11th Meeting of the Expert Review Committee (ERC)
On Polio Eradication in Nigeria

Abuja, Nigeria

7-8 December 2006

Executive Summary

The 11th ERC was held at a key point in the history of immunization in Nigeria, 1 year after the Interim NPI Executive Director was appointed under Presidential Mandate to markedly accelerate polio eradication and enhance routine immunization.

The past 12 months was distinguished by the innovative, new 'Immunization Plus Days' (IPDs) strategy to re-engage communities in preventive health services. Based on initial data, IPDs may constitute one of the most important milestones in the global effort to achieve the 4th Millennium Development Goal (MDG4), for child survival.

Since IPDs and other innovations were introduced in mid-2006, routine immunization coverage (DPT3) has almost doubled (to 67%), polio (since mid-2006) and especially measles cases have dropped precipitously, and the communities and authorities at all levels are increasingly engaged and taking ownership of these activities.

However, ERC is very concerned that the IPD success is now grievously threatened by an acute financing gap and potential complacency at donor and community level.

Key Recommendations (Prior to the March 2007 ERC Meeting):

1. The immediate priority must be to close the funding gap for 2007-8 IPD activities.

2. To facilitate planning and budgeting, the 'tentative' 24-month campaign schedule should, based on current epidemiology, include:
   - 2 nationwide child survival campaigns each year, 6 months apart,
   - 4 subnational IPDs each year for *very high risk*, *high risk* and *moderate-high* risk states and 2 subnational activities for the *moderate risk* states.

3. In 2007, 1 of the national and 2 subnational IPDs should be conducted in the first 6 months. The 2nd subnational IPD may need to be delayed until May or June depending on the political situation. In this case, local immunization activities should continue in March in key risk areas.

4. Highest priority for intensified eradication activities should now be:
   - *Very High Risk* states (Kano, Katsina, Jigawa) that still have >25% zero-dose children and >60% of polio cases and,
   - *High Risk* states (Bauchi, Kaduna, Zamfara) that still have 10-20% zero-dose children and 20% of the total cases.

5. IPD 'Pluses' should be more consistent to optimize impact and attractiveness. NPI should explore with the new Malaria Plus Project the future inclusion of ITNs.

6. Communications work should now be state-specific, to reflect the local issues and appropriate approaches; first priority should be *very high risk* and *high risk* states.

7. States and LGAs should further systematically engage traditional and religious leaders in IPDs (eg. to initiate community dialogues, reconcile non-compliance).

8. NPI and states should expand the routine immunization 'Reaching Every Ward' strategy to all LGAs, with quarterly feedback to LGA Chairmen/health authorities.

1. Introduction

The 11th ERC was convened at a particularly important time in the history of immunization in Nigeria, coming 12 months after the Interim Executive Director of the National Programme on Immunization (NPI) was appointed under Presidential Mandate to markedly accelerate polio eradication activities and enhance routine immunization coverage within a 1 year period.

This 1 year period was distinguished by the introduction of an innovative new approach, now known as 'Immunization Plus Days' or IPDs, to re-engage communities in preventive health services, particularly across northern Nigeria. Based on the initial success of IPDs, this development may constitute one of the most important milestones in the global effort to achieve the 4th Millennium Development Goal (MDG4) to enhance child survival.

As the 11th ERC met, evidence was accumulating documenting a marked impact of IPDs in increasing the delivery of maternal and child health interventions and substantially reducing childhood morbidity from vaccine-preventable diseases. The ERC noted that this progress was recognized by a major international award at the Task Force on Immunization (TFI) meeting in Maputo in December 2006. At the same time, concerns were being raised as to the ultimate success of the IPD approach due to acute financing constraints and potential complacency at the community level.

The opening ceremony of the 11th meeting of the ERC was presided over by the ERC Chairman, Professor Oyewale Tomori, with opening statements by the Interim Executive Director of NPI, the Representatives of the World Health Organization and UNICEF, and partner agencies. The ERC was pleased to note the participation of key states in the deliberations of the 11th meeting.

This report summarizes the main findings, deliberations and recommendations of the 11th meeting of the ERC.

