

SEA-Polio-22
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Seventh Meeting of the WHO/SEAR EPI Technical Consultative Group on Polio Eradication and Vaccine- Preventable Diseases

*Conclusions and Recommendations
Calcutta, India, 24 - 26 August 2000*

WHO Project: ICP VAB 200



World Health Organization
Regional Office for South-East Asia
New Delhi
November 2000

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1. INTRODUCTION

The Seventh Meeting of the EPI/SEAR/WHO Technical Consultative Group (TCG) on Polio Eradication and Other Vaccine Preventable Diseases was held in Calcutta, India from 24–26 August 2000. The purpose of the meeting was to review progress made toward immunization goals in the Region, with particular emphasis on achievements in polio eradication, and to advise on activities for 2000/2001 required to interrupt wild poliovirus transmission.

The TCG members present were: Dr Prayura Kunasol, Chairperson; Dr R. N. Basu, Vice-Chairperson; Dr Walter Dowdle, Rapporteur; Dr A. Ramalingeswara Rao, Dr Isao Arita, and Dr Stephen L. Cochi.

The inaugural session was presided over by His Excellency Mr Viren Shah, Governor of West Bengal. The participants were welcomed by Dr Robert Kim-Farley, WHO Representative for India, on behalf of the Regional Director, WHO Regional Office for South-East Asia and the Director-General, WHO. Other welcome speeches were made by: Mr Herbert Pigman, Vice-Chairman of the Rotary International PolioPlus Committee and Co-Chair of the Global Fund-Raising Initiative, Ms Monica Sharma, Deputy Regional Director, UNICEF/ROSA (Nepal) for the Regional Director UNICEF/ROSA, Mr Gautam Basu, Joint Secretary, Ministry of Health and Family Welfare, Government of India, Mr Subrata Mukhopadhyay, Honourable Mayor of Calcutta, Dr Shakeel Ahmed, Honorable Minister of Health and Family Welfare, Government of Bihar, Mr Partha Dey, Honorable Minister In-Charge, Health and Family Welfare, Government of West Bengal, H.E. Mr Viren Shah, Governor of West Bengal. Dr Prayura Kunasol, Chairman, Technical Consultative Group, WHO delivered the vote of thanks.

See Annexes 1 and 2 for list of participants and agenda.

2. GENERAL SUMMARY

TCG congratulates the countries in the South-East Asia Region (SEAR) for their sustained dedication to reducing the burden of vaccine preventable diseases in the Region. The TCG particularly commends the polio-endemic countries for their diligence in implementing the supplemental immunization recommendations from its sixth meeting in Dhaka in May 1999 and its special

meeting in Lucknow in August 1999. Polio eradication in the Region continues at a remarkable pace. High-quality active surveillance in polio-endemic and recently endemic countries in the Region now guides the supplementary immunization activities planned in 2000/2001. The goal of global certification is 2005. Quality, in all components of surveillance and supplemental immunization activities, is key to achieving this goal.

High priority TCG recommendations include:

- Ensuring high quality of all NIDs planned for 2000 – 2001;
- Preparing for massive mop-ups from February 2001;
- Giving special attention to rapid processing of stool specimens and reporting of laboratory data on highly suspect cases;
- Considering any wild poliovirus isolation in 2001 to be a public health emergency and
- Developing national polio eradication strategic plans and budgets for 2001 – 2005.

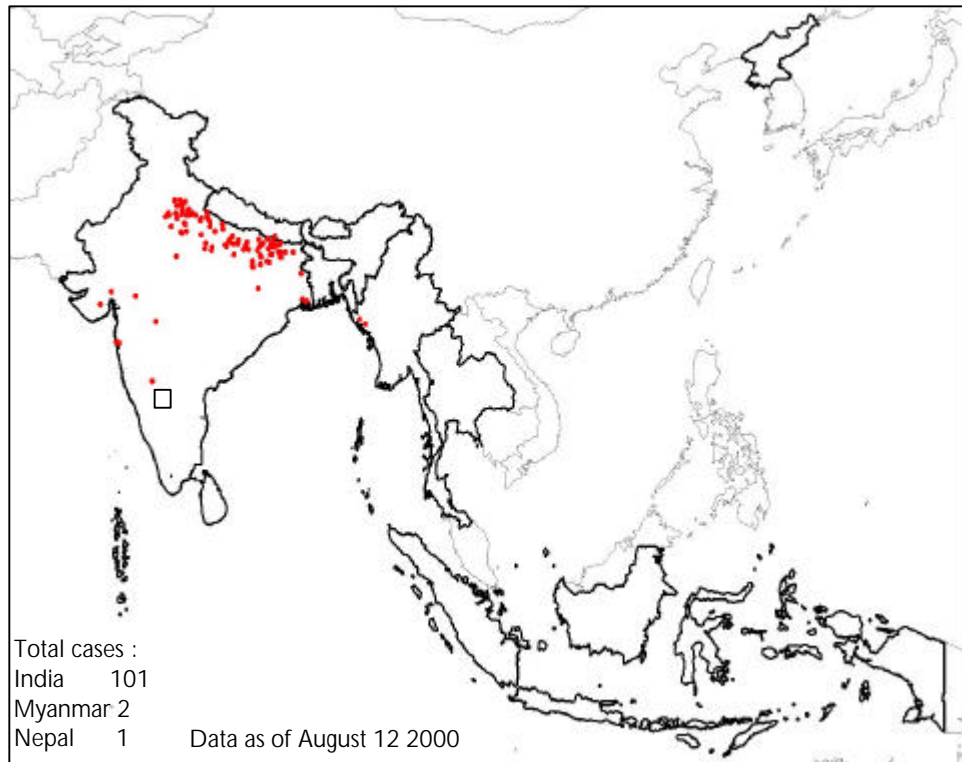
3. POLIOMYELITIS ERADICATION

TCG notes with satisfaction that all Member Countries conduct active surveillance for AFP and report weekly to SEARO. In 1999, the regional non-polio AFP rate was 1.58 per 100 000 population <15 years of age and the adequate stool collection rate was 71.2%. In 2000, the annual non-polio AFP rate is 1.35 and the adequate stool collection rate is 82%. Laboratory-confirmed polio cases in the Region declined by 53% for the period January to July, from a reported 223 in 1999 to 104 in 2000. For the same period in India, laboratory-confirmed polio cases declined by 51% from 204 in 1999 to 101 in 2000. The last wild poliovirus type 2 in SEAR (and the world) was isolated in India in October 1999. (See Map 1)

No wild virus has been detected in Bangladesh in the year 2000 despite greatly improved AFP surveillance. TCG notes that continuation of this favourable trend confirms the efficacy of the present eradication strategy and reaffirms the need to continue immunization pressure on poliovirus through high-quality rounds of NIDs, SNIDs, and mopping up in Bangladesh, India, Nepal and Myanmar.

In 2000, as of 12 August, three Member Countries have reported wild poliovirus: India – 101 (19 P1, 82 P3), Myanmar – 2 P1 and Nepal – 1 P3. The P3 case in Nepal occurred in a Terai town, which shares a border with Bihar. The two P1 cases in Myanmar occurred in two townships close to the border with Bangladesh.

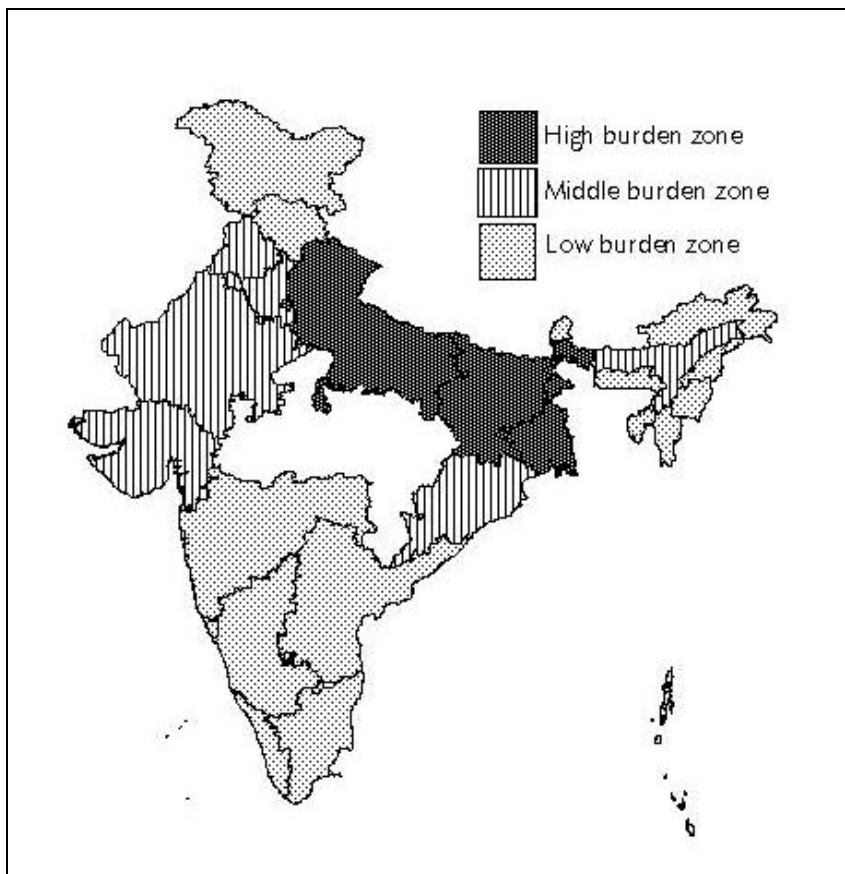
Map 1. Laboratory-confirmed Wild Polio Cases, 2000 South-East Asia Region



Based on a review of the epidemiology of polio in 1999 and 2000, India may be divided into three zones:

- **High Burden Zone (HBZ)** comprising Bihar, Delhi, Uttar Pradesh (UP), and West Bengal (WB);
- **Middle Burden Zone (MBZ)** comprising Assam, Gujarat, Haryana, Madhya Pradesh, Orissa, Punjab, and Orissa, and
- **Low Burden Zone (LBZ)** comprising the remaining 21 states.

