

**The Fourteenth Meeting of the India Expert Advisory Group
for Polio Eradication
5 - 6 December 2005 Delhi, India**

Conclusions and Recommendations

The fourteenth meeting of the India Expert Advisory Group (IEAG) was convened on 5 - 6 December 2005 in Delhi, with the following objectives:

1. To review progress on polio eradication since the last meeting of the IEAG, held in May 2005;
2. To make recommendations on accelerated strategies to ensure the interruption of wild poliovirus transmission in India.

Dr. R. N. Basu served as Chairperson, with Dr Steve Cochi as Rapporteur. Dr T Jacob John, Dr Jagadish Deshpande, Dr. R. N. Srivastava, Mr Carl Tinstman, Dr. Naveen Thacker, Dr. Raju C. Shah, Dr. Maritel Costales, Dr. Bruce Aylward, and Mr Chris Maher were the other members of the IEAG. Dr. Subhash Salunke, Prof. N.K. Ganguly, Dr. Lalit Kant, and Dr Olen Kew were unable to attend. Union Secretary for Health and Family Welfare Shri Prasanna Hota, and Dr David Heymann, the Special Representative of the Director-General of WHO for Polio Eradication, also participated. Other attendees included representatives from Government of India (including Dr Biswal and Dr Haldar, Assistant Commissioners for Immunization), the States of Bihar, Uttar Pradesh (UP), Delhi, Maharashtra, Jharkhand, and Uttaranchal, CORE, donor agencies i.e. DFID, KfW, EU, Italian Embassy and the World Bank, and from partner agencies, i.e. Rotary International, UNICEF, WHO, CDC and USAID. The IEAG reported to the Additional Secretary, Ministry of Health and Family Welfare, Ms S Jalaja, subsequent to the meeting. The IEAG particularly noted the specific contributions to the proceedings of the meeting by state delegations from Bihar, Uttar Pradesh and Jharkhand, and their reports of progress and future plans.

Findings and conclusions:

As at 5 December 2005 a total of 54 confirmed polio cases with onset in 2005 have been reported in India, 24 from Bihar, 25 from UP, 2 from Jharkhand, and one each from Delhi, Uttaranchal, and Punjab. Fifty-one cases are due to type 1 poliovirus. Only 3 cases due to type 3 have been reported, all in western UP, with the most recent having onset on 13 June in Moradabad district. By 5 December only 10% of October onset AFP cases were still pending primary isolation, so information on the epidemiological situation up to the end of October is nearly complete.

Throughout India, during the peak transmission period August to October, only 25 cases have been detected in 2005 compared with 68 in 2004 and 79 in 2003. In May 2005, there were three endemic areas in India: western UP, Bihar, and Mumbai. **The introduction of monovalent OPV type 1 appears to have had a significant impact,** particularly on transmission in Mumbai and in western UP. The Greater Mumbai area has not detected local transmission of wild poliovirus since April 2005. Transmission is down significantly in western UP, with only 10 cases in the peak transmission period compared to 43 in 2004. The use of mOPV1 also had an impact in Bihar, (there has been a decline in the number of cases in the peak transmission period from 22 in

2004 to 13 in 2005), but it is less distinct than in UP or Mumbai. **This is most likely due to a lower quality of supplementary immunization activities, particularly in northern and eastern Bihar.**

Genetic data indicates that only 2 clusters of type 1 remain active in 2005, (down from 10 in 2003 and 4 in 2004). One cluster has only four representative viruses to date, the other is responsible for all remaining type 1 cases. The greatest diversity within this cluster is found in Bihar, indicating more widespread transmission in that state. All three cases of type 3 detected in 2005 belong to a single genetic cluster.

The IEAG notes the significant efforts that are still being made to improve the programme and to reach more children, through operational and communications initiatives. In particular the progress includes the following:

- High AFP detection rates have been maintained, and the consistency of surveillance has improved (i.e. more districts are achieving basic quality indicators).
- The laboratory network has continued perform superbly in dealing with the greatly increased workload with no loss of timeliness or deterioration in quality.
- Monovalent OPV type 1 (mOPV1) has been used extensively (300 million doses) in infected areas since April 2005.
- The efforts to reach moving populations by targeting transit points and developing a special strategy for railways has lead to more than 5 million children being reached per round in the three endemic states since the April NID.
- The SM Net and communications efforts in western UP and Bihar have been expanded to cover more high risk areas.
- As noted by the IEAG in May, these programmatic improvements have led to a better immunization status against polio for children in India in 2005 than ever before; major improvements have occurred in high risk districts in UP and Bihar, among children less than two years, and in underserved children in western UP.