2. Status of Wild Poliovirus Transmission

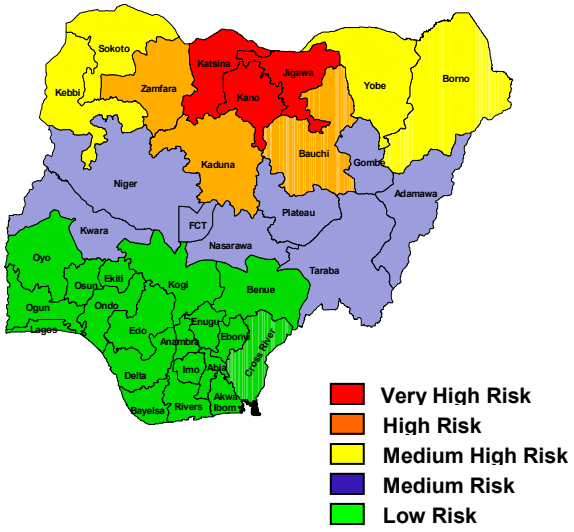
As of 1 December, a total of 1018 cases of poliomyelitis due to wild poliovirus had been reported from 18 states in Nigeria, compared with 698 cases in 21 states at the same point in 2005. Three states, Kano, Jigawa and Katsina, account for 61% of the cases detected to date, with an additional 20% of the cases reported from Bauchi, Kaduna and Zamfara.

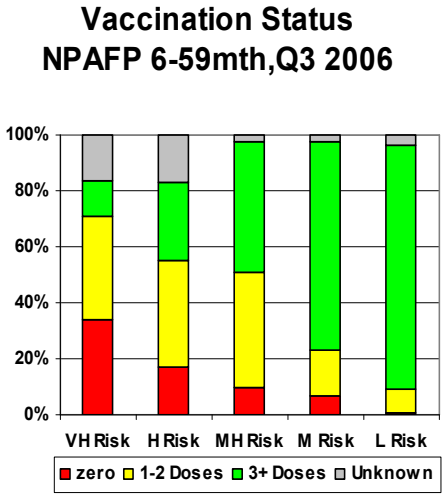
However, there is compelling evidence that the total number of cases hides the excellent progress that is being made since the introduction of the IPD strategy in mid-2006:

- 80% of the total cases had onset in the 1st six months of 2006,
- There has been a steep decline in type 1 polio since the introduction of mOPV1 in March 2006 (as opposed to a level incidence of type 3 polio),
- The biodiversity of type 1 poliovirus (i.e. the number of genetic lineages) has been cut in half during the second half of 2006,
- Polio has remained geographically restricted to the north of Nigeria.

The combination of polio case numbers and population immunity gaps (i.e. zero-dose children among non-polio AFP cases) now demonstrates 5 distinct geographic 'risk' categories for persistent polio transmission, that should guide programme planning and implementation:

i. *Very High Risk*: states with >25% 'zero-dose' children in Q3 2006. These 3 states account for 60% of all polio cases,
ii. *High Risk*: states with 10-20% 'zero-dose' children in Q3 2006. These 3 states account for 20% of all polio cases,
iii. *Moderate-High Risk*: states with ≤10% 'zero-dose' children in Q3 2006, but greater than 25 cases. These 4 states account for 15% of all polio cases,
iv. *Moderate Risk*: the remaining 8 states of northern Nigeria that reported cases in 2006,
v. *Low Risk*: the states which have been polio-free for ≥12 months.





The ERC was extremely concerned to learn that funding for OPV, IPD operational costs and surveillance/laboratory activities in the first half of 2007 (and through 2008) is not secure, despite the tremendous progress summarized above and in subsequent sections of this report. The ERC highlights that the excellent opportunity that now exists to eradicate polio and improve routine immunization and child survival services in this most important country could be squandered unless the funding gap is immediately addressed.

Recommendation:

1. The immediate priority of the Government of Nigeria and its international partners must be to close the funding gap, currently estimated at US$75-100 million for 2007-8 IPD activities.

