12th Meeting of the Expert Review Committee (ERC) On Polio Eradication & Routine Immunization in Nigeria

Abuja, Nigeria

3-4 May 2007

Executive Summary

The 12th ERC was convened at a historic point in the Global Polio Eradication Initiative, coming 2 weeks before the World Health Assembly deliberates the intensification of activities in the last 4 countries in the world that have yet to interrupt indigenous wild poliovirus, of which the only one in Africa is Nigeria.

The major ERC finding was the continued progress towards routine immunization strengthening and polio eradication, with a doubling of routine coverage and a 78% decline in polio cases in the 1st quarter of 2007 compared with 2006. The ERC noted the very steep >90% decline in type 1 polio, the most virulent and epidemic-prone type. The ERC highlighted however, that the same number of states are still reporting polio, requiring continued large-scale, intensive Supplementary Immunization Activities (SIAs/IPDs) in 2007-8. Although most cases in 2007 have been type 3 polio, the ERC expects this to drop rapidly as 3 of the last 4 SIAs used trivalent OPV.

The ERC was most impressed by the strong statements of commitment and support for immunization strengthening and polio eradication by the Executive Director and Chairman of the Board of the National Primary Health Care Development Agency.

Major Recommendations:

1. During the NPHCDA's ongoing transition, federal authorities should give special attention to ensuring critical functions continue, including rapid finalization of the 2007 SIA calendar, domestic financing for SIAs, vaccine procurement (with UNICEF), and strong advocacy with state, religious, traditional and other leaders.

2. Federal authorities should fast-track licensing of mOPV3 for use in late-July.

3. The focus of intensified activities should be to eradicate type 1 polio in the 6 *very high risk* and *high risk* states, Kebbi (high cases) and Sokoto and Borno (exports).

4. The SIA/IPD schedule through end 2007 should be:
   - *Very High Risk, High Risk* and *Medium-High Risk* States: 23-26 June SIA using mOPV1; July/August SIA using mOPV3; Sept and Nov SIAs with the vaccine depending on the epidemiology,
   - Other states or areas of states should be included depending on epidemiology.

5. For the purposes of planning, 2 national SIAs should be planned for early 2008, with 4 subnational SIAs in the remainder of the year.

6. High quality training for all teams must be ensured, especially IPC training. Additional committed, capable supervisors and monitors must be identified from medical schools or other appropriate institutions, and the best possible supervisors targeted to the high risk LGAs and wards.

7. A coverage benchmark for independent monitoring should be established which if not met will require vaccination teams and supervisors repeat work in that area.

8. The expansion of the 'Reaching Every Ward' strategy to improve routine immunization must be expanded to the remaining 40% of LGAs by end-2007.

Introduction:

The 12th Expert Review Committee for Polio Eradication and Routine Immunization was convened at a historic time in Nigeria, within 1 month of the completion of state and federal elections and only 2 days after the National Programme on Immunization (NPI) was merged with the National Primary Health Care Development Agency (NPHCDA).

This context is particularly important given that the last ERC, in December 2006, had reported tremendous progress in re-engaging communities in routine immunization and polio eradication (through the new Immunization Plus Days strategy) and substantially reducing the burden of poliomyelitis. At that time the ERC highlighted the risks to this progress during the first 6 months of 2007 due to the concentration of leaders and resources on the election process. This was the first meeting of the ERC since the *Urgent Stakeholder Consultation on Polio Eradication* that was convened by the new Director-General of the World Health Organization on 28 February 2007. It also precedes by 2 weeks the deliberations of the World Health Assembly on progress towards eradication in the last 4 remaining countries with indigenous poliovirus, the only one of which in Africa is Nigeria.

The ERC was delighted to be welcomed by the Executive Director of the NPHCDA and Chairman of the Board, both of whom reaffirmed the commitment of the Government of Nigeria to strengthen routine immunization and eradicate polio, and participated in the full deliberations of the ERC. The ERC was also very pleased to have the 'Very High Risk' states of Kano, Katsina and Jigawa participate fully in the meeting, given the central importance of these states in the Global Polio Eradication Initiative.

This report summarizes the main findings, deliberations and recommendations of the 12th meeting of the ERC.

