14th Meeting of the Expert Review Committee (ERC) On Polio Eradication & Routine Immunization in Nigeria

Jos, Nigeria

12 - 13 March 2008

Executive Summary

The 14th Expert Review Committee for Polio Eradication (ERC) was convened just as there has been an upsurge in type 1 polio cases in Nigeria and only 9 months before the end-2008 target date for stopping type 1 wild polio globally.

The ERC noted with some alarm that of the 4 remaining polio endemic countries in the world, Nigeria now accounts for nearly 90% of the type 1 cases, reporting 40 cases by 11 March 2008, compared with just 1 in India, 2 in Pakistan and 3 in Afghanistan.

Although the type 1 upsurge is alarming, the ERC highlighted that more than 50% of these cases are in just 3 states (Kano, Jigawa, Sokoto) and, in all infected areas, the upsurge reflects simply a failure to reach and immunize all children, and the continuing existence of clusters of unimmunised children particularly in high risk LGAs, rather than any fundamental problem with the eradication strategy.

The ERC was encouraged that the end-2008 target to stop Type 1 polio could still be achieved in Nigeria due to (a) the very strong Federal commitment, (b) the very strong State ownership and oversight of activities, (c) the fact that within all of the infected states polio is primarily sustained by a limited number of Very High Risk LGAs, and (d) new tactics in team selection, supervision, social mobilization, and logistics that could be rapidly scaled-up to greatly increase the immunization coverage of children.

5 Major Recommendations to achieve the end-2008 Type 1 Goal:

1) Five states should be recognized as Very High Risk for the global Type 1 target, due to their disease burden and/or risk of spreading polio, in this order: Kano, Sokoto Jigawa, Borno, Katsina. This should be urgently communicated to the Governors and emergency plans developed to reduce the proportion of zero-dose children to less than 10% in the April and May mOPV1 campaigns.

2) Before the April mOPV1 campaign, every LGA in the infected states should be ranked as Very High, High or Moderate risk of missing the end-2008 Type 1 target on the basis of recent cases, campaign performance, and immunization status of children. An urgent meeting between the Governor and the Chairmen of the Very High Risk/High Risk LGAs should be convened to ensure their chronic problems in reaching children are addressed before the April round.

3) Federal, State and LGA authorities and partners should plan for:

- 2 mOPV1 SIAs in up to 20 states in April and May,
- 3 large-scale mop-up rounds around any type 1 case outside these areas,
- 2 SIAs in up to 20 states in August - September (vaccine TBD),
- the addition of mOPV1 to the measles campaigns in late 2008.

It is strongly recommended that these be supplemented with a further mOPV1 round in mid-2008 in the Very High Risk areas and those with breakthrough transmission.

4) Before the April campaign, LGA Chairmen should establish mechanisms to hold vaccinator and supervisor teams accountable to achieving a target of >90% coverage in each ward, as assessed by the independent monitors, with immediate re-vaccination

in any ward that fails to achieve this target. This monitoring should be expanded to include 'out-of-house' monitoring to better assess actual coverage during these rounds.

5) Before the April campaign, additional steps must be taken to improve quality in all Very High and High Risk LGAs, including:

- reviewing and revising microplans,
- analyzing reasons for 'non-compliant/absent' children to adapt tactics,
- appropriate team selection
- mobilizing local leaders to participate and engage their communities
- deploying additional supervisors and monitors

Introduction:

The 14th Expert Review Committee for Polio Eradication and Routine Immunization was convened from 12 - 13 March 2008, in Jos, Plateau State. The meeting convened at a time when optimism engendered by the undoubted progress towards polio eradication in Nigeria throughout 2007 was tempered by a troubling resurgence of wild poliovirus type 1 occurring in several states over the past six months.

The ERC was welcomed by the Executive Director of the NPHCDA, who reaffirmed the commitment of the Government of Nigeria to strengthen routine immunization and eradicate polio, and who then participated in the full deliberations of the ERC. The ERC was also very pleased to have representatives of all states participate fully in the meeting. Representatives of partner agencies attended and expressed their continued strong support.

This report summarizes the main findings, deliberations and recommendations of the 14th meeting of the ERC.

Report on the 13th ERC Recommendations:

The ERC noted the report on the status of implementation of the 13th ERC recommendations, noting that the majority had been fully or partly implemented.

