were an important method for surveillance. Finally, areas of civil disorder, heavy migration, refugee populations, and border locations should also receive special attention.

#### 9. DOCUMENTATION REQUIRED FROM EACH COUNTRY FOR CERTIFICATION

Each National Committee for the Certification of Polio Eradication must provide sufficient documentation to support the statement that the country is polio-free and that wild poliovirus importations could be readily detected. Furthermore, mechanisms should be in place to respond to the importation of a wild polio virus in an appropriate way. The purpose of the documentation is to provide the ICCPE with a set of standard, internationally accepted data upon which it can base its decision whether or not to certify the country as polio-free. If and when the ICCPE certifies the South-East Asia Region as polio-free, the country documentation will be used by the Global Commission as a basis for endorsing the decision of the ICCPE.

The documentation must cover the following five general subject areas:

- (1) Country background information: demography and geography.
- (2) Structure of the polio eradication initiative in the country: immunization, surveillance and laboratory services.
- (3) Immunization activities and data.
- (4) Surveillance activities and data.
- (5) Laboratory services for polio eradication.

The information required under each of these subject areas is explained in the following sections.

#### 9.1 Country Background Information; Democraphy and Geography

*Purpose:* To rapidly familiarize the ICCPE and Global Commission members with the basic demographics and geography of a country that are relevant to polio eradication and its certification.

This section should include information on the population of the country, relevant vital statistics and major population centres. Minority populations should be reviewed along with other groups which may not fully utilize the health services or who are known to have low immunization coverage. Remote areas, areas with difficult access, and areas which border polio-endemic countries should also be specified.

The country background information should include a national map which indicates the major population centres, bordering countries/oceans, and principal geographic features (mountain ranges, high plateaus and rivers, etc.). Information should be provided on the number, type, and distribution of health care facilities and access of the population to the same.

#### 9.2 Structure of the National Polio Eradication Initiative

*Purpose:* to familiarize the ICCPE and Global Certification Commissions with the organization of the polio eradication initiative in each country (immunization, surveillance and laboratory services).

This section should include information detailing the personnel responsible for polio immunization, AFP and polio surveillance, and enterovirus (poliovirus) laboratory services. This section should also explain the relationship between these units or departments and outline the interaction between e different groups. It is of particular importance to:

- demonstrate that the distribution of AFP/disease reporting sites is representative of the population density and geography of the different areas of the country.
- demonstrate how AFP/polio notifications are transmitted to those responsible for undertaking the case investigation, stool sample collection and implementation of appropriate control measures, particularly in the event of an imported polio case or wild poliovirus detection.
- demonstrate how both positive and negative laboratory results are transmitted to those responsible for initiating a response, whether it be supplementary immunization activities or adjusting routine immunization strategies.

#### 9.3 Immunization Activities Related to Polio Eradication

**Purpose:** to demonstrate to the ICCPE that high routine polio immunization coverage has been maintained and/or that supplementary immunization activities have been implemented to interrupt wild poliovirus circulation, where appropriate. This data should also demonstrate the capacity to limit the spread of imported wild polioviruses by maintaining high levels of population immunity.

This section should contain full information on both the routine and supplementary polio immunization activities that have been conducted in the country. The history of polio immunization should be outlined, including the routine immunization schedule, the polio vaccines that have been used and the immunization coverage that has been achieved.

National immunization figures should be provided for as many years as possible. Immunization coverage should be provided, by province, for the previous three year period to demonstrate homogeneously high coverage. In areas with low immunization rates, there should be evidence of targeted measures taken to improve the coverage.

The data on supplementary polio immunization should include:

- National and Sub-national Immunization Days;
- Mopping-up;
- Outbreak response immunization policy and practice, and
- Other data, as appropriate.

#### 9.4 Surveillance Activities for Polio Eradication

*Purpose:* to demonstrate to the ICCPE that disease surveillance is of a sufficient standard to be able to detect any cases of paralysis due to either indigenous or imported wild poliovirus.

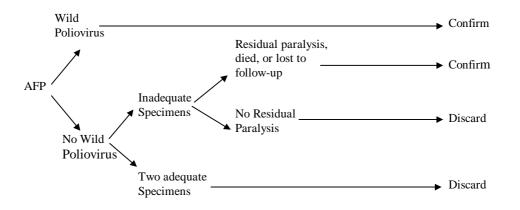
The data covered in this section should serve as the key element, in conjunction with the information on laboratory capacity(see below), for certification of a country as polio-free. This section should include information on both the results and performance of AFP/polio surveillance.