Recommendations:

1. To ensure that the 2006 gains in routine immunization and polio eradication are sustained and built on, as the NPHCDA fully assumes the functions of NPI, the ERC recommends that the Federal Ministry of Health and NPHCDA give particular attention to the following critical federal-level functions during this transition period:
   - provide overall strategic and technical leadership of polio eradication, including rapid finalization and communication to states of the 2007 IPD calendar and dates,
   - finalize the domestic financing commitment for IPDs in 2007, to facilitate planning and assistance by international partners,
   - ensure continuity of vaccine procurement, in coordination with UNICEF,
   - continue to provide strong advocacy with state, religious, traditional and other leaders for their direct engagement in routine immunization and polio eradication.

Report on the 11th ERC Recommendations:

The ERC used this opportunity to recognize and congratulate *in absentia* the NPI Chief Executive ad interim for her strong leadership while operating under Presidential Mandate in 2006, and its achievements during her tenure.

The ERC was very grateful for the frank and impressive report on the status of implementation of the 11th ERC findings, noting that of the 19 recommendations 9 had been fully implemented, 4 were partially achieved and 6 were still in progress. The ERC was particularly impressed that the recommended IPD schedule for early 2007 had been implemented despite the challenges posed by the election period.

The ERC regretted to learn that among the recommendations that had not been achieved, an mOPV3 had not yet been licensed, there was still inconsistency in the 'pluses' offered during the IPDs, domestic financing commitments for IPDs were unclear, and local level microplanning and supervision was still deficient.

Recommendations:

2. To optimize the tools available to states to protect their children from polio as effectively as possible, the ERC stresses the need for appropriate federal authorities to fast-track the licensing of mOPV3 for use as early as late-July or early-August in an IPD in key type 3-affected states.

Wild Poliovirus Transmission:

As of 1 May 2007, a total of 63 cases of paralytic poliomyelitis (polio) have been confirmed in 15 states, compared with 288 cases in 16 states during the same period in 2006. ***Most assuring, this marked decline in the burden of wild poliovirus in Nigeria is primarily due to a steep fall in type 1 polio, the most virulent of the remaining wild poliovirus types, and the most likely to spread nationally and internationally*** (type 1 cases declined from 258 to 15 cases during the same period in 2006 and 2007).

The ERC noted that while progress appears to be relatively uniform across the polio-infected northern states, fully 60% of cases are still being reported from the 3 states designated as *very high risk* and an additional 15 % from 2 of the 3 *high risk* states. Apart from these states, the high risk state of Bauchi and the medium-high risk state of Kebbi are between them reporting more than 20% of cases in 2007, and may in the near future require reclassification as *very high risk* if the situation does not improve.

The ERC highlighted that in addition to the sharp, 75% decline in polio cases in 2007 compared with the first quarter of 2006 there are other strong indicators of real progress towards polio eradication including:

- a month-to-month decline in polio type 1 cases between Jan and March 2007, compared with a month-to-month increase in each of the 3 previous years.
- a reduction in the number of circulating genetic clusters of type 1 polio from 42, to 22 to 9 in 2004, 2005 and 2006, respectively.
- a reduction in the number of Local Government Areas (LGAs) reporting polio cases, from 125 in the 1st quarter of 2006 to 35 to date in 2007.

While the ERC noted that there has been an increase in type 3 polio in the 1st quarter of 2007 compared with the same period in 2006 (from 30 to 44 cases), the ERC stressed that it expects this increase to be transient as 3 of the last 4 IPD rounds have been with trivalent OPV and a round of mOPV3 is tentatively planned for mid-2007.

Recommendations:

3. From a strategic perspective, the ERC stresses that based on the current and evolving epidemiology of wild poliovirus in Nigeria, the focus of the intensified eradication activities should be as follows:
   - from a burden of disease perspective, priority must continue to be *very high risk* and *high risk* states, as well as Kebbi, which together have 78% of cases,
   - from an international perspective, attention must also be given to Sokoto and Borno from where there continues to be spread to Niger, Cameroun and Chad,
   - from a virologic perspective, the highest priority should continue to be eradicating type 1 poliovirus, which is by far the most virulent and prone to epidemic spread of the remaining two serotypes.

Supplementary Immunization Activities (SIAs)

At the 11th meeting the ERC had recommended as a guideline that in both 2007 and 2008, 2 nationwide SIAs/IPDs should be planned, and that additionally 4 SIAs/IPDs should be planned for very high risk, high risk, and moderate-high risk states, with 2 SIAs/IPDs planned for the moderate risk states. Since the 11th ERC meeting in December 2006, the following IPD rounds have been carried out: one national round in January 2007 using trivalent OPV (tOPV), one round in 12 northern states in early March using tOPV, and one round in 147 high risk LGAs in late March, using mOPV1. The tOPV rounds in November 2006 and January and March 2007 should reduce the risk of extensive WPV3 transmission and protect against the emergence and spread of a cVDPV.