2. The above-mentioned risk categories should be used to guide the intensification of polio eradication activities through mid-2007, by which time they should be reviewed by the ERC (if necessary, the categories can be reviewed before then).

3. Supplementary Immunization (incl. Immunization Plus Days, IPDs)

Since the 10th ERC meeting in July 2006, two rounds of IPDs were conducted: in September 12 northern states conducted IPDs; in November 19 northern states and FCT conducted IPDs. In October, 17 southern states conducted an integrated measles-OPV-vitamin A SIA.

The ERC was very impressed with the progress that the implementation of IPDs had made towards both polio eradication and routine immunization in northern Nigeria. The ERC further noted that by establishing access to such a high proportion of children in northern Nigeria, IPDs may be one of the most important developments to date in the achievement of the 4th Millenium Development Goal, on child survival (MDG4).

Particularly impressive developments in the area of IPDs include:

(a) the marked and increasing ownership of these activities by states, LGAs and local communities, including traditional and religious leaders, as evidenced by contributions of human, financial and other resources,
(b) the use of specific indicators to track the performance of IPD teams and supervisors at the local and LGA levels,
(b) the increasing acceptance of polio immunization, as evidenced by the reduction in zero-dose children,
(c) the substantial increase in DPT3 coverage (from an average of <20% in 2005 to over 60% to date in 2006),
(d) the well documented reduction in both measles and polio cases.

The ERC was extremely concerned, however, by reports that the 'novelty' of the IPDs may be wearing off together with a decrease in the amount of resources committed to deliver additional interventions besides vaccines, potentially leading to a decrease in their effectiveness in the coming year. This may be reflected in the fact that nearly 60% of children are now reached through the house-to-house component of the IPDs, as opposed to 40% in the first round (the balance of children having been immunized at fixed sites). The ERC was also concerned that the inconsistent and sometimes erratic availability of the 'pluses' could be decreasing the attractiveness of IPDs for parents (in a UNICEF survey, 83% of parents reported that the 'pluses' increased the likelihood of their participation).

The ERC was also very concerned that the IPDs may rapidly reach a 'plateau' with <80% of children reached in some key areas, a level which would be insufficient to interrupt poliovirus transmission. Reaching the last 10-20% of children in all areas will require a substantial increase in the quality of SIAs, particularly in the very high, high and moderate-high risk states. Specific areas where the ERC noted that IPD performance could be improved included training, local microplanning in some states, effective supervision and monitoring.

Recommendations:

3. To facilitate LGA, state, national and international planning and budgeting, a 24 month 'tentative' schedule of SIAs should be established as a matter of urgency. Based on the current epidemiology of polio in Nigeria, the ERC offers the

following advice for SIAs in 2007 and 2008, noting that this should be reviewed and if necessary adjusted at each ERC meeting:

- 2 nationwide immunization/child survival days should be planned, ideally 6 months apart (e.g. Jan and Sept), to facilitate the use of Vitamin A and other interventions that are best delivered on a semi-annual basis.
- 4 subnational immunization plus days should be planned for the *very high risk*, *high risk* and *moderate-high* risk states,
- 2 subnational immunization plus days should be planned for the *moderate risk* states,
- in the event of importations into a polio-free area, emergency outbreak response/mop-up rounds should be implemented per previous ERC recommendations and the May 2007 World Health Assembly Resolution.

The exact number of rounds and states targeted should be adjusted to the emerging epidemiology of polio and risks.

4. In 2007, 1 of the national and 2 subnational IPDs should be conducted in the first 6 months. The 2nd subnational IPD may need to be delayed until May or June depending on the risk of disruptions due to the prevailing situation. In this case, local immunization activities should continue in March in key risk areas.

5. Federal, state and LGA authorities should work to establish consistency in the 'pluses' that are offered during IPDs to ensure predictability and optimize the attractiveness of IPDs for parents.

6. NPI should initiate discussions with states, LGAs and the malaria programme regarding potential future use of the IPD strategy to deliver ITNs as a 'plus' through the new Government of Nigeria-World Bank Malaria Plus Project.