Historical data on the confirmed number of polio cases must be provided, including summaries of the most recent cases. Details should also be provided of the performance of the AFP surveillance system, using the standard performance indicators. Particular attention should be given to demonstrating that surveillance performance has reached the standards set by the Global Commission

(see 8.1: Quality of AFP Surveillance, above). National Certification Committees should also review a random sample of the AFP case investigation forms to ensure they have been properly completed and that the data in the line-listings is complete.

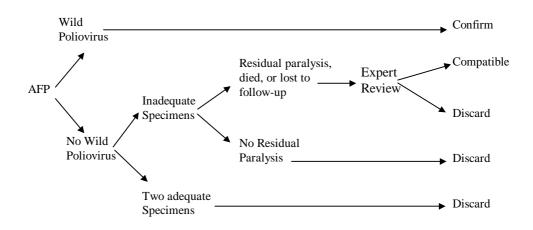
A spot map of AFP cases should be included for at least each of the previous three years. The reasons for any geographical areas with an obvious lack of cases should be explained (i.e. lack of population, poor surveillance), along with information on special surveillance activities that were undertaken, if necessary, in those areas.

The results of all AFP investigations for at least the previous three year period should be summarized using the standard AFP classification system. Figure 2 summarizes the classification of AFP cases based on clinical case definition (earlier stages of the Programme). Figure 3 gives the classification of AFP cases, based on virological case definitions (later stages of the Programme):



#### Figure 2: Classification of AFP cases, using clinical case definitions

Figure 3: Classification of AFP cases, using virological case definitions



Special attention should be paid to the data on polio-compatible cases. These data should include:

- clinical features of the case, including possible alternative diagnoses;
- epidemiological features (case from a high-risk area, clustering of similar cases);
- virological features (other viruses found, contact specimen, specimen double-checked);
- further epidemiological evaluation: investigations of the cluster, active search for additional cases and stool surveys, etc., and
- details on mop-up campaigns (if any).

The Commission should in particular be satisfied that all necessary steps have been taken to ensure that polio-compatible cases do not become the source of, or a link in, wild poliovirus transmission.

#### 9.5 Laboratory Services for Polio Eradication

*Purpose:* To demonstrate to the ICCPE that the laboratory could isolate and identify wild poliovirus in the stool of a paralysed child.

This section should begin with the identification of the laboratory responsible for virology in support of polio eradication, documentation of its accreditation in the WHO Polio Laboratory Network and the results of all proficiency testing that the laboratory has performed (minimum level of 80%). A copy of each independent assessment of the laboratory that was performed should be included in the documentation for the ICCPE. Only the laboratory results from accredited network laboratories, or the results which have been confirmed by an accredited network laboratory, can be considered in the certification process.

The standard laboratory performance indicators (Annex 3) should be documented for each year during which it served as the national poliovirus laboratory (a minimum of three years of performance indicators should be provided).

For as many years as possible, but for a minimum of three years, the following documentation will be required from each national laboratory:

- (1) Laboratory Process and Results:
  - the total number of stool specimens received, the total number of AFP cases from which stool specimens were received and the total number of stool specimens that were processed each year;
  - the timeliness of stool sample processing and reporting by the laboratory;
  - the total number of non-polio enteroviruses that were isolated and the non-polio enterovirus isolation rate;
  - the total number of polioviruses that were isolated, the total number of isolates that were sent for intratypic differentiation, and the total number of AFP cases that had results sent for intratypic differentiation, and
  - the results of all intratypic differentiation studies, by specimen and AFP case.

- (2) Missing Laboratory Data:
  - the reasons for each instance in which a specimen that was received in the laboratory was not processed;
  - the reasons for any failure to send a poliovirus isolate for intratypic differentiation, and
  - the reasons for any missing intratypic differentiation result.

While summary data will be needed for the ICCPE, the National Committees should review and comment on the data management system in the national laboratory and ensure that all specimens can be tracked, if necessary.

#### **10. BORDERS WITH OTHER WHO REGIONS**

WHO/SEAR shares a land border with two other WHO regions: the Western Pacific Region (WPR) and the Eastern Mediterranean Region (EMR). It is recognised that there will be a risk of reintroduction of wild poliovirus to South-East Asia Region from a number of non-SEAR countries along these borders until such time as all countries are certified as polio-free. Therefore, the ICCPE for the SEAR will require sufficient information on the status of polio eradication activities in non-SEAR border countries, particularly Pakistan, to be able to assess this risk and evaluate the appropriateness of measures that are being proposed to detect and respond to importations.