The ERC reviewed available performance data from these rounds, including new independent monitoring data from 'outside houses' that is proving particularly valuable in confirming progress and identifying problem areas. While there remain important gaps in SIA performance, data from several sources indicate that in the northern states there has been an overall improvement in coverage over the 3 rounds, building on the improvements in the second half of 2006. This is further supported both by epidemiological data, and by data on the immunization status of non-polio AFP cases. ***These achievements are particularly impressive given the extremely challenging circumstances of early 2007 due to the state and federal elections during this period.***

The ERC noted the increasing ownership of these activities by states, LGAs and local communities, including traditional and religious leaders. ***The engagement of the three highest risk states (Kano, Katsina, and Jigawa) in particular is greatly improved, with these states now collaborating closely to exchange best practices and to improve the quality of IPD activities.*** Activities to mobilize and engage local communities are being widely conducted across all northern states.

While these developments are extremely encouraging, independent monitoring data show that there are still many children not being reached during immunization rounds, up to 18% in some states; the ERC noted in particular that the 3 *very high risk* states and Bauchi all had >15% missed children in at least 1 of the previous 3 rounds. The ERC stresses that to achieve the goal of eradicating polio it will be necessary to achieve high coverage consistently in all infected and high risk states. While it is vital to continue efforts to engage communities and families, much of the previous community reluctance to accept immunization has been overcome.

The quality of work by each vaccinator team, and their supervision, has now become the critical factor in reaching and immunizing sufficient children to stop polio transmission. Both the work of vaccinator teams and supervisors must be urgently addressed, especially in the highest risk LGAs.

Recommendations:

4. Taking into account the proposed SIA schedule from the national programme, the following SIAs/IPDs rounds should be conducted before the end of 2007
   - Very High Risk, High Risk and Medium-High Risk States:
     - 23-26 June SIA using mOPV1,
     - July/August SIA using mOPV3;
     - Sept SIA using mOPV1, mOPV3 or tOPV depending on the epidemiology,
     - Nov SIA using mOPV1, mOPV3 or tOPV depending on the epidemiology,
   - depending on the epidemiology, additional at risk states or areas of states should be included in these rounds using mOPV1 or mOPV3. For the September round, the final extent and vaccine of choice should be decided by end July; for November the decision should be by end-September.

5. In the event of importations into a medium or low risk state, emergency outbreak response/mop-up rounds should be implemented per previous ERC recommendations and the May 2006 World Health Assembly Resolution.

6. For the purposes of planning by the federal and state governments of Nigeria, and their international partners, 2 nationwide campaigns should be planned for early 2008, with 4 subnational activities in the remainder of the year, with the timing, extent and vaccine of choice depending on the emerging epidemiology.

7. The quality of work of immunization teams and supervisors is now critical to achieving consistently high coverage. Continued efforts should be made to:
   - ensure high quality training for all teams, including IPC training; senior supervisor input into all training sessions should be used as a monitoring indicator,
   - identify additional committed, capable supervisors and monitors, from medical schools or other appropriate institutions and sources,
   - target the best possible supervisors from state governments, local governments, and partner agencies to the most vulnerable areas and high risk LGAs.

8. End-process monitoring and out-of-house monitoring must guide efforts to improve the quality of work; a coverage benchmark for end-process, independent monitoring should be established which if not met will require the vaccination team and supervisors to repeat the work in that area.

Surveillance & Laboratory

Overall, surveillance quality has improved; data presented to ERC comparing performance in the first three months of 2006 and 2007 showed improvement in both key indicators with all states achieving an AFP detection rate of above 2/100,000 and the stool adequacy rate above 80% in all except three states of Kano, Bauchi and Katsina (down from nine states in 2006). Additionally, the proportion of LGAs achieving both indicators increased from 70% to 84%. Except for the north east and north west zones that had respectively 66% and 76% proportion of LGAs achieving both indicators, the rest of the zones was above 80%. ERC is concerned that these two zones house the most infected LGAs in 2007 so far.

The ERC did further note that the presence of orphan viruses located mostly at the border areas clearly show surveillance gaps which need to be addressed.