7. To ensure IPD performance rapidly reaches the last 10-20% of children in key areas, Federal authorities should re-define the key elements of LGA microplans to include brief narratives, sketch maps, daily implementation schedules, training and appropriate social mobilization and supervision. For January, the priority should be enhancing training and microplans in the *very high* and *high risk* states to contain, at a minimum, sketch maps, daily implementation schedules and participatory training.

8. State and LGA authorities should further enhance the effectiveness of IPD supervision by increasing the proportion of women supervisors to ensure sufficient women are included to supervise vaccination team work within the houses. The proportion of female supervisors should be monitored by LGA.

9. To enhance the accuracy and effectiveness of IPD supervision and independent monitoring activities, these should include surveying of children outside the households (eg. 'street surveys', market surveys, Qu'ranic school monitoring, etc). The ERC looks forward to a report on this issue.

10. Between IPDs, advocacy, immunization and mobilization activities should continue, with particular emphasis on building the trust and participation of communities and areas with high non-compliance rates and other risk factors based on surveillance programme monitoring data.

11. Given the progress being made in controlling and eliminating type 1 poliovirus from Nigeria, the ERC reiterates its recommendation that mOPV3 be registered for use as soon as possible (i.e. ideally Q1 2007) to ensure that the best possible tools will be available when needed to finish the job of eradication in Nigeria.

4. Social Mobilization

The ERC was very impressed with the wide range of social mobilization and communications activities that are now being undertaken as a core part of the IPD and other immunization activities. This work now includes, at least on a pilot basis, a full spectrum of activities targeted at:

- *Vaccinators and supervisors*: revised training materials to assist in the mobilization of communities and management of 'non-compliance'; 'social mapping'
- *Community Engagement*: increasing use of community dialogues, mass media, partnerships with civil society organizations, novel strategies such as the 'child adoption strategy' in Kano and father-to-father education in Katsina,
- *Key Influencers*: increasingly systematic and ongoing engagement of traditional and religious leaders (including Qu'ranic school teachers), and international figures such as Grand Cheikh Cissé of Senegal.

The ERC was also encouraged by the increasing collection and analysis of communications indicator data including the reasons for missed children, the sources of information on IPDs, and key influencers. The ERC noted that through such data it was now evident that the decline in 'noncompliance' had been accompanied by an increase in 'absent children' indicating the need for further investigation to determine whether this was in fact hidden non-compliance. Aggregate information on knowledge, attitudes and practice (KAP) collected by UNICEF indicates a need to further enhance the understanding of the general population on basic issues such as the need for a child to receive multiple doses of OPV (currently only 54% of parents).

The ERC highlighted the need for further objective analysis of the impact of the many activities being undertaken to enhance community participation and acceptance of IPDs, the feasibility of rapidly scaling up the particularly high impact activities, the need for disaggregated data to guide activities at the state and LGA levels.

Recommendations:

12. The targeting of community dialogues should rapidly be assessed such as by comparing the proportion of zero-dose children in 2005 in LGAs with and without such dialogues. The impact of community dialogues should also rapidly be assessed such as by comparing the proportion of zero-dose children in the first and second halves of 2006 in LGAs with and without such dialogues. These data should guide decisions regarding the scale-up of these activities.

13. Recognizing the diversity of issues and potential influencers across states (and even between LGAs), communications work should now be state-specific, to reflect the local issues and appropriate approaches. The state-specific communications workplans should be updated as a matter of urgency to reflect specific findings from the use of communications indicators in recent IPD rounds.

The first priority for assistance in refining and implementing these plans should be given to the 6 *very high risk* and *high risk* states.

14. Local traditional and religious leaders should be further and systematically engaged in the IPDs, particularly in such activities as initiating community dialogues and reconciling non-compliance. This should be the responsibility of States and LGAs.

15. Using the tremendous experience gained to date, the communications indicators should continue to be refined with the collection, analysis and rapid use of this data in the programme within 2-3 weeks of each round.