In particular the ERC noted the financial commitments made by the Government of Nigeria, both to polio eradication activities and to the broader immunization agenda. This is a very positive demonstration of engagement by the Government and the ERC looks forward to further direct financial support of polio eradication and immunization activities by the Federal and State Governments, and ongoing support from partner agencies.

Current epidemiological situation:

By any standard it is clear that 2007 was a year of remarkable progress in polio eradication in Nigeria. As of 11 March 2008, a total of 286 cases of paralytic poliomyelitis due to wild poliovirus have been confirmed in 23 states in 2007, compared with 1122 cases in 18 states in 2006. This progress demonstrates what can be achieved with strong political commitment and solid technical strategies.

However, over the last 6 months wild poliovirus type 1 has been staging a comeback particularly in the high risk states in northern Nigeria, sending a very clear warning that despite the progress, conditions for persistence of wild poliovirus transmission still exist, and these conditions must be addressed if WPV transmission is to be finally interrupted.

Wild poliovirus type 1:

WPV1 cases have risen in the last 2 quarters of 2007, and in the first quarter of 2008 to date they are already higher than they have been for several years. As at 11 March, a total of 46 cases of polio have been confirmed in 2008, 40 of which are due to WPV1. States such as Kano and Jigawa, which had been free of WPV1 for several months, have recently been reporting multiple cases. Kano alone has reported 10 cases due to WPV1 with onset in 2008, Sokoto 7 cases, and Jigawa 5cases.

In the global context, what is happening in Nigeria is critical. The global goal is to achieve interruption of WPV1 everywhere in the world in 2008; at this stage, Nigeria accounts for 90% of global WPV1 cases in 2008.

Wild poliovirus type 3:

In contrast to WPV1, wild poliovirus type 3 (WPV3) cases have declined consistently since the first use of mOPV3 in July 2007. In the whole country 6 cases due to WPV3 with onset in 2008 have so far been reported, only one of which was in the endemic zone of the country (in Kano). Over the past 6 months a significant proportion of WPV3 cases have been reported from the outbreak that commenced in south-western Nigeria in the second half of 2007, following importations from endemic northern states. Sporadic WPV3 transmission has also been detected in middle belt states.

Circulating VDPVs

Circulating cVDPVs have shown a declining trend quarter by quarter, but 3 cases were still reported with onset in January 2008. Transmission has persisted only in LGAs of poor performance and very low immunization coverage; as noted by the ERC in their previous meeting, cVDPVs are being detected from un-immunized and under-immunized children, and many LGAs infected with cVDPVs have also reported wild poliovirus, indicating the presence of significant numbers of un-immunized children. Continued attention will need to be paid to identifying and addressing any remaining areas of transmission.

Reasons for the persistence of WPV1 in the endemic states

More than 90% of cases are still being reported from the 12 designated high risk states. Within those states, cases are mostly being reported from LGAs with clear indicators of risk. Most cases occur in LGAs demonstrating one or more of the following characteristics: they have shown persistent WPV transmission in the past, continue to detect zero dose AFP cases, persistently miss more than 10% of children during IPDs according to monitoring data, and continue to have clustering of non-compliant households. *There clearly remain large numbers of children in these areas who are not being reached with immunization, and are repeatedly missed during immunization*

activities. Analysis of the immunization status of wild poliovirus cases demonstrates that they continue to be overwhelmingly un-immunized or under immunized. Clearly there remain large pockets of un-immunized and under-immunized children which must still be identified, reached, and immunized, before transmission of wild poliovirus in Nigeria can be finally stopped.

Conclusions

Despite the number of cases in early 2008, the ERC considers that overall there is clear evidence of continuing progress in polio eradication in Nigeria:

- Wild poliovirus case numbers declined by 75% from 2006 to 2007
- Data from non-polio AFP cases indicate improving immunization status in young children and a reduction in the proportion of children who have never been immunized
- Independent monitoring data demonstrate generally improved coverage of children with OPV during IPDs in 2007
- Social mobilization and communications interventions are increasingly directed by data and are showing an impact
- The engagement and ownership of Federal and State Governments is high

Nonetheless, the continuation of WPV1 transmission is extremely disturbing and requires an urgent and intensive response to ensure that the gains made in 2007 are not lost, and that the national and global goals of stopping WPV1 transmission in 2008 are achieved. Transmission continues in areas where the quality of immunization work is clearly inadequate, and where large numbers of un-immunized and under-immunized children remain. By using available data, LGAs in the high risk states can be prioritized according to risk, and specific actions taken to improve quality of immunization activities.