Map 2. Laboratory-confirmed Wild Polio Cases, 2000 India



In 2000, the HBZ accounted for 92 of the 101 laboratory-confirmed cases in India, with Uttar Pradesh (UP) reporting 54 (13 P1; 41 P3), Bihar 35 (4 P1; 31 P3), and West Bengal 3 (P3). The remaining nine cases were reported from Gujarat (1 P1; 1 P3), Haryana (1 P3), Karnataka (1 P1), Madhya Pradesh (2 P3), and Maharashtra (3 P3). (See Map 2)

The TCG noted with concern the outbreak of wild poliovirus type 3 in India, which peaked in late 1999, but has continued through the first six months of 2000. The detailed investigation undertaken by the Government and partner agencies suggests that multiple factors contributed to this outbreak. Some of these factors include failure to vaccinate possible due to cold chain problems in the most severely affected states, and inconsistency in the standard OPV potency testing procedures causing vaccine failure. A review of national OPV production and release procedures demonstrated the need to take a number of steps to ensure optimal thermostability of OPV

throughout its shelf life and adequate protection from thermal stresses up to the point of use.

The TCG noted with satisfaction that the Indian regulatory authorities had initiated appropriate steps to ensure that the OPV used in this country met all WHO release specifications. Meanwhile, appropriate studies had been initiated to determine the thermostability and titre degradation of locally-blended vaccine over time, to ensure that the components maintained appropriate potencies over the full vaccine shelf life.

The TCG restated that special attention must be given to stock management and distribution of vaccine, ensuring a proper cold chain and improving the quality of NIDs planning and implementation. This would ensure optimum impact of all vaccine used in the upcoming rounds of SNIDs and NIDs in all SEAR countries including India.

3.1 Surveillance for Detection of Wild Polioviruses

Reported non-polio AFP rate, adequate stool collection rate, confirmed polio cases and poliovirus strain detected, by country - South East Asia Region, 1999 & 2000

Countries	Non Polio AFP Rate*		Adequate stool collection rate [#]		Confirmed polio cases (Wild virus) ⁺		Wild type	
	1999	2000	1999	2000	1999	2000	1999	2000
Bangladesh	0.73	1.10	48	66	395 (28)	54 (0)	P1/P3	
Bhutan	0.00	0.00	0	0	0 (0)	0 (0)	-	-
DPR Korea	0.00	0.00	36	76	0 (0)	0 (0)	-	-
India	1.84	1.85	71	83	2817 (1126)	196 (101)	P1/P2/P3	P1/P3
Indonesia	0.99	0.68	84	88	39 (0)	25 (0)	-	-
Maldives	0.00	0.00	0	0	0 (0)	0 (0)	-	-
Myanmar	0.83	0.58	66	72	50 (4)	13 (2)	P1	P1
Nepal	2.00	1.53	76	81	42 (2)	8 (1)	P1	P3
Sri Lanka	1.90	1.35	88	86	0 (0)	0 (0)	-	-
Thailand	1.92	1.00	84	91	24 (0)	7 (0)	-	-
Total	1.58	1.54	71	82	3367 (1160)	303 (104)	-	-

* Per 100,000 children aged <15 years. Does not include AFP cases pending classification, which would inflate the estimate.

[#] Two Specimen collected within 14 days of paralysis onset.

⁺ Reported confirmed polio cases based on clinical, compatible and virological findings data as of August 12, 2000

Table 1 summarizes country performance on the key indicators of the non-polio AFP and stool collection rates for the years 1999-2000. The improvement in collection rates in Bangladesh is noteworthy. With the deployment of 32 SMOs in Bangladesh and nine in Myanmar, these countries are positioned to achieve surveillance targets by the end of 2000.

Also noteworthy is the increased reporting of cases by DPR Korea. However, information from this country regarding specimen processing has been regrettably not available regrettably.

TCG commends the SEAR laboratories and global network partners for their integration of AFP surveillance and successful use of molecular biology to provide programme guidance and monitoring. See Annex 3 for the report of the SEAR Laboratory Network Meeting.

Fifteen of the 17 laboratories in the SEAR Polio Laboratory Network are fully accredited. The Dhaka laboratory has progressed rapidly and will be reviewed for accreditation later this year. Until then, stool specimens from the Dhaka laboratory will continue to be tested in parallel with CDC, Atlanta. The DPR Korea laboratory has been equipped and staff members have been trained to start polio work. It will also receive support from a WHO/STC. However, DPR Korea has not accepted the recommendation of the sixth TCG that stool specimens should be tested in parallel with the Regional Reference Laboratory in Beijing, China. It remains the only country in the world not served by an accredited laboratory. The performance of the Colombo laboratory in the most recent proficiency panel is of concern and will continue to be closely monitored.

All wild polioviruses (greater than 1 000 in 1999) in the Region are sequenced. Additionally, three high-performing laboratories in the SEAR network at Chennai, Lucknow in India and Bandung, Indonesia now have the capacity to perform intra-typic differentiation. These laboratories will undergo proficiency testing and review for accreditation in the first quarter of 2001. WHO has coordinated the development of laboratory data management software for collaborative review and evaluation by laboratories and EPI programmes for potential laboratory application.

TCG commends India for its plan to extend AFP surveillance to other vaccine preventable diseases at an appropriate time. TCG also approves of the current use of the surveillance network for investigating emergencies, such as the measles outbreak in Uttar Pradesh, India, which can serve as a model for other countries in the Region.

Recommendations

- (1) In 2001, Nepal and Thailand should join India and Sri Lanka in switching to the virological classification scheme for AFP surveillance, having achieved the three recommended surveillance performance criteria in 1999.
- (2) Until the national laboratory is accredited, original stool specimens from DPR Korea should be split and tested in parallel by the WPR Regional Reference Laboratory in Beijing.
- (3) DPR Korea should constitute a National Expert Review Committee to review and classify AFP cases, beginning with those reported in 1999. A joint surveillance review by national and international experts should be conducted in DPR Korea by the end of 2000.
- (4) All countries should have regular meetings of standing Expert Committees to determine whether compatible and/or highly suspicious cases under review should trigger mop-up operations.
- (5) All poliovirus isolates pending intra-typic identification must be tracked to ensure rapid wildvirus identification and immunization action.
- (6) Indonesia and Myanmar should take immediate action to reverse the declining AFP surveillance indicators.
- (7) Particular attention must be given to increasing surveillance in those border areas harbouring joint reservoirs, such as Bangladesh and Myanmar.
- (8) TCG endorses the Global TCG recommendation that all [SEAR] countries develop national strategic plans (surveillance, SIAs, and containment) for 2001 through 2005, the target year for global certification.

3.2 Supplementary Immunization

TCG commends SEAR countries for completing the 1999/2000 supplemental immunization activities recommended at its meetings in Dhaka, May 1999, and Lucknow, August 1999. However, repeated references in reports to logistic constraints, such as delayed flow of funds, insufficient transport and human resources, is a cause for concern.

Activities completed in 1999/2000 and those planned for 2000/2001 are summarized in Figure 1. TCG endorses the proposed schedule.

Figure 1. Supplemental Immunization Activities 2000/2001

Country	2000												2001												
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J
Bangladesh																									
Bhutan																									
DPR Korea																									
India																									
Indonesia																									
Maldives																									
Myanmar																									
Nepal																									
Sri Lanka																									
Thailand																									

NIDs/SNIDs

Vaccine supply was a critical issue in 1999/2000. Late delivery to some Member Countries affected implementation and possibly the quality of the rounds. The issue remains critical in 2000. However, adequate vaccine is anticipated to be available to cover the planned rounds in all 10 countries of the Region. Ninety percent (90%) of the vaccine used in the supplementary immunization rounds in India will come from local producers. See Annex 4 for the Report of the Eighth SEAR-EPI Interagency Coordinating Committee (ICC) Meeting.

India conducted four rounds of NIDs and two rounds of SNIDs in the winter of 1999 and the spring of 2000. Process evaluation of the IPPIs and reports of independent monitors highlighted some important lessons:

- House-to-house activities reached millions of previously unreached children.
- Non-acceptance of polio vaccination is a myth. Where services reached the communities, immunization rarely met with resistance from families.

- The fast chain coupled with the use of VVM can easily support house-to-house activities.
- Quality of NIDs were negatively affected in some areas, and communities may have been missed because of:
 - Top-down planning/micro planning;
 - Poor quality of training and social mobilization;
 - Inadequate involvement of non-health and private sectors and
 - Weak or often non-existent supervision.

Additionally, the qualitative evaluation conducted in Bangladesh and India revealed the shortcomings of relying on zero-dose monitoring solely by the vaccination team (rather than by 64 independent observers and supervisors) and the inadequacy of NID reported coverage for assessing the quality of NIDs.

Recommendations

- (1) NIDs should continue with high quality house-to-house immunization activity in endemic countries as well as in neighbouring countries at high risk for cross-border transmission of wild poliovirus.
- (2) Countries should systematically use key operational indicators for monitoring the quality of NIDs, such as existence of micro-plans and maps, attention to logistics, zero-dose monitoring, VVM, proportion of children and houses missed during the NIDs, number of teams per supervisor, availability and placement of social mobilization materials.
- (3) Although AFP surveillance and the absence of polio is the ultimate measure of the impact of NIDs, process evaluation and monitoring of checklists by monitors/observers on the days of the campaign are critical for identifying shortcomings and taking corrective measures immediately following the campaign. Post-NID evaluation surveys could be used to give more accurate data that could influence subsequent NIDs.
- (4) Trained supervisors and monitors should conduct zero-dose monitoring.
- (5) A plan of action to respond to wild poliovirus importation should be in place now in all polio-free countries in the Region.
- (6) Indonesia should continue to conduct SNIDs in high-risk priority areas.