5. Surveillance & Laboratory

The ERC reviewed the field surveillance activities nationwide, noting that these continue to perform at a very high level, with all but 2 states, Kano and Rivers, now achieving an AFP rate of greater than 2 and stool sample collection rates of >80%. The ERC was encouraged to see that surveillance quality is being monitored at the LGA level and that specific, targeted actions being undertaken to enhance surveillance quality in states and LGAs that were lagging.

Particularly encouraging was the work since the 10th ERC to integrate active surveillance and case investigation of measles and neonatal tetanus cases.

The ERC did note, however, that LGAs in key areas of very high strategic importance to global polio eradication, particularly in Kano and the northeastern (NE) zone, were lagging in their surveillance indicators. The ERC also noted that case investigation data was incomplete in over 15% of AFP cases that were investigated in the 6 very high risk and high risk states (by contrast, <5% of AFP cases had incomplete data in the other states).

Although performance of both the Ibadan and Maiduguri laboratories was generally very high, as measured by standard indicators, the ERC was very concerned that the latter facility was only provisionally accredited due to a higher than acceptable rate of missed wild polioviruses. The ERC was pleased with the detailed plan of action laid out by the laboratory Director to address these issues and noted that until full accreditation was again achieved the specimens would be tested in parallel with another fully accredited laboratory.

Recommendations:

16. In the area of AFP field surveillance, the priorities should be (a) ensuring full case investigation (incl. vaccination status) of all AFP cases, in particular to reduce the current high level in the 6 very high and high risk states, and (b) enhancing AFP performance indicators in the lagging LGAs of the NE and SS Zones and Kano.

17. In the area of the polio laboratory network, very high priority should be given to fully implementing the plan of action for re-accrediting the Maiduguri laboratory. The ERC looks forward to a full report on this process at its next meeting.

18. Surveillance outcome data (eg. age and vaccination status of cases; proportion of zero-dose NPAFP cases) should be analyzed at least quarterly by the risk categories outlined in recommendation 1.

5. Routine Immunization

Accelerated efforts in 2006 to increase routine immunization coverage, including through IPDs, Local Immunization Days (LIDs) and the Reaching Every Ward (REW) strategy, has resulted in a marked increase in DPT3 coverage nationally, from 37.5% in 2005 to 67% in 2006 to date, exceeding the 2006 target of 65% coverage for this vaccine. These achievements have been facilitated by implementation of the REW strategy in greater than 50% of LGAs, linking with hospitals and private providers to encourage them to deliver immunization services and development and dissemination of a REW field guide and Standard Operating Procedures (SoPs) together with REW training in 4 of 6 zones.

Monitoring and supervision of routine immunization activities have been strengthened through monthly monitoring meetings of LGA immunization officers at state level and of service providers in some LGAs, tracking of number of immunization sessions, and tracking of health worker training. The ERC was impressed with the further progress achieved in implementing the programme of work to strengthen and rehabilitate the cold chain.

The tremendous achievement in routine immunization strengthening, and the delivery of some child survival interventions (e.g. vitamin A) in Nigeria in 2006, represents one of the more important milestones in the effort to achieve MDG4 in Africa.

Recommendations:

19. The ERC fully endorses the NPI priorities for routine immunization, including the expansion by end-2007 of the REW strategy to the remaining 40% of LGAs that have yet to introduce this approach.

20. All states should be encouraged to initiate quarterly feedback bulletins on routine immunization coverage to the LGA Chairman and appropriate LGA health authorities. At the Federal and State levels, DPT3 coverage should be mapped by LGA to monitor progress and target support activities.

6. Next ERC Meeting

Based on the current epidemiology of polio, progress in routine immunization strengthening and NPI plan of activities, the ERC proposes that its next meeting should be scheduled for early March 2007. The ERC suggests to NPI that the *very high risk* states (Kano, Jigawa, Katsina) be invited to participate and present at the next ERC meeting, to help the ERC understand the magnitude and challenges of reaching the remaining zero-dose children in these areas, and additional approaches that are being undertaken in this regard. The ERC also reiterates its interest to participate in the advocacy for, and monitoring of, IPDs at state level and requests NPI facilitate their participation in advance of the next round.