The WHO Secretariat will ensure that appropriate background information on the progress towards polio eradication and certification in adjacent countries is provided to the ICCPE. The ICCPE will also monitor activities in the bordering regions through the Global Commission. If necessary, an extraordinary meeting with the Commission of members from one or more of the other regions will be considered.

#### 11. ROLE OF THE WHO SECRETARIAT IN THE CERTIFICATION OF POLIO ERADICATION

The SEAR/EPI Secretariat will be responsible for supporting the work of the ICCPE and national committees. Upon completion of the first meeting of the ICCPE, the Secretariat will facilitate the finalization of the certification strategy and the establishment of national committees. The WHO/EPI Secretariat will assist with the implementation of the certification strategy at the national level and, when appropriate, act as a liaison between the committees and the ICCPE. The WHO/EPI Secretariat will also be responsible for identifying the unmet resources requirements for the certification process.

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# TENTATIVE TIMETABLE FOR THE CERTIFICATION PROCESS FOR POLIO ERADICATION IN THE SOUTH-EAST ASIAN REGION

January 1997	Appointment of the International Certification Commission for Polio Eradication in the South-East Asia Region (ICCPE) by the Regional Director.		
June 1997	First Meeting of the ICCPE:		
	<ul> <li>briefing of the commission on the latest developments in polio eradication,</li> <li>review of the terms of reference for the Commission,</li> <li>review/updating of the Plan of Action for certification,</li> <li>consideration of special activities which may be required for certification of polio eradication in non-epidemic countries where AFP surveillance does not meet international standards,</li> <li>review of timetable.</li> <li>Preparation of the Report of the 1st Meeting of the ICCPO and Plan of Action for publication (English version).</li> </ul>		
August 1997	Publication of the regional documents for the certification of poliomyelitis eradication.		
August-September 1997	Establishment of a National Committee for Certification in each Member State of the South-East Asian Region.		
November-December 1997	Initial meetings of National Committees:		
	<ul> <li>briefing on duties, TOR, timetable,</li> <li>review of certification protocol and documents,</li> <li>decision on timetable.</li> </ul>		
May 1998	Second Meeting of the ICCPE:		
	<ul> <li>review of the timetable for the certification process,</li> <li>evaluate needs for special surveillance activities in non-endemic countries,</li> <li>review the initial national committee reports on the progress towards certification, difficulties in implementation of strategies and potential solutions.</li> <li>approval of the "documentation manual".</li> </ul>		
October 1998	Workshop for Chairpersons of National Committees for the Certification of Polio Eradication on preparation of documentation for certification.		
October 1998-May 1999	Preparation of documentation for certification focusing on non- endemic countries (Bhutan, Maldives), and recently-endemic countries (Sri Lanka).		

June 1999	Third Meeting of the ICCPE:		
	<ul> <li>evaluate the documentation prepared for certification by non-endemic countries,</li> <li>specify the additional surveillance activities that will be required in non-endemic countries based on experience of the evaluation,</li> <li>report to the Regional Director on the action required for certification of polio eradication by the year 2003 in the Region.</li> </ul>		
March-May 2000	Field visits by members of the ICCPE to certain countries (primarily of the recently-endemic zone).		
June 2000	Fourth Meeting of the ICCPE:		
	<ul> <li>evaluate the documentation prepared for certification by countries,</li> <li>evaluate the quality of AFP surveillance in the Region,</li> <li>report to the Regional Director on the action required for certification of polio eradication by the year 2003 in the Region.</li> </ul>		
March-May 2001	Field visits by members of the ICCPE to certain countries of the endemic zones.		
June 2001	Fifth Meeting of the ICCPE:		
	<ul> <li>evaluate the documentation prepared for certification by countries,</li> <li>evaluate the quality of AFP surveillance in the Region,</li> <li>report to the Regional Director on the action required for certification of polio eradication by the year 2003 in the Region.</li> </ul>		
March-May 2002	Field visits by members of the ICCPE to certain countries of the endemic zones.		
June 2002	Sixth Meeting of the ICCPE:		
	<ul> <li>evaluate the documentation prepared for certification by countries,</li> <li>evaluate the quality of AFP surveillance in the Region,</li> <li>report to the Regional Director on the action required for certification of polio eradication by the year 2003 in the Region.</li> </ul>		
2002-2003	Final Stage of the preparation of documentation for certification		
June 2003	Seventh Meeting of the ICCPE:		
	<ul> <li>evaluate the documentation prepared for certification by countries,</li> <li>decide on the certification of the South-East Asian Region as polio-free,</li> <li>report on the decision to certify the South-East Asian Region as polio-free to the Regional Director.</li> </ul>		
September 2003	Presentation of the Certification Document to the WHO Regional Committee.		