- (7) Thailand should conduct SNIDs to cover all areas with the following criteria: less than 80% routine OPV3 and NID coverage, sub-certification levels of AFP surveillance, clusters of polio-compatible/clinically-confirmed AFP cases, border areas with recent endemic countries or migrant populations from endemic countries.
- (8) DPR Korea should continue to conduct, high-quality NIDs annually until adequate surveillance information becomes available.

Mopping-up

The remaining polio reservoirs in the SEA Region may be described as areas of dense populations with low routine coverage, inadequate AFP surveillance, bordering on endemic areas, and/or geographically or culturally difficult to reach. Mop-up operations in these areas are critical to interrupt the final chains of transmission and shorten the interval in reaching polio-free status.

In conjunction with Bangladesh, Myanmar responded to isolations of wild polioviruses by conducting mop-up operations in October and November 1999. Two other polioviruses were detected in a neighbouring district in January 2000 because these mop-up operations were small scale. Virus transmission appears to have been interrupted as a result of a larger scale mop-up in February and March 2000 in Rakhine state, which shares a border with Bangladesh. Mop-ups were also conducted in high-risk townships in the delta area south of Yangon and in townships in North Shan state.

In 1999, India conducted limited immunization campaigns around each confirmed case of polio covering populations of 100 000 children. These efforts did not interrupt transmission, primarily because of the need for improved planning and the better geographical reach. In 1999, Orissa conducted widespread well-planned and supervised mop-up operations in high-risk areas with intense wild poliovirus circulation, covering a large geographical area, targeting 1.7 million children. Since October 1999, no wildvirus has been detected in Orissa despite noticeable improvement in the quality of the surveillance system. In 2000, India decided to conduct mop-up operations in response to each laboratory-confirmed case in all 28 states and territories except Bihar, Delhi, UP and West Bengal. As of 12 August 2000, a total of nine wildviruses have been isolated in these areas and over 13 million children targeted for the mop-ups. The four high-risk states were excluded because of widespread poliovirus circulation in 1999.

Recommendations

- (1) Mop-ups are massive, active house-to-house immunization strategies of the highest quality, requiring leadership, detailed planning, and supervision. Planning should be begun now for mop-up operations on detection of wild poliovirus by all countries from February 2001.
- (2) The scale of mop-ups should depend on such factors as recent history of virus transmission, population density and movement, quality of surveillance and evidence of clinically-confirmed or compatible cases. At a minimum, operations should cover multi-district geographical areas. For Bangladesh and India, an appropriate geographical area may be multiple districts or sub-districts targeting at least one million children.
- (3) All countries should analyze clinical/compatible polio cases and conduct mop-up activities for those cases that appear likely to be polio.

4. ENSURING VACCINE SUPPLY AND QUALITY

TCG is pleased that the issue of OPV quality has been fully reviewed and is being resolved through the full cooperation of manufacturers, regulatory authorities, and international partners. This experience also emphasizes the importance of quality assurance capacity in the Region for other childhood vaccines as well, particularly measles, TT/Td, HBV, and combination vaccines.

Recommendations

- (1) Recognizing the tight global vaccine supply, all supplemental immunization activities should be closely coordinated between country planners, manufacturers, UNICEF, Copenhagen and WHO/HQ. A guideline for planning NIDs and SNIDs should include: formulating an overall immunization activity plan one year in advance, scheduling the month of the activity six months in advance and scheduling the day of activity at least three months in advance.
- (2) As a component of the process of ensuring high quality OPV in India, WHO should collaborate with the national regulatory authority in coordinating Good Manufacturers Practices (GMP) audits of local blenders, monitoring use of WHO potency-testing procedures, and providing proficiency tests for manufacturers and national control laboratories.

- (3) All SEAR countries should use a rational wastage factor when estimating OPV requirements for campaigns, ensuring efficient distribution and use of vaccine.
- (4) Bangladesh and other countries scheduled to receive 50-dose vials should reassess their expected wastage to ensure an adequate supply of vaccine for all supplemental immunization activities.
- (5) All countries should ensure that cold chain technicians and health workers are trained to consistently and accurately complete the vaccine arrival report, including VVM status.
- (6) SEAR Member Countries should make every effort to strengthen quality assurance capacity for all vaccines at all levels of manufacturing, national regulatory procedures and policies, product distribution, and end use.

5. ROUTINE IMMUNIZATION

TCG recognizes the need for SEAR countries to focus on polio eradication this year and encourages them in their efforts to achieve this target. At the same time, it notes the need to continue with routine immunization on measles, neonatal tetanus, new vaccines and hepatitis B, vitamin A and immunization, injection safety and vaccine quality.

Recommendations

- (1) All countries should work towards developing surveillance to identify and report adverse events following immunization.
- (2) All countries should prepare long-term plans of action and a detailed listing of resource requirements for accelerated measles control and elimination of neonatal tetanus, for review by TCG at its next annual meeting.
- (3) All plans for routine immunization programmes should include a detailed plan and sufficient budget to ensure injection safety.
- (4) WHO should develop regional guidelines for utilizing AFP surveillance to support accelerated measles control as well as control of neonatal tetanus.

- (5) SEAR countries should conduct routine vitamin A supplementation ensuring that all children aged 6-12 months receive one dose of 100 000 IU of vitamin A. Additional doses of vitamin A should be given where possible during supplementary immunization rounds.

6. WILD POLIOVIRUS LABORATORY CONTAINMENT

Preventing reintroduction of wild poliovirus from the laboratory to the community is the other half of polio eradication. The necessary steps are described in the *WHO Global Action Plan for Laboratory Containment of Wild Polioviruses*. Certification of the Region as polio-free requires completion of the pre-eradication phase of the plan, consisting of national surveys of laboratories and the creation of national inventories of laboratories that elect to retain wild poliovirus infectious and potentially infectious materials. TCG commends SEAR for developing Regional Guidelines and deadlines for completion of the pre-eradication phase requirements. See Annex 5 for the Report of the Third Meeting of the International Certification Commission for Polio Eradication in SEAR.

Recommendations

- (1) TCG endorses the recommendation of the Global TCG that all [SEAR] countries should develop national plans for the pre-eradication phase of containment, consisting of a nation-wide survey of all countries that may possess wild poliovirus infectious and potentially infectious materials and establish a national inventory of all laboratories that retain such materials.
- (2) SEAR should begin pilot implementation of the Regional Guidelines by the end of 2000 in the polio-free countries of the Region.

7. CROSS-BORDER ISSUES

TCG is pleased to learn of the progress of the March 2000 WHO/UNICEF meeting of polio-endemic SAARC and neighbouring countries in Kathmandu.

As a follow-up to this meeting, Bangladesh and Myanmar officials met in June to plan task forces in each country to coordinate cross-border surveillance and immunization activities. However, inadequate surveillance along the Thailand and Myanmar borders remains a concern. See Annex 6 for the full report of the Cross-Border Working Group.

Recommendation

- (1) WHO and SEAR countries should carefully identify AFP blind spots on border areas and aggressively increase the quality of surveillance and supplemental immunization activities. Special attention should be paid to areas that are likely to be shared reservoirs of wild poliovirus.

8. SOCIAL MOBILIZATION

TCG emphasizes the critical importance of social mobilization in successful supplemental immunization activities and endorses the recommendations given below. See Annex 7 for the full report of the Working Group on Social Mobilization.

Recommendations

- (1) Communication guidelines should be established to facilitate high-quality planning, training and implementation.
- (2) EPI managers, senior planners and key decision-makers should be sensitized and oriented in communication.
- (3) At upcoming TCG meetings, country presentations should include the communication aspects of polio eradication efforts.

9. AD-HOC WORKING GROUP ON IMMUNIZATIONS

The initiation of GAVI has created a big opportunity for countries to introduce new vaccines and improve immunization systems. In response to this opportunity, a regional Ad Hoc Working Group is proposed to be formed by WHO and UNICEF. This group will determine an appropriate mechanism to facilitate identification of consultants, coordinate scheduling of GAVI activities, disseminate current information on vaccine development, support ICC activities and liaise on behalf of Member Countries at the global level.

TCG endorses the formation of the Ad Hoc Working Group on Immunizations.

10. MATERNAL AND NEONATAL TETANUS ELIMINATION

As of 1999, five countries in the Region have met the goal of elimination of neonatal tetanus, defined as less than one case of neonatal tetanus per 1 000 live births in every district of every country. Bangladesh, India, Indonesia,

Myanmar and Nepal have not yet achieved the goal. WHO estimates that 91 000 cases of neonatal tetanus occur annually in the SEA Region and 30 000 maternal deaths occur due to tetanus.

Bangladesh, India and Myanmar have implemented aggressive TT campaigns in high-risk areas. Three million women in Bangladesh received a second dose of tetanus toxoid (TT) in August 2000, and nine million women in India received three doses. Supplemental TT immunizations are planned in eight high-risk districts of Nepal during the last quarter of 2000. Indonesia has completed campaigns reaching an estimated eight million women at high risk for tetanus and is currently implementing effective school immunization activities to sustain maternal and neonatal tetanus (MNT) elimination.

TCG commends the South-East Asia Region for leading the implementation of an aggressive high-risk approach and endorses this approach as the most cost-effective strategy to achieve MNT elimination.