The ERC expects that following the February 2008 IPD round using mOPV3, WPV3 transmission will be suppressed to very low levels in most of the country, allowing the programme to concentrate on the far more serious issue of eradicating WPV1.

Recommendations:

1. The ERC considers the following to be the strategic priorities for polio eradication in Nigeria for the coming 6 months:
   - priority must continue to be given to the high risk states, which still account for 90% of cases and are the main source of poliovirus transmission; within this group of states, Kano, Sokoto, Jigawa, Borno, and Katsina are at the very highest risk, both because of ongoing transmission and because they export virus to other states and other countries
   - priority should continue to be given to eradicating wild poliovirus type 1, which is by far the most virulent and prone to epidemic spread of the remaining two serotypes
   - while cVDPV transmission continues to decline, it is persisting in some very low performing areas; surveillance data should continue to be closely monitored to ensure that any remaining areas of transmission are mopped up and all transmission stopped

Supplementary Immunization Activities (SIAs)

The ERC is satisfied that the mix of monovalent and trivalent OPV rounds in 2007 and early 2008 has been appropriate, and has been optimal for achieving high levels of population immunity to the circulating poliovirus serotypes.

The ERC reviewed available performance data from the rounds in 2007 and early 2008, including independent monitoring data. Data from several sources indicate that in the high risk states there has been an overall improvement in coverage in 2007, although some fluctuation in coverage has occurred in the second half of the year. The ERC also notes the increasing ownership of polio eradication activities by states, LGAs and local communities, including traditional and religious leaders. Activities to mobilize and engage local communities are being widely conducted across all northern states.

However, there remain many LGAs with significant coverage problems, and as noted earlier *quality of work in these areas must be improved if WPV transmission is to be finally stopped.* The ERC has consistently warned that in high risk areas many children are still not reached during immunization activities. Independent monitoring data and non-polio AFP data show that despite many IPD rounds, certain areas still have high levels of missed children.

Recommendations:

The objective of activities in 2008 should be to fully interrupt all remaining transmission of wild poliovirus in Nigeria before the end of the year.

2. The ERC recommends the following SIA schedule for the remainder of 2008:
   - April and May: 2 SIPD rounds in the all high risk states, and in middle belt states (up to 20 states in all) using mOPV1
   - June - July: mop-ups in designated very high risk LGAs (see below) in the infected states using mOPV1 according to the epidemiology
   - August and September 2008: 2 SIPD rounds in the high risk states (minimum 12 states) using the appropriate OPV according to epidemiology
   - November and December 2008: addition of OPV to the planned measles follow-up campaigns

3. In the April and May SIPDs, consideration should be given to phasing the activity, covering the 5 very highest risk states (Kano, Sokoto, Jigawa, Borno, and Katsina) one week later, to ensure that all available resources can be concentrated on these highest risk areas.

4. The highest strategic priority for all infected states must be to close remaining quality gaps and to immediately reduce the proportion of 0-dose children to less than 10% by:
   a) carrying out a prioritization exercise to classify LGAs as very high, high, and moderate risk, using the latest available data, on the basis of the following indicators:
   - evidence of consistent transmission of WPV in previous years
   - recent transmission of WPV (within the last 6 months)
   - reported cVDPVs

- zero dose AFP cases reported
- average number of doses received by AFP cases
- consistently more than 10% of children missed in IPDs according to monitoring data
- consistently high numbers of non-compliant households reported in IPDs

b) fully implementing a package of interventions in these LGAs including:
- review and revision of microplans
- careful team selection
- deployment of additional supervisors and monitors
- systematically analyzing the reasons for 'absent' or 'non-compliant' children and adapting strategies to reach, identify, and immunize these children
- mobilizing local leaders to participate and engage their communities
- ensuring availability of appropriate add-ons.

5. Local Government authorities must be accountable for the quality of IPDs. LGA Chairmen in the identified very high and high risk LGAs should be convened for special review meetings immediately prior to each IPD round, to review past performance, identify problems, and decide on solutions. These meetings should be convened by the state Health Commissioner and Commissioner of Local Government. Following each meeting a full report should be made to the State Governor.

6. Before the April campaign, LGA Chairmen should establish mechanisms to hold vaccinator and supervisor teams accountable to achieving a target of >90% coverage in each ward, as assessed by the independent monitors, with immediate re-immunization in any ward that fails to achieve this target.