The IEAG considers that the greatest risk to polio eradication in India is the ongoing transmission in Bihar. From Bihar, in 2005 the virus has been exported to Mumbai, Punjab, Jharkhand, and UP within India, and most seriously, internationally to Nepal. Rapid action must be taken by the Union Government and the State Government of Bihar to ensure that SIAs in early 2006 are of excellent quality and that WPV transmission is finally interrupted in that state.

The very low transmission detected in the peak transmission season of 2005, despite the significant improvement in surveillance sensitivity, indicates that wild poliovirus is now struggling to survive in India. **The period of maximum pressure on the virus, the low transmission season, is now rapidly approaching. The key action in the coming months will be to conduct excellent SNIDs in January and February in UP and Bihar, particularly in the highest risk districts, to ensure that the virus is stopped in the low transmission season. The combination of the low season and the enhanced effectiveness of mOPV1 makes these early rounds particularly critical.** These rounds should be followed by highly effective NIDs before the middle of the year. Efforts to concentrate on high risk districts and communities, heightened surveillance activities, special efforts to reach underserved communities, and reaching children in transit during immunization rounds, must be continued. Polio-free states

and areas must continue to maintain the utmost vigilance and high levels of population immunity through routine immunization to reduce the risk of importation.

The IEAG remains confident transmission can be stopped during the coming low season, that the overall strategies being followed are correct and appropriate, and that they are proving their effectiveness. As in previous meetings, the IEAG calls on the Union Government, State Governments (particularly Bihar and UP), and their international and national partners to maintain focus and momentum.

The IEAG appreciates the Government of India's commitment to polio eradication, evidenced by increased mobilization of Government resources. The IEAG urges the Government to continue its efforts to mobilize required funds to ensure that both vaccine and operational costs can continue to be covered, both from internal sources, and from external funds made available by partners, including through the medium of the ICC.

IEAG Recommendations

Government Oversight

Experience in UP and other states has shown that the engagement and direct oversight of state government, and state and district civil administrations, has a tremendous impact on the quality of polio eradication activities. Conversely, those areas with poor local government engagement, characterized by lack of involvement of district and block medical officers in polio eradication activities, and lack of oversight by district magistrates, quality of activities is often poor. There is a risk of failure in India if key state governments, particularly Bihar, are not fully engaged.

- The Union Government and partners should make immediate efforts to engage the new Chief Minister and Government of Bihar to ensure direct oversight of polio eradication activities in the state. This will be critical in the coming months as Bihar constitutes the greatest risk to achieving polio eradication in India. This engagement could include:
 - A high level advocacy meeting, engaging government leadership, and district administrations, as well as media and other key stakeholders
 - A joint State and Union Government task force for polio eradication in Bihar
 - The establishment of a polio cell reporting to the Chief Secretary, headed by a senior IAS Officer on Special Duty.
- The Government of UP must maintain a high level of engagement at both state and district levels, with particular oversight on the highest risk districts.

Supplementary Immunization Schedule and Vaccine

- For the period January to May, the IEAG reaffirms its recommendation that two rounds of SNIDs and two rounds of NIDs be conducted, as follows:
 - The SNIDs in January and February should cover: Bihar: selected districts of Jharkhand; Uttar Pradesh and neighbouring districts of Uttaranchal;

- Delhi; and Mumbai-Thane-Rajgarh, and other areas as determined epidemiologically.
 - The second round of mop-ups in selected districts in Punjab should coordinate with the first SNID round.
 - mOPV1 should be used in Bihar, western UP and other areas where appropriate during the SNID rounds, as per the Gol plan. All other areas should use tOPV.
 - The NIDs should be planned to follow on from the SNIDs as closely as possible to take advantage of the low season for poliovirus transmission. mOPV1 should be used in selected areas of Bihar and UP during the NID rounds, and in any other areas in which a wild poliovirus is isolated.
- As far as possible the January and February SNID rounds should be coordinated with the Nepal SNIDs.
 - Consideration should be given to a single round using mOPV3 in the known remaining area of transmission in western UP, prior to the high season (possibly during one of the NID rounds). If wild poliovirus type 3 is found in any area mOPV3 should be used in mop-ups for 2 sequential rounds.
 - The Government and partners should continue to plan for 4 SNID rounds in the second half of 2006. For planning purposes these rounds should be expected to cover UP and Bihar, but final decisions on the extent, timing, and type of vaccine to be used, should be made in May and be based on the epidemiological situation at that time.
 - Mop-ups should be carried out in response to the detection of wild poliovirus in polio-free areas as quickly as possible, especially in those states not conducting SNIDs. As per the recommendations of the Global Advisory Committee on Polio Eradication, a plan should be developed within 72 hours of detection of the virus, and at minimum a multi-district response should be initiated as soon as possible thereafter.
 - For 2007 the IEAG recommends that for planning purposes the Government of India and partners should continue to plan for 2 rounds of NIDs in the period January-March followed by 2 SNIDs in the period October-November.