While the laboratory performance indicators still remain high, a slight slip in turn around time for stool specimen results particularly the data entry was noted. Considering that the programme is driven by the timely availability of results which should further be improved by the new algorithm that has just been introduced, every effort must be made to ensure that results reach the programme as required.

Recommendations:

9. The timeliness of data sharing between the laboratories and the surveillance section should be monitored and reported at the next ERC; regular contact between the labs and the surveillance section must be enhanced to ensure that data are accurate and harmonized in a timely manner.

Social Mobilization

ERC was extremely pleased with the progress made towards implementation of the recommendations previously made for social mobilization in particular the analysis of the data related to impact of community dialogues on the zero dose children; the engagement of local traditional and religious leaders to penetrate the Quranic schools; trends in missed children and non-compliance. The innovations that were put in place to address the specific local problems were also commended. The ERC notes that the national programme has planned a country communication review that is expected to take place shortly, and looks forward to receiving feedback on this review and its recommendations, at the next ERC meeting. The ERC notes that the current Communications Database will be updated following the Community Dialogue Audit planned for May/June, and the rapid KAP assessment in August.

Since the introduction of the Engaging Communication strategy in early 2006, there has been noticeable progress in the level of partnership with communities and in the quality of social data being used to guide the communication response. ***However, the ERC remains concerned that despite the increased participation of traditional and religious leaders and key community individuals in the Immunization Plus Days, the suboptimal attitude, knowledge and inter-personal communication skills of***

vaccinators and supervisors continue to hinder the quality of the team performance. Reducing the levels of missed and zero-dose children by addressing the skills of the vaccinators must now be the highest priority of the communication component and the entire programme.

Recommendations:

10. 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. These efforts should be documented and evaluated to assess impact.

11. Particular attention should be given to quickly strengthening the IPC skills of vaccinators and supervisors. As a first priority, the State and LGA Health Educators, and social mobilization officers and consultants, should be further trained to improve their skills. These should in turn then participate in the vaccinator team trainings. Finally, repeated trainings should be planned and conducted, especially in high risk wards, to address the challenge of changing teams.

Routine Immunization

Data from routine reporting of coverage, from National Immunization Coverage Surveys, and from monitoring of immunization sessions all indicate an improvement in routine immunization coverage in 2006. Efforts in 2006 to increase routine immunization coverage have included IPDs, Local Immunization Days (LIDs), and the Reaching Every Ward (REW) strategy, which has now been rolled out in 60% of LGAs. Reported coverage of DPT3 in 2006 reached 77%, an extraordinary improvement on 2005. There have been improvements in cold chain capacity and monitoring data show improvements in the availability of vaccine at immunization sessions.

However much of the improvement in coverage, particularly in northern states, has been a result of the IPDs, and there is not yet a robust programme for the routine delivery of immunization services in several states. Vaccine stock outs remain common.

While encouraged by the improvements in routine immunization coverage, the ERC is convinced that a more stable and reliable delivery system for immunization is critical both to ensure the maintenance of polio-free status in the longer term and for the control of other vaccine preventable diseases.

Recommendations:

12. The ERC re-emphasizes the need to complete expansion of the REW strategy to the remaining 40% of LGAs by the end of 2007. Priority should be given to covering fully the *very high risk* and *high risk* states for polio by end-August. Additional efforts should also be targeted to any other wards and areas where zero-dose AFP cases are reported, or wild poliovirus is detected.

13. The Federal Government of Nigeria should ensure the timely release of funds for vaccine procurement to minimize the risk of vaccine stock-outs early in each calendar year. Vaccine distribution should be closely monitored to ensure vaccine moves appropriately from national to state and LGA levels.

14. The planned Mid-Level Manager (MLM) training programme should be initiated as quickly as possible, commencing in the highest risk states for polio.

15. Monitoring of immunization sessions and vaccine availability should continue, with results fed back to State and local governments to identify and prioritize for action, those areas where routine fixed site and outreach sessions are inadequate.

Next ERC Meeting

Given the rapid but fragile progress in routine immunization strengthening and polio eradication, and the need for further decisions on the extent and vaccine of choice for each SIA, the ERC proposes that its next meeting should be scheduled for 11-12 September 2007. Recognizing the central importance of the *very high risk* and *high risk* states to the state, federal and international polio eradication milestones and goals, the ERC proposes that the 13th meeting be convened in Kano and include the participation of representatives all 6 of those states, as well as Sokoto, Kebbi and Borno.