7. End-process monitoring and out-of-house monitoring data must both be used to guide efforts to improve the quality of work; the monitoring process must be carefully supervised to ensure that data are reliable and an accurate indication of the true situation.

8. In the coming months, any polio importations into polio-free states must be rapidly and effectively responded to, to ensure that transmission does not become re-established in non-endemic areas. This includes the area of the WPV3 outbreak in the south-west, where mop-ups should continue until transmission is stopped. ***Following any detection of WPV in any non-endemic state, emergency outbreak response/mop-up rounds should be implemented as per previous ERC recommendations and the May 2006 World Health Assembly Resolution.***

9. Any LGA in which cVDPV is detected should immediately carry out 2 rounds of LIDs using tOPV.

10. As previously recommended, a full schedule of 2 NIDs and 4 SNIDs should be planned for 2009, with provision for large-scale mop-up rounds as required.

Surveillance & Laboratory

Surveillance quality in general continues to remain high. Focussed surveillance reviews are now being carried out in key states. The ERC considers that it is critical to maintain a high level of vigilance on surveillance quality, particularly as the

programme enters the final phase of eradication. The laboratory performance indicators have further improved through 2007 and into 2008. The ERC noted in particular the significant improvement in timeliness in both national laboratories in 2008. The programme is receiving good data to inform programme decisions.

Recommendations:

11. The programme should fully implement the plans for local surveillance reviews to identify any area where there may be weaknesses in the system.

12. Particular attention should be paid to areas failing to meet surveillance indicators, detecting longer chain (orphan) viruses, and with significant mobile or nomadic populations.

13. Given the cross border transmission of wild poliovirus between Borno and Chad, and between other northern states and Niger, particular attention should continue to be given to ensuring that surveillance quality is of high standard in these areas.

Social Mobilization and communications for polio eradication

The ERC noted progress made towards implementing recommendations previously made for social mobilization and communications. The programme is increasingly using data to drive activities, in particular with respect to community dialogues, the expansion of engagement of local traditional and religious leaders, the expansion of engagement of Quranic school teachers, both male and female, and other innovations.

Recommendations:

14. The ongoing efforts to engage communities and community leaders (religious, traditional and political) should continue to be pursued and expanded with priority given to the highest risk LGAs (see above). These efforts should continue to be documented and evaluated to assess impact. States should develop data-based strategic plans to ensure appropriate social mobilization interventions are targeted to these high risk communities.

15. At national and state level a process of engaging and re-vitalizing mass media should be undertaken, to highlight polio eradication activities and the importance of immunization.

16. Epidemiological and programme data must be used to guide social mobilization and communications interventions; at state level, government and partners should ensure that the capacity exists to collect, analyze, and incorporate data into communications activities, and the impact of these activities assessed through appropriate evaluation and monitoring.

Routine Immunization

The ERC noted the ongoing activities to improve routine immunization coverage. In particular it is encouraging that the Federal Government has improved the timeliness of provision of funding for vaccine supplies to the national programme. However the

ERC continues to believe that there is a massive amount of work to be done to put routine immunization on a firm footing.

Recommendations:

17. The ERC would like to continue to receive progress reports on the status of REW implementation at LGA level, and any evidence of impact on session frequency and coverage.

18. States should review and update their plans of action for the delivery of routine immunization services, taking into account data on the monitoring of immunization sessions and vaccine availability, to improve the consistency of delivery of services.

19. The ERC endorses the Logistics Working Group priorities for 2008, for analysis of the cold chain inventory in advance of the introduction of new vaccines, and a follow-up vaccine security mission.

20. Now that stable funding has been secured for vaccine supply, NPHCDA and the states should ensure that stock-outs of vaccine at any level do not occur.

Measles Control Activities

The ERC received a report on the situation of measles control. Surveillance for measles is becoming more reliable, and is showing the expected increase in measles incidence as time goes on from the 2005/2006 national catch-up campaigns. The NPHCDA presented plans to conduct an integrated follow-up measles campaign in 2008, including other child survival interventions, and OPV.

Recommendations:

21. The ERC endorses the plan for the 2008 integrated measles follow-up campaigns in November and December 2008. The lessons from previous campaigns should be applied to improve quality of the proposed campaign.

Next ERC Meeting

Given the current volatile epidemiological situation and the intensity of activities in the final stages of eradication, the ERC proposes that its next meeting should be scheduled for 9-10 July 2008.