Enhancing the impact of supplementary immunisation activities

The IEAG believes the actions being taken to improve the impact of supplementary immunization activities are having a major effect on the capacity of the programme to reach children at high risk for sustaining wild poliovirus transmission. However there remain high risk areas of lower performance, especially in Bihar, but also in some districts in western UP which must be addressed in order to finally eradicate polio. These districts often suffer from less MOIC engagement and high medical officer vacancy levels.

- The programmatic actions taken to focus on high risk districts, the transit strategy, and the underserved strategy, in order to improve access to children in highest risk areas in the endemic states, and to specifically reach underserved children in western UP, must continue and be fully implemented.

- The districts of greatest focus must be those that have had transmission in the period from April 2005 onwards.
- Plans to deploy additional SMOs to Bihar and to western UP for the January and February rounds are important to enhancing the impact of these activities. Efforts should focus in particular on Bihar, and most especially on the critical 12 districts in north-east and north-central Bihar.
- Additional specific actions should be taken for Bihar as follows:
 - The State Government of Bihar should consider appointing a senior IAS Officer on Special Duty to be responsible for ensuring the engagement of the civil administration in the oversight of polio eradication activities in the districts. This officer could be responsible for a polio cell, working in coordination with the Secretary for Health and reporting directly to the Chief Secretary.
 - At the planned technical meeting in Bihar in December to prepare for the coming rounds, microplans for all high risk districts should be reviewed; particular attention should be paid to the reasons for missing children, and the significance of the high proportion of remaining X houses; strategies for reaching children outside of the house, and for revisiting houses, should be reviewed to identify the best options for reaching more children
 - Block MOICs and Block Development Officers must be involved in planning and preparation at block level, and in supervision of teams in the field. Their involvement should be monitored by District Magistrates and reported to the state Chief Secretary and Secretary for Health. The report of this monitoring process should be shared by state representatives at the next IEAG meeting.
 - The IEAG endorses the programme plans to expand the activities of the SM Net in Bihar, and requests partners to continue to support the SM Net with adequate resources.

Maintaining sensitive surveillance

The surveillance system is operating at a very high level of sensitivity. While noting concerns about the very high rates of AFP reporting from UP and Bihar in particular, the IEAG considers that at this stage of the eradication process in India it is critical to achieve high sensitivity even at the expense of specificity, i.e. the risk of including cases which may not be AFP. **The evidence is clear that by improving the sensitivity of the system, transmission has been detected in several districts where it otherwise would not have been found.** The IEAG reaffirms that the surveillance system is reliable and of high quality.

- The IEAG notes the improvement in surveillance uniformity (including the improvement in surveillance indicators in Chattisgarh, Orissa and Andhra Pradesh) and urges the programme to continue to monitor surveillance at state and sub-state level, and to immediately address identified problems.
- District indicators should continue to be closely monitored. Districts with either low or very high AFP rates should be assessed to ensure that surveillance quality is adequate. Particular emphasis should be placed on those areas at highest risk of importation of wild poliovirus from the remaining endemic areas.
- Detailed investigations of confirmed wild poliovirus cases should continue to include assessments of surveillance quality in the districts concerned, to identify

any possibility that earlier transmission may have been missed, including review of any compatible cases that may have been reported.

Routine immunisation

The IEAG notes the work being done to carry out activities under the national and state plans for immunization services, under the guidance of the National Technical Advisory Group for Immunization. The IEAG is pleased to note in particular that major efforts are being made to rehabilitate the cold chain, that considerable funding has been made available to the state governments by the Union Government for immunization activities, and that independent monitoring of immunization services has commenced in UP and Bihar.

- IEAG recommends that more work must be conducted under the guidance of the NTAG to link the monitoring data on enhanced routine immunisation outreach sessions to actions taken to address service delivery problems, and ultimately to coverage achievement.
- The Union Government and NTAG should consider ways that external monitoring of immunization activities could be initiated in states other than UP and Bihar.
- High priority districts for polio eradication in UP and Bihar should continue to be targeted for intensive efforts to improve routine immunization and reports on progress provided to the NTAG and IEAG.
- All polio-free states should concentrate on improving routine immunization coverage of infants and ensuring sustained high coverage levels, to ensure that they minimize the risk of re-introduction of wild poliovirus.