Achieving and sustaining MNT elimination requires continued diligence because tetanus can never be completely eradicated. Routine coverage rates of TT2+ must be increased to $\geq 80\%$, the drop-out rate must be reduced and the quality of outreach services must be improved in all high-risk districts identified.

TCG appreciates the ongoing efforts made by SEAR countries to achieve the MNT elimination goal and acknowledges the efforts of UNICEF to make financial resources available to achieve the MNT goal by 2005.

Recommendations

- (1) Plans for the high-risk approach should include a detailed plan and sufficient budget to generate safe disposal of used injection equipment.
- (2) All countries implementing an aggressive high-risk approach should monitor the quality of supplemental immunizations carefully. A thorough review of achievements made in districts initially targeted before expanding the approach to remaining high-risk districts should be carried out.
- (3) Increasing immunization coverage through routine services for children and women in high-risk districts should be a priority to sustain MNT elimination. Micro-planning in high-risk districts should include activities to improve routine immunization coverage and safe delivery practices.

- (4) Update of school immunization programmes in SEAR countries should be discussed at the next TCG meeting.
- (5) WHO should update the Regional Strategic Plan to achieve Maternal and Neonatal Tetanus by 2005 in close collaboration with its partners. Progress made and lessons learnt on implementing the high-risk approach should be presented at the next meeting of the TCG.

11. MEASLES

TCG reiterates its endorsement of the joint WHO-UNICEF SEA Regional Plan of Action (1999) and encourages countries to take necessary steps to implement recommended measles control strategies. Measles control activities should be accelerated only in areas where polio has been eliminated.

The occurrence of the measles outbreak in Sri Lanka illustrates the need for countries to sustain high routine coverage and improve the quality of surveillance. TCG appreciates the efforts made by Sri Lanka in investigating the measles outbreak and utilizing the data to refine its control strategies.

Recommendations

TCG endorses the recommendations from its meeting in Dhaka, 1999 and reiterates the following:

- (1) Countries should prepare a long-term plan of action on measles control and present this at the next TCG.
- (2) Bhutan, Indonesia, Maldives, Sri Lanka, and Thailand, should review data to monitor the build-up of susceptible children, implement specific strategies to prevent outbreaks, and continue to strengthen routine reporting of measles.

12. IMPACT OF POLIO ERADICATION INITIATIVE ON HEALTH SYSTEMS

TCG commends the work of India and partners for evaluating the impact of Pulse Polio Immunization (PPI) campaigns on health systems. The strengths of

PPI include improving the credibility of the health systems at national and local levels, enhancing the morale and improving the relationship of health staff and level of awareness of health priorities in the community. Concerns include the extra work demand on field workers as well as other routine health activities.

Some disruption of other health activities is inevitable, particularly due to repeated NIDs/SNIDs and mop-up rounds. This disruption may be minimized by involving NGOs, CBOs and local communities in other health programme activities.

TCG also notes that these issues were discussed by a Global Working Group in Geneva, December 1999. The group concluded that polio eradication has considerable potential to advance other health activities, but deliberate action is required. The group developed a draft checklist to assist countries to take full advantage of the opportunities offered by the initiative. The group requested SEAR countries to utilize the checklist and provide feedback on suggestions for improvement. See Annex 8 for the checklist.

Recommendations

- (1) Countries should use the opportunity provided by the polio eradication initiative to build on and enhance the image and credibility of the health system and improve the morale and capacity of district programme managers. In particular, the polio initiative should stimulate additional political and administrative commitment to other programmes, notably universal immunization and antenatal care. The initiative can also advance the concept of decentralized planning and implementation of universal immunization programmes with increased accountability at the district and sub-district levels.
- (2) All countries should utilize the proposed polio and EPI checklist to monitor progress towards achievement of the stated goals and provide feedback on suggestions for improvement.

13. EPI DATA QUALITY

Immunization coverage estimates are used to monitor the performance of immunization services at local, national and international levels. These estimates guide polio eradication, measles control, neonatal tetanus

elimination, and yellow fever control activities. They are used to identify areas of weak system performance that may require extra resources and focused attention; and as one factor to consider when deciding to introduce a new vaccine. Coverage levels with diphtheria-tetanus-pertussis vaccine (DTP) are considered one of the best indicators of health system performance and funding agencies frequently consider immunization coverage levels when reviewing applications for support. The 1990 World Summit for Children set international goals for immunization coverage. It is therefore critical that countries should report reliable data. TCG notes with concern the gap between administrative coverage and best estimates (by coverage survey) reported by several SEAR countries as an indication of systemic problems in data generation and management in these countries.

TCG commends SEAR for taking the initiative in addressing this issue and endorses the proposal to conduct a regional consultation.

Recommendations

- (1) In the light of the important uses of immunization coverage data, Member countries should support improvement of the quality of immunization coverage data.
- (2) Member countries should identify local and national experts with detailed knowledge of the policies, structure, and performance of the national immunization programme to participate in the regional consultation.
- (3) The identified participants should review the information provided by WHO with other knowledgeable experts having detailed historical knowledge of the programme.
- (4) The national EPI programme should identify problems in making coverage estimates and recommend solutions to these problems to WHO/SEARO/EPI and their partners.

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Annex 2

AGENDA

**Wednesday, 23
August 2000**

Evening Registration for TCG, Virologists', Social Mobilization, and ICC Meetings at TCG Desk

**Thursday,
24 August 2000**

0800-1300 hrs	TCG Registration continued	
0800-1345 hrs	Meeting of Virologists of SEAR Polio Laboratory Network (Annex 2A)	
0800-1200 hrs	Communication and Social Mobilization Working Group Meeting (Annex 2B)	
1400 hrs	Inaugural session: Presided over by His Excellency Mr Vivek Shah, Governor of West Bengal	
1530 hrs	Welcome remarks and introductions	Dr Palitha Abeykoon, HTP/SEARO
	Administrative announcements	Mr John Fitzsimmons, TO-VAB, SEARO
1545 hrs	Polio eradication	
	(a) Global and Regional Progress	
1545 hrs	Global update	Dr Bruce Aylward, VAB/HQ
1600 hrs	Regional updates	
	<ul style="list-style-type: none">• SEAR update	Dr Arun Thapa, MO-EPI, SEARO
	<ul style="list-style-type: none">• SEAR Polio Laboratory Network update/Virologists meeting recommendations	Dr Nalini Withana, Regional Laboratory Coordinator, SEARO
	<ul style="list-style-type: none">• Update on molecular epidemiology	Dr J.M. Deshpande, ERC Dr Olen Kew, CDC
1700 hrs	Discussion	
	(b) GAVI	
1730 hrs	Update on application progress	Dr Bjorn Melgaard, Dir. VAB/HQ

Friday

25 August 2000

0830-1700 hrs	Polio eradication (contd)	
	(a) AFP surveillance	
0830 hrs	AFP surveillance: Status and plans	Bangladesh DPR Korea
0900 hrs	The Nepal perspective: Surveillance in the Terai	Dr Rajendra Bohara, PEN
0915 hrs	Discussion	
	(b) NIDs/SNIDs: Plans and quality	
1015 hrs	Quality indicators NIDs	Mr Reza Hossaini, TO-Polio, SEARO
1030 hrs	India Process evaluation of NIDs/ SNIDs	Dr K. Suresh, UNICEF
1045 hrs	Social Mobilization Working Group Report	ROSA/SEARO
1100 hrs	Discussion	
1130 hrs	Indian high-burden zone states: plans	Uttar Pradesh, Bihar, West Bengal, and Delhi
1210 hrs	The Thai perspective: stopping/downscaling NIDs	Thailand
1220 hrs	Discussion	
	(d) Mopping-up: Scale and extent: (15 min. each)	
1430 hrs	Regional perspective	Mr Reza Hossaini, TO-Polio, SEARO
	The India experience	Dr S. Sarkar
	The Myanmar experience	Myanmar
1515 hrs	Discussion	
1615 hrs	Vaccine supply update	Dr Bruce Aylward/ Ms Shanelle Hall
1630 hrs	Discussion	
1645 hrs	Report of Jt. WHO/UNICEF meeting of polio-endemic SAARC and neighbouring countries	March 2000, Kathmandu Dr Ellen G. Barclay ROSA/UNICEF
1700 hrs	Summary Polio Eradication	
1730-1900 hrs	Working group session on Cross-border Issues	ROSA/SEARO

Saturday

26 August 2000

0800-1130	Routine immunization	
0800 hrs	Maternal and Neonatal Tetanus Update, Issues	Dr Francois Gasse/ Dr. K. Suresh

Seventh Meeting of the WHO/SEAR EPI Technical Consultative Group

0815 hrs	Investigation of measles outbreak	Sri Lanka
0830 hrs	Discussion	
0900 hrs	VSQ issues	Ms Vidhya Ganesh VSQ, SEARO
0915 hrs	EPI data quality and management issues	Mr Tony Burton, VAB/HQ
0930 hrs	Impact of polio eradication on health systems	Dr N. K. Arora, INCLEN
0945 hrs	Global TCG recommendations and checklist on EPI and polio	Dr Bruce Aylward, VAB/HQ
0955 hrs	Discussion	
1015 hrs	Regional Task Force on Immunization	Dr (Ms)Ellen G. Barclay Dr Brent Burkholder
1030 hrs	Discussion and wrap-up routine immunization	
1130-1330 hrs	ICC Meeting (Annex 2C)	
1130-1330 hrs	ICCPE side meeting	
1500 hrs	Conclusions and recommendations	
1700 hrs	Closure	