# PROPOSED TIMETABLE FOR NATIONAL COMMITTEES FOR THE CERTIFICATION OF POLIO ERADICATION IN SEAR

September 1997	Appointment of National Committee Members		
November-December 1997	<ul> <li>First meeting of the National Committee:</li> <li>decision on timetable</li> <li>review of the Regional Plan of Action for Certification</li> </ul>		
January 1998	Orientation meeting with national immunization and surveillance personnel responsible for polio eradication.		
April 1998	Briefing document on national certification for the second meeting of the ICCPE.		
June 1998	ICCPE Meeting		
August 1998	Review of ICCPE recommendations with national immunization and surveillance staff.		
October 1998	Regional Workshop for chairpersons on the preparation of documentation for certification.		
December 1997-January 1998*	Site-visits, as required.		
February 1999	Review of the documentation available to date for national certification.		
April 1999	Submit documentation for certification of national polio eradication to the Third ICCPE Meeting.		
June 1999	ICCPE Meeting		
August 1999	Review of ICCPE decisions with national immunization and surveillance staff.		
February 2000	Update of national certification documentation for ICCPE.		
April 2000	Review of certification status by Fourth ICCPE meeting.		
	<ul> <li>review procedure for identifying and responding to wild poliovirus importations</li> </ul>		
June 2000	ICCPE Meeting		
August 2000	Review of ICCPE decisions with national immunization and surveillance staff.		

December 2000-January 2001*	Site-visits, as required.	
February 2001	Update of national certification documentation for ICCPE.	
April 2001	Review of certification status by the Fifth ICCPE meeting.	
June 2001	ICCPE Meeting	
August 2001	Review of ICCPE decisions with national immunization and surveillance staff.	
December 2001-January 2002*	Site-visits, as required.	
February 2002	Update of national certification documentation for Commission.	
April 2002	Review of certification status by the Sixth ICCPE meeting.	
June 2002	ICCPE Meeting	
August 2002	Implementation of ICCPE recommendations.	
December 2002-January 2003*	Site-visits, as required.	
April 2003	Final report on national certification to the Seventh ICCPE meeting.	
June 2003	ICCPE Meeting	
2003 onwards	Updates to the ICCPE, as required, on the status of polio eradication and certification activities until such time as Global certification occurs.	

\* Site visits can be organized any time during the year.

# WHO RECOMMENDED INDICATORS FOR MONITORING THE QUALITY OF AFP SURVEILLANCE AND LABORATORY SERVICES

	Indicator	Minimum Performance Target
1.	Non-polio AFP cases per 100 000 population aged less than 15 years:	> 1 case/100 000
2.	Percentage of routine surveillance sites that provide routine reports (including 'zero reports') on time:	> 80%
3.	Percentage of AFP cases that are investigated:	> 80%
4.	Percentage of AFP cases that are investigated within 48 hours of notification:	> 80%
5.	Percentage of AFP cases with a follow-up examination for residual paralysis at 60 days after the onset of paralysis:	> 80%
6.	Percentage of AFP cases with 2 'adequate' <sup>2</sup> stool samples collected at least 24 hours apart within 14 days of onset of paralysis:	> 80%
7.	Average score of the laboratory on standard WHO proficiency panel testing over the previous three year period:	> 80%
8.	Percentage of specimen results sent from the national laboratory within 28 days of receipt of the specimen in the laboratory:	> 80%
9.	Percentage of intratypic differentiation results available within 90 days of the collection of the stool specimens:	> 80%
10.	Percentage of stool specimens from which a non-polio enterovirus is isolated in the national laboratory:	> 10%

<sup>&</sup>lt;sup>1</sup> 'Zero Reporting' System: all routine reporting sites send a report which states 'zero' AFP (or polio, if appropriate) in the absence of cases.

<sup>&</sup>lt;sup>2</sup> Adequate stools: 2 samples collected at least 24 hours apart, 0-14 days after the onset of paralysis, and arriving in the lab with ice present (or still frozen ice packs), sufficient quantity for complete analysis and accompanied by proper documentation.

#### LIST OF BACKGROUND DOCUMENTS

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