Annex 2A

NINTH MEETING OF VIROLOGISTS OF SEAR POLIO LABORATORY NETWORK

Thursday

24 August 2000

0815 hrs	Welcome address Introductions	Dr Palitha Abeykoon,
0830 hrs	Global Polio Laboratory Network	Dr Ray Sanders:
0845 hrs	SEAR Laboratory presentations: Lucknow Mumbai Nepal (Bangkok RRL) Yangon SEARO	Dr T.N Dhole Dr J.M.Deshpande Dr Yaowapa Pongsuwanna Dr Soe Lwin Dr (Mrs) Nalini Withana
0915 hrs	Molecular epidemiology	Dr J.M Deshpande / Dr Olen Kew
0945 hrs	Discussion	
1030 hrs	Non Polio Enteroviruses	Dr Harrie van der Avoort
1045 hrs	Quality Assurance	Dr Harrie van der Avoort
1100 hrs	Laboratory Data Management	Mr Tony Burton
1130 hrs	Laboratory Containment of Wild Polioviruses SEAR Guidelines	Dr Ray Sanders Dr (Mrs) Nalini Withana
1300 hrs	General Discussion and recommendations	
1345 hrs	Close	

Annex 2B

COMMUNICATION AND SOCIAL MOBILIZATION WORKING GROUP

**Thursday
24 August 2000**

0800-1200 hrs	Communication and Social Mobilization Working Group (in parallel with Virologists Meeting)	
0800 hrs	Welcome address	Dr Brent Burkholder- WHO/SEARO
0810 hrs	Regional Overview: <ul style="list-style-type: none">• Regional & Country update, future challenges, WHO-SEARO• Building regional consensus and strengthening political commitment, UNICEF-ROSA• Mobilizing Rotarian for NIDs, Rotary International	
0845 hrs	Country Experiences & Case Studies <ul style="list-style-type: none">• Interpersonal communication and local PA, UNICEF-Bangladesh• Innovative approaches, lessons learned from last rounds of IPPI, India-MOH• Reaching the hard to reach and un-reached community, UNICEF-Nepal Discussions	
1015 hrs	Post NIDs Evaluation Studies (Qualitative) <ul style="list-style-type: none">• Bangladesh- WHO• India - UNICEF	
1045 hrs	Round-Table on Key Themes/Issues - exchange of experience <ul style="list-style-type: none">• Motivating health Workers & Volunteers• Effective use of Surveillance Data for advocacy and programme communication• Communication plan for Mop-Up Operations	

1115 hrs	Special Initiatives <ul style="list-style-type: none">• Feedback from the global polio social mobilization working group, UNICEF-New York• Working with the journalists-PANOS• NGO Initiatives-CORE, regional coordinator
1200 hrs	Closing Remarks

Annex 2C

EIGHTH MEETING OF THE INTERAGENCY COORDINATING COMMITTEE (ICC)

**Saturday
26 August 2000**

1130 hrs	Welcoming Remarks	Dr Brent Burkholder, RA- VAB, SEARO
	Nomination of Chairman and Rapporteur for ICC	
1135 hrs	Approval of 1999 report	Chairman
1140 hrs	SEAR: Looking Ahead	Dr Brent Burkholder
1155 hrs	Updated Estimated Resource Requirements and Shortfalls: 2000-2004	Mr John Fitzsimmons
1210 hrs	Launching the Private Sector Initiative	Mr Herb Pigman
1220 hrs	Accountability: Lessons Learned from SCOVA Review in India	Dr Sobhan Sarkar Mr Kaushik Dutta
1235 hrs	Discussion	Chairman
1250 hrs	Partner Statements	
	Aus Aid	KFW Germany
	CDC	NORAD
	DANIDA	Republic of Korea
	DFID	Rotary International
	European Commission	UNICEF
	International Red Cross	USAID
	Japan	World Bank
	JICA	
1315 hrs	Special Recognition	Chairman
1325 hrs	Summary	Rapporteur
13:30	Closure	

Annex 3

REPORT OF THE NINTH SEAR LABORATORY NETWORK MEETING, CALCUTTA, 24 AUGUST 2000

Chairman: Dr Jagadish Deshpande, Enterovirus Research Centre, Mumbai

Rapporteur: Dr. Olen Kew, CDC, Atlanta

The virologists of the South-East Asia Regional Laboratory Network met in Calcutta on 24 August 2000 at the Seventh Meeting of the SEAR-EPI TCG.

Dr Palitha Abeykoon opened the meeting by highlighting the outstanding progress that has been achieved over the past year in the development of the SEA Regional Polio Laboratory Network. Fifteen laboratories in the Region are now accredited, two more are in advanced stages towards accreditation. All current wild poliovirus isolates from the Region are now being sequenced. Two major laboratory workshops were conducted in the Region during the past year, focusing on intratypic differentiation (ITD) and computerized laboratory data management.

Dr Bjorn Melgaard emphasized of the key role the virologists of the Region in the surveillance for wild poliovirus circulation, and of the crucial value of accurate virological data to the highly-developed polio eradication activities in the Region.

Dr Ray Sanders reviewed the development of the WHO Global Polio Laboratory Network, now consisting of a total of 148 laboratories: 126 National Laboratories (NL), 16 Regional Reference Laboratories (RRL), and six Specialized Reference Laboratories (SRL). The annual global workload has grown to >50 000 stool specimens processed, >3 000 polioviruses isolated, and >1 000 poliovirus isolates characterized by nucleotide sequence analysis. Ninety percent of the Global Network laboratories have been accredited, and all countries (except DPR Korea) are served by a WHO-accredited laboratory. A new laboratory manual is being developed, with stand-alone sections that can be individually updated and distributed by e-mail, which is accessible from the World Wide Web. Non-English language versions are also under development. The target date for publication is January 2001, after incorporation of comments in the advanced draft version to be distributed in October 2000.

1. Review of SEARO Laboratory Network Activities

Dr Tapankumar Dhole described the many activities of the National Laboratory in Lucknow. A key milestone was the isolation in his laboratory of the last wild type 2 poliovirus found anywhere in the world (from an October 1999 case in Uttar Pradesh). The Lucknow National Laboratory processes the largest number of stool specimens of any laboratory in the Global Network.

Dr Jagadish Deshpande reviewed the sharp decline of wild poliovirus circulation in Maharashtra state and in the city of Mumbai, as indicated by the steep fall in the isolation rate for wild polioviruses in the face of greatly increased sampling of children with acute flaccid paralysis (AFP). In Mumbai, which had ~1000 polio cases per year in the early 1990s had three cases in 1999, and one case up to July 2000. The Mumbai RRL is operating efficiently, and has no backlog in ITD. The laboratory uses PCR for rapid ITD, and has designed its own PCR primers for direct and specific detection of indigenous wild Type 3 poliovirus.

Dr Yaowapa Pongsuwanna discussed the comprehensive support the Bangkok RRL has provided to Nepal. In 1999 they processed 452 stool samples from 229 cases, while in 2000 (up to July) 237 stool samples were processed from 119 cases. Wild Type 1 poliovirus was isolated from two cases in 1999, and wild Type 3 poliovirus was isolated from a case in Nepal in 2000.

Dr Aye Aye Thin reviewed laboratory surveillance for wild polioviruses in Myanmar. Careful analysis of the laboratory data revealed that wild poliovirus circulation was localized to communities in Rakhine state bordering Bangladesh. Six cases associated with wild Type 1 polioviruses were detected in the past year (4 in 1999; 2 more in 2000). The Yangon NL was accredited in January 2000.

2. Regional Overview

Dr (Mrs) Nalini Withana emphasized the highly satisfactory progress in the development of the SEAR Laboratory Network over the last year. The number of accredited laboratories has increased from three to 15. The remaining two laboratories are in line for accreditation. Regional workshops in ITD and in computerized data management have contributed to the increased efficiency of the SEAR Network laboratories. A Regional Plan of Action for the Containment of Wild Poliovirus Infectious Materials has been developed, and the important role of network virologists in the containment process

emphasized. Dr Withana described in detail the crucial importance of laboratory site visits, working side by side with network virologists, to identify and correct deficiencies in technique.

3. Molecular Epidemiology

Characterization of wild poliovirus isolates by nucleotide sequencing has become an important component of poliovirus surveillance in SEAR. Dr. Olen Kew reviewed the general concepts of molecular epidemiology, and the current patterns of wild poliovirus circulation in Bangladesh, Myanmar, and Nepal. Dr Jagadish Deshpande gave a comprehensive, up-to-date review of the detailed patterns of poliovirus transmission in India. The biodiversity of wild Type 1 and 3 isolates has declined sharply from 1999 to 2000, indicating the likely breakage of many independent chains of poliovirus transmission in India. The current transmission of wild poliovirus Type 3 in India appears to be sustained by one major chain of transmission (recognized as a single genetic lineage), as opposed to transmission via multiple independent chains of transmission in previous years.

4. Enterovirus Isolation and Internal Quality Control

Dr Harrie van der Avoort discussed the continuing importance of enterovirus isolation data to poliovirus surveillance in the SEAR. Although the enterovirus isolation rate is no longer a criterion for accreditation (because of the shift to L20B cells), these rates should still be checked from the isolation data using RD cells. The seasonality of enterovirus isolation remains a useful indicator of the overall sensitivity of virological surveillance.

Dr van der Avoort also discussed the importance of internal quality control procedures, as the results of regular proficiency testing may not reflect routine day-to-day laboratory performance. A new performance criterion is internal quality control, including the testing of cell culture sensitivity by titration of reference virus stocks with known titres, and spot retesting of specimens confidentially selected by the laboratory director. Another important activity is the critical review of current laboratory data in the context of past laboratory findings. External site visits are an important activity to maintain high proficiency.

5. Laboratory Data Management

Dr Tony Burton described the development of a user-friendly programme for laboratory data management, the Polio Laboratory Information for Action

(PLIFA) programme. The PLIFA programme has been adapted for the SEAR since April 2000, in collaboration with regional virologists. Developmental testing is ongoing, and the PLIFA is expected to be fully operational by October 2000. PLIFA highlights pending samples, and greatly facilitates the integration of AFP and poliovirus surveillance data, potentially substantially strengthening collaboration between programme virologists and epidemiologists. The current format is for NL; a RRL version is under development.

6. Poliovirus Containment

Poliovirus containment is an integral part of polio eradication. Adherence to regional and global containment guidelines is required for regional (and global) certification. Dr Ray Sanders described the WHO Global Containment Plan, and the phased nature of the containment process. Reviewing the progress towards containment in the SEA Region, Dr Withana informed that a Regional Containment Plan of Action had been prepared and distributed and current regional containment activities were on schedule. She stressed the important leadership role of the regional virologists as advocates and experts for poliovirus containment.

Annex 4

REPORT OF THE EIGHTH SEAR-EPI INTERAGENCY COORDINATING COMMITTEE (ICC) MEETING

(Meeting of Partner Organizations for SEAR/EPI, Calcutta,
India, 26 August 2000)

The Eighth Regional ICC Meeting for SEAR/EPI was convened on 26 August 2000 by the WHO/SEARO Secretariat. Mr. Rajendra Saboo, past president of Rotary International, was nominated as the Chairperson, while Dr Steve Cochi (CDC/USA) served as the Rapporteur. Representatives of the governments of Australia (AusAid), Denmark (DANIDA), European Economic Commission, Germany (KfW), Japan (JICA), Republic of Korea, Norway (NORAD) United Kingdom (DFID), United States (CDC, USAID), and other international and bilateral partner agencies such as Rotary International, WHO, UNICEF, International Federation of Red Cross/Red Crescent Societies [IFRC], World Bank and Bill and Melinda Gates Children's Vaccine Program were invited to participate. The minutes of the Seventh ICC meeting held in Dhaka, Bangladesh, 5 May 1999, were approved.

Reporting on actions taken to implement the 1999 recommendations of the ICC, Dr Brent Burkholder, Acting Regional Adviser, Vaccines and Biologicals, WHO/SEARO, presented a vision of what priority activities lay ahead within the SEA Region as the polio eradication initiative drew closer to completion and the full agenda of global immunization moved forward. Major issues identified included: 1) accelerated introduction of new and underutilized vaccines, especially hepatitis B vaccine; 2) strengthening of immunization systems, in particular attention to vaccine safety and quality, improving routine immunization by accessing hard-to-reach groups, and enhancing the quality of immunization coverage data in the Region to ensure reliable monitoring of progress; 3) continuing to strengthen polio surveillance through implementation of the strategic plan of India's National Polio Surveillance Project (NPSP), and 4) stepping up efforts in the accelerated disease control initiatives (polio eradication, maternal and neonatal tetanus elimination, measles control).

Mr John Fitzsimmons, Technical Officer, EPI/SEARO, presented a brief summary of regional resource requirements for the period 2000-2004 and

noted that there were now 17 significant partners associated with the polio eradication efforts in the SEA Region. Over time, there had been a dramatic increase in both the amount of resources mobilized and the timeliness of its utilization. The estimated resource requirements, including contributions of countries, for 2000 for strengthening of routine immunization was US\$ 265 million; and for polio eradication - US\$150 million (9% surveillance, 91% supplemental immunization). Upcoming challenges included streamlining operations within WHO and identifying additional resources for mopping up in 2001.

Mr Herb Pigman of Rotary International reported on plans for a joint venture of with the UN Foundation to raise additional funds for polio eradication through a Polio Eradication Private Sector Appeal from corporations, foundations, and wealthy individuals. This effort was scheduled to be launched with a formal announcement on September 27 at the Polio Summit in New York at the United Nations, and had a fund-raising planning target of US\$ 200 million.

The firm of Lovelock & Lewes and Price Waterhouse gave a presentation on an ongoing (but soon to be completed) review of the polio eradication fund utilization in India at the field level. These funds were channelled from the State level to the field through a mechanism called the Standing Committee of Voluntary Agencies (SCOVAs). The timeliness of passing funds from the state to the field level ranged from 22-35 days, representing a substantial delay for such a time-sensitive programme as polio eradication. A workshop would be conducted in the near future on the findings and recommendations, and a report made at the next India ICC meeting in September.

Partner Statements

Partner agency statements were made by CDC/USA, DFID, IFRC, KFW/Germany, Rotary International, UNICEF, USAID, and the World Bank.

Special Recognition

On the occasion of their departure from the South-East Asia Region, special certificates of appreciation were presented to Dr Jon Andrus (WHO), Dr Steve Atwood (UNICEF), and Mr Alan Court (UNICEF) for their significant service in the cause of polio eradication.

Annex 5

THIRD MEETING OF THE INTERNATIONAL CERTIFICATION COMMISSION FOR POLIO ERADICATION IN THE SOUTH-EAST ASIA REGION, CALCUTTA, INDIA, 26 AUGUST 2000

1. INTRODUCTION

The third meeting of the International Certification Commission for Poliomyelitis Eradication (ICCPE) in the South-East Asia Region (SEAR) of the World Health Organization (WHO) was held in Calcutta, India, on 26 August 2000. Members of the ICCPE and the chairperson of the NCC from Indonesia, Sri Lanka and Thailand were invited to participate in the deliberations of the Seventh Meeting of the SEAR Technical Consultative Group from 24-26 August.

Dr Nath Bhamarapravati chaired the ICCPE meeting. Dr N. K. Shah, Dr N. W. Vidyasagara, Dr Nick Ward, Dr R. N. Basu, Dr Md. Nazrul Islam were present. Of the three NCC chairpersons invited, Prof Priyani Soysa, Chair NCC Sri Lanka and Dr Sujarti Jatanasen, Chair NCC Thailand, attended the meeting. Dr N. K. Arora, Member-Secretary, NCC India, reported on NCC activities in India. Dr Arun Thapa, Medical Officer, VAB/SEARO, acted as the rapporteur. Dr Jon Andrus, former Acting Chief, VAB/SEARO, also participated in the meeting.

2. OBJECTIVES

The objectives of the meeting were:

- (1) To brief Members of the Regional Commission on NCC activities in selected polio-free countries in the Region;
- (2) To discuss agenda items from the Global Certification Commission Meeting, Geneva, May 2000, relevant to SEAR;
- (3) To review the Plan of Action and set an agenda for the Regional Commission for the next year, and
- (4) To discuss expansion in membership of the ICCPE.

3. PROCEEDINGS

The Commission discussed the following:

- Update on NCC activities in India, Sri Lanka and Thailand;
- Agreed to the need to induct additional members to the SEAR ICCPE, and the desirability of having a member from EMR, which is also polio-endemic;
- The need to be proactive with DPR Korea and help that country meet the requirements for certification;
- Agenda items 2 and 3 from May 2000 meeting of the Global Certification Commission and endorsed the resolutions of the Global Commission on these items (Annex 3);
- How to certify conflict-affected areas: Through days of tranquility, SNIDs have been conducted in conflict-areas. While immunization service delivery is going on, its validation is difficult. A mathematical model to predict the probability of a missed reservoir in the Jaffna peninsula was mentioned, but not considered for lack of information on such a model. The issue before the Commission was how to certify conflict-affected areas;
- The need to have more information about the situation of polio on the Thai-Myanmar border;
- The declining surveillance indicators in southern India and the need to avoid complacency, and
- Review of the plan of action and setting an agenda for itself for the coming year.

4. RECOMMENDATIONS

The Commission reached a consensus on the issues discussed and requested that SEARO facilitate the implementation of the following recommendations.

- (1) The Regional Director should be requested to nominate Dr Ali Jafferri, Chair of the ICCPE, Eastern Mediterranean Region and Dr David Salisbury, Chief of Immunization, UK, as additional members to the SEAR ICCPE.

- (2) The ICCPE secretariat, VAB/SEARO, should nominate an ICCPE member to conduct a site visit to DPR Korea during the week of the second round NIDs on 20 November 2000. A professional staff of the secretariat should accompany the Member.
- (3) By November 2000, the ICCPE should convey a formal note to the President of DPR Korea or the Ministry of Health that currently available information is inadequate for certifying that country. This note should be copied to the chair of the NCC of every Member Country.
- (4) SEAR Member Countries, which have been polio-free for more than three years, i.e. Bhutan, Maldives, Indonesia, Sri Lanka and Thailand, should submit a draft country report to the Secretariat in VAB/SEARO, by 31 January 2001. The draft report should include information about conflict-affected and hard-to-reach or silent areas.
- (5) The ICCPE should meet independently in 2001 before the SEAR TCG meeting, allowing for adequate time (2 ½ to 3 days), to review country documentation from Bhutan, Maldives, Indonesia, Sri Lanka and Thailand, and to review the plan of action and timetable to certification. The next meeting should be conducted in March 2001, with dates and venue to be confirmed later. The NCC Chair of Bhutan, Maldives, Indonesia, Sri Lanka and Thailand should be invited to attend this meeting.
- (6) The ICCPE should continue to be invited to participate in the deliberations of the SEAR TCG.

Annex 6

REPORT OF THE MEETING OF THE WORKING GROUP ON CROSS-BORDER POLIO ACTIVITIES

The Working Group on Cross-border Polio Activities met in Calcutta on 25 August 2000. See Annex 1 for the list of participants.

The working group convened to review progress made, gaps identified and plans for the next steps for cross-border activities since the "Joint WHO-UNICEF Meeting of Secretaries of SAARC and Border Countries on Cross-Border Management of Poliomyelitis Coordination" in Kathmandu in March 2000. Countries reported on the following areas of progress made:

1. BANGLADESH-MYANMAR

A high-level cross-border meeting was held in Yangon in June 2000 with representatives from the MOH, MOFA, MOI of both Bangladesh and Myanmar. The draft recommendations call for the following action points:

- Establishment of an easy cross-border travel mechanism
- Immediate notification to the neighbouring country of any AFP case in the border areas (through shared case investigation forms);
- Monthly sharing of basic information (through a bulletin);
- Joint micro-planning for NIDs and mop-ups in border areas, and
- Establishment of local coordination committees (LCCs).

Mop-ups in Myanmar will be from 10-14 October 2000 and 10-14 November 2000, and NIDs will be on 10 December 2000 and 14 January 2001. Bangladesh is planning NIDs on 14-20 November and 18-26 December 2000, and on 5 March and 9 April 2001. As recommended the LCCs should meet beforehand to coordinate these activities, preferably between 15 and 25 October 2000 in Cox's Bazar. Under the agreement reached at the meeting in Yangon, it should be possible for staff to cross the border to prepare for SIAs. PDOs should also become involved in the activity.

A one-day meeting was held in Yangon with MOH staff to discuss communication issues in border areas. This meeting needs further follow-up.

2. BANGLADESH-INDIA

It was recognized that a formal meeting between representatives of both governments was urgently needed, to pave the way for local meetings. Some cross-border coordination, however, was already taking place: e.g. three Bangladesh cases detected in Calcutta were promptly reported back to Bangladesh. While coordination between Bangladesh and India is certainly needed, the issue of the Chitmahals ("enclaves" of Bangladesh in India, and vice-versa) will need special attention. In India, NID activities do not include the Chitmahals. In Bangladesh, the Chitmahals are fully covered during the NIDs and routine EPI services may be introduced in the future. There are also several islands off the coast with Bangladesh and India, which will require specific attention during cross-border coordination.

3. NEPAL-INDIA

Information exchange needs to be strengthened between the two countries, including AFP data exchange. While the NIDs are synchronized between India and Nepal, such is not the case for SNIDs/ Mop-Ups. There was a call for WHO and UNICEF to approach governments to synchronize these supplementary immunization activities (SIAs). While in some locations, local informal cross-border meetings (authorized by local authorities) have been held, local border meetings are urgently needed on a larger scale, especially to coordinate SIAs. Surveillance medical officers can play an important role in this. A starting point could be sharing of communication materials. Nepal may require more funds if it is to carry out mop-ups for wild poliovirus cases found in the border area with India.

4. INDIA-PAKISTAN

The Indian-Pakistan border has only a few well-established crossing points, and immunization centres have been established at these points during SIAs. NID messages, broadcast by TV, are also reaching people across the border, so that people are aware of SIAs being organized.

5. PAKISTAN-AFGHANISTAN

This border has been recognized as requiring special attention because of the intensive movement of Afghan refugees. UNHCR has been fully involved in activities along this border.

6. THAILAND-MYANMAR

A cross-border meeting on TB, HIV and malaria has been held in the past, but not on polio. Myanmar AFP cases detected in Thailand are being reported to Myanmar through SEARO.

7. BHUTAN-INDIA

Bhutan requested that they be included in cross-border discussions at the regional level, in light of their border with India that is vulnerable to polio transmission.

8. RECOMMENDATIONS

- (1) The SEARO and India NPSP websites could play a central role in informing countries on polio activities in Member Countries, including activities in border areas.
- (2) Some governments may require high level bilateral meetings to pave the way for close coordination in border areas. WHO-SEARO and UNICEF-ROSA may help to facilitate this process.
- (3) There is a need for a global mechanism to share information on AFP and polio cases in border areas with WHO and UNICEF. A possible solution could be the regular exchange of case-investigation forms with brief guidelines as to which parties should receive it and within what delay.
- (4) Cross-border meetings should also include in-country regional-level staff.
- (5) The participants agreed that there was a need for a follow-up to the Joint WHO-UNICEF Meeting of Secretaries of SAARC and Border Countries on Cross-Border Management of Poliomyelitis Coordination held in Kathmandu in March 2000, during which progress could be reviewed and further recommendations made. This meeting could be held after the next rounds of NIDs and SIAs are completed, i.e. in mid-2001.
- (6) NGOs and other partners need to be included and involved in cross-border activities at all levels.

Annex 7

COMMUNICATION AND SOCIAL MOBILIZATION WORKING GROUP MEETING, AUGUST 24, 2000

1. WELCOME ADDRESS

Welcoming the group to Calcutta on its 350th birthday, Dr Brenton Burkholder (WHO/SEARO) challenged it to develop clear guidelines for social mobilization, the importance of which has been stressed at the global TCG and the cross-border meeting in Katmandu.

2. REGIONAL OVERVIEW

Mr Reza Hossaini (WHO/SEAR) reported on the status of polio eradication efforts in the Region. He said that even with the introduction of intensified immunization activities, still many children remain unreached. Process evaluation studies indicated that many people reported not being aware of the NID dates. Most of the regional burden was still in India. Many meetings over the past year encouraged increased attention to social mobilization and the development of "new and improved" partnerships (especially with NGOs). At this final stage of polio eradication when countries were reaching zero polio transmission, the advocacy and social mobilization efforts should focus on mopping-up operations and maintaining political will and community commitment. He challenged the group to come with a clear action plan.

Ms Sylvia Luciani (UNICEF/NY) stressed the importance of integration of communication into all EPI programmatic efforts. She commented on three areas including: review of the ACADA communication planning process, stressing that advocacy, social mobilization, and programme communication needed to be integrated and synergistic; findings from the mid-year polio partners meeting on communication held in New York; and (3) identification of priorities for action. Ms Luciani presented four major issues: (a) inadequate partners' co-ordination at country level; (b) low community participation in AFP surveillance; (c) poor quality of communication plans and their implementation; and (d) inadequate dissemination of information, tools and lessons learned.

Possible solutions offered were: (a) promote closer interagency collaboration at country level through joint agency assessment missions; (b) develop simple messages/guidelines on AFP surveillance; and (c) develop messages for service providers, to be adapted at country level; (d) Increase regional communication support to country teams and follow-up on plans; (e) implementation at national and sub-national levels (micro-planning); (f) improve sharing and dissemination of tools; and (g) develop guidelines on basic communication questions for assessment/reviews, directed not only at communication staff, but targeted at country PE/EPI teams.

Dr Ellen Girerd-Barclay (UNICEF/ROSA) invited the group to offer feedback on the draft communication plan for Asia. She invited the group to consider how others could provide technical and financial support. She also provided a brief overview of some of the recommendations made at the cross-border meeting noting that of the 33 recommendations made, 13 focused on communication and social mobilization. Some of the recommendations were:

- Use participatory research for planning (currently, most is guesswork);
- Develop specific strategies for hard-to-reach groups;
- Integrate communication in overall programme planning;
- Develop health workers communication skills;
- Motivate service providers;
- Need to identify new partners – including youth (border patrol police), and
- Focus more on interpersonal communication rather than only media.

Dr Girerd-Barclay also presented recommendations from the Global Communication for Polio Eradication meeting held in New York, NY. Specific recommendations included:

- Ensure systematic inclusion of substantial communication component in all TCG and other technical meetings;
- EPI/polio technical staff from WHO, UNICEF, and CDC should be invited to participate in annual and mid-year communication meetings;

- WHO-HQ should issue guidelines on basic questions for assessments targeted at country epidemiologists, communication, and surveillance. Staff to review through grab samples;
- Communication assessment questions to be included in all reviews/assessments which would require close coordination with communication and EPI staff;
- Issue guidelines for systematic press briefings for use by country-level field offices; need uniform ways to handle controversial issues;
- Develop a system for regular feedback from country-level communicators, and
- Identify people to collect information and disseminate to others.

Mr Hemant Ahuja showed several posters, aprons, hats, vertical banners for street lamps and new sun visors developed by Rotary International. He also announced that Rotary is building on its successful programme called 'Village corps' and bringing it into the city, especially urban slums, calling it 'community corps'. Rotary is also developing a film on the "human chain" to encourage volunteers. He reported that the Rotary leadership has stepped up efforts - making polio work mandatory for every club.

Ms Ellyn Ogden (USAID) reported that, as a result of the New York meeting, USAID had developed some quick and easy-to-use guidelines (check-lists) for various aspects of polio eradication communication, which materials were distributed to participants for their use (See Annex 8).

Dr Pierre Claquin, working on a USAID-funded project in Bangladesh, indicated that research was being initiated to understand "who" the unreached were and "where" they were, to develop a comprehensive profile of zero dose children.

3. COUNTRY EXPERIENCES AND CASE STUDIES

Ms Sadhna Shankar reported India's experience last year with the increased number of supplemental immunization activities and the addition of house-to-house visits after booth-based events. She said that an additional 10 million zero-dose children were reached with these new strategies. These changes meant IEC and social mobilization efforts had to change as well. Feedback from the UNICEF process evaluation revealed that: interpersonal

communication was key in rural areas; visibility of communication materials was low; print materials were present only around district headquarters; booths were hard to see from a distance; there were still resistant groups and hard-to-reach areas; there were problems with both the allocation and dissemination of funds; the distribution of IEC materials was not timely, and service providers became fatigued, especially without any feedback on what they accomplished. She said that Government of India would focus its attention to the most vulnerable states in the high burden zones (four northern states) with incremental efforts made in the middle and low burden zones to address the above issues.

Dr Rownak Khan (UNICEF) shared Bangladesh's experience with communication and social mobilization efforts for the NIDs in which 20 million children under five are targeted. In 1995, a National Communication Core Committee was set up to prepare for their first round of NIDs. The Committee was headed by the Chairman of Rotary's Polio Plus committee and had representatives from the Government of Bangladesh, WHO, UNICEF, IOCH and others. Survey reports started showing a gradual decline in coverage, but with the addition of the combined fixed and house-to-house search, increases were made (to 88%). Dr Khan reported that interpersonal communication and miking were primary sources of information about NIDs and that teachers were major allies in their effort (comprising almost half of their NID workforce). Dr Khan indicated that participatory research has been helpful in identifying opportunities to spread the word about polio days. Issues yet to be addressed included: need to prepare a comprehensive multi-year communication strategy; need to research/understand who and where zero-dose children were; exploring new approaches to encouraging participation during transition from NIDs to mop ups; and discovering and meeting the needs of service providers.

Mr Tehmas R. Manekshan shared Nepal's experience with SNIDs and NIDs which had reached 95% of target population. Now efforts needed to focus on reaching the last 5% (mostly in urban areas). Rotarians were helping in urban areas. While cooperation was good, volunteers were working in unfamiliar areas –so children from the area as well as municipal and teachers turned out to be very helpful. He also reported that outreach efforts need to strengthen the involvement of private practitioners and local political leaders.

Post-NIDs qualitative evaluation studies from India and Bangladesh were presented.

3.1 Evaluation of NIDs in India

Presenting the findings from the 1999-2000 IPPI rounds Dr K Suresh (UNICEF- India) revealed that in many states mass vaccinations was working well with over 95% of children receiving at least three doses of vaccine. Research among parents of zero dose children to understand why their children did not get vaccine revealed the following reasons: lack of attitude among the parents (e.g. complacency); not aware of date/time; not aware of need for additional doses; child ill/too young; not convinced that child needs it. Findings from focus group discussions with beneficiaries included:

- Polio is acknowledged as dreadful disease;
- Polio drops are a known prevention strategy along with cleanliness and healthy food;
- People want more information;
- IEC activities – TV most effective in urban and IPC in rural areas, and
- Need for repeat doses is not understood.

Reasons for not getting vaccinated included: knowledge barriers and attitudinal barriers (psychological fatigue; complacent attitude; traditional barriers; side-effects of drops (cause sickness, polio, or infertility); and preference for private doctor (especially urban upper/middle class).

Research with service providers revealed gaps in training, especially in being able to handle questions about vaccination from parents. Other concerns that service providers raised included: resistance from beneficiaries (derogatory disposition and lack of faith in vaccine); intersectoral coordination; undefined/unclear role delineation; and inadequate compensation for difficult work.

3.2 Evaluation of NIDs in Bangladesh

Dr David Sniadack, (WHO/Bangladesh) presented findings from the evaluation of Bangladesh's NIDs. He indicated that data came from independent observers using check-lists during every NID and second, NID coverage evaluation surveys done as part of the National EPI Coverage Evaluation Surveys. The data from independent observers were used to identify problems during first round so corrections could be made before the second round. He gave several examples of problems identified and corrections that were made (cold chain and asking about AFP cases). The data

from National EPI Coverage Evaluation Survey used WHO's 30 cluster methodology; NGO volunteers as surveyors and weights data according to population figures.

3.3 Discussion of Country Experiences

Mr Gautam Basu (GOI) called for research into effective local level strategies for reaching the unreached. He also called for increased coordination with partners and development of a coordinated media relations strategy to effectively deal with misinformation (e.g., polio drops cause HIV/AIDS) and/or controversial issues (e.g., adverse effects; OPV/IPV). He encouraged everyone to be on the look out for things that could sabotage polio eradication efforts.

Ms Tamali Ganguly (West Bengal) suggested that many of the "don't know/wasn't aware" responses in the coverage surveys really masked underlying issues that people did not feel comfortable admitting. There were many beliefs about vaccine causing stunted growth and/or sterility/infertility.

Dr EGP Haran (IOCH) asked the group to explore whether "resistant" groups were indeed resistant or underserved by delivery system.

Dr Steve Atwood (UNICEF/India) echoed the need to extend the outreach system. He stated that the worker (the person who goes out) should be the focus of communication.

Ms Ellyn Ogden (USAID) –indicated the need to deal with the negative consequences that health workers faced when problems were identified (VAPP or AFP). Health workers were often blamed for problems, so there were no incentives for identifying and addressing problems.

4. SPECIAL REPORTS

4.1 Working with Journalists

Ms Sandhya Srinivasan (consultant for PANOS Institute) presented findings from a WHO-sponsored project about reporting on the polio eradication initiative. The project involved commissioning briefings from journalists in eight high-risk states, workshops in two states, and a report on communication issues emerging from the entire process. General findings included:

- Many journalists took pains to study polio eradication issues, often they did not have access to the right information;

- Information for journalists was rarely presented in a useful format;
- Campaign workers did not cooperate with requests for information;
- Mutual suspicion between the campaign and the media affected media reporting and the public's perceptions, and
- Public information was incomplete and could provoke anxiety.

She reported that journalists had many questions needing detailed answers. A media analysis indicated that the vast majority of press reports were about NIDs followed by outbreak reports and then reports of illness and deaths after OPV. She encouraged a move away from an event-driven media relations strategy.

On the whole, journalists just wanted to provide clear and thoughtful information to the public. She recommended that campaign managers present timely, clear and complete information on the campaign to journalists, make contact with editors, coordinate their efforts, so journalists are not sent from one organization to the next, provide their perspective on controversial issues, respond to inaccurate reports, issue a corrective statement, conduct an inquiry, and take the findings to the community, the press, and back to the campaign itself.

4.2 NGOs Initiatives

Dr Roma Solomon (CORE Group - Bangladesh India and Nepal) shared how the network of 35 US-based private voluntary organizations, receiving funding from USAID, would be participating in polio eradication efforts in the Region. These organizations reach 4.4 million children in the Region, so their participation was vital. NGOs will work to:

- Identify difficult areas and hard to reach population groups;
- Identify and contact potential partners;
- Participate in planning process for NIDs;
- Share maps of target areas;
- Sustain motivation;
- Provide direct support to families with paralyzed children;
- Expand community involvement and mobilize volunteers;

- Training and supervision;
- Assist in outbreak response immunizations, and
- Maintain high levels of routine immunization.

She encouraged the group to involve NGOs because they could help plug some of the gaps and establish and/or reinforce linkages at the local level.

Mrs Aloka Mitra, Project Director, Women's Interlink Foundation told how the NGO was working with the government to reach children in the slums, railway lines, canals, and red-light districts of Calcutta and three other districts in West Bengal. They developed local "teams" to help plan outreach efforts and involved youth clubs, police officers, religious leaders, and mothers. She indicated the need for more IEC materials for dissemination to gain access to the community, thus reaching vast areas effectively and efficiently.

5. OPEN DISCUSSION ON KEY ISSUES

The discussion was organized to address three broad areas: (1) Lessons learnt; (2) Challenges/priorities for intervention; and (3) Identifying technical support needs for the region.

5.1 Lessons learnt

- In reaching hard-to-reach children, the role of IPC emerged as very important;
- Training and motivation of health workers, volunteers and service providers is crucial;
- Importance of participatory research;
- Involvement of children and youth;
- Micro-planning— improve quality and involve community members;
- A need for more sophistication and quality of communication (better quality of communication plans; need to listen better--listen, find out, address);
- Fund flows could affect quality of social mobilization work; deal with bottlenecks;

- Communication versus feedback; allow volunteers to participate in debriefings and evaluation activities so they can see the fruits of their labour. Feedback is vital in maintaining motivation;
- Conquering rumours – need local, credible folks – make them ambassadors;
- Involve academy of paediatrics, get local paediatric spokespeople trained to interact with the major media, and
- Need to strengthen political will in high-burden states in India.

5.2 Challenges/priorities for interventions:

- Training and motivation of health workers, volunteers and service providers is key;
- Dealing with traditional barriers, misconceptions, misinformation by the media;
- Increasing involvement of local leaders;
- Providing/equipping service providers with some communication skills and motivation;
- Non-optimal involvement of NGOs;
- Issue of management of adverse events;
- Addressing cross-border areas, and
- New approaches for reaching the poorest of the poor.

5.3 Technical support needs of the Region:

- Need for better system for information dissemination;
- Need for quality technical communication support;
- Regular opportunities for communication and social mobilization workers to meet to not only share ideas, but also to plan action steps together, and
- Need to increase scientific credibility of communication and social mobilization by presenting rigorous research in the larger TCG meeting.

Annex 8

EPI CHECKLIST, IMPACT OF POLIO ERADICATION INITIATIVE ON HEALTH SYSTEMS

PE Activity	Actions to Strengthen Routine Immunization	Yes/No? How?
Advocacy	<ul style="list-style-type: none"> • State the needs of EPI. • Use nids high visibility to solve routine EPI bottlenecks. 	
Partner Coordination	<ul style="list-style-type: none"> • Expand mandate of ICC to include routine EPI. 	
IEC	<ul style="list-style-type: none"> • Include EPI messages in NIDs training, materials, media. 	
Social Mobilization	<ul style="list-style-type: none"> • Use organizations and people mobilized for Ids to support EPI. 	
Planning	<ul style="list-style-type: none"> • Use polio microplanning/training to improve EPI plans. • Use NIDs target pop date for EPI if more accurate. 	
Cold Chain/ Logistics	<ul style="list-style-type: none"> • Ask NID partners to support parts, maintenance, training. • Apply NID stock management to teach for routine vaccines. • Provide Vaccine Vial Monitor training. 	
Service Delivery and Supervision	<ul style="list-style-type: none"> • Use NID training to refresh EPI skills and knowledge. • Combine surveillance and routine supervisory visits. 	
Surveillance	<ul style="list-style-type: none"> • Gradually include other priority diseases with AFP surveillance. 	
Injection Safety	<ul style="list-style-type: none"> • Ensure safety plan for all SIAs with injectable vaccines. 	
Monitoring	<ul style="list-style-type: none"> • Use key indicators to monitor/document impact on EPI. 	