20th Meeting of the Expert Review Committee (ERC) on Polio Eradication & Routine Immunization in Nigeria

Abuja, Nigeria

4 - 5 October 2010

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Executive Summary

The ERC believes that Nigeria can stop poliovirus transmission by mid-2011 if key actions are taken to intensify the programme, to address quality gaps, and to build on the significant progress to date. Poliovirus transmission is at the lowest levels ever seen, and programme data demonstrates continued improvements in accessing and immunizing children. The improved programme quality has been greatly facilitated by the engagement of political and traditional leaders. However there remain significant programme gaps that must be addressed before poliovirus transmission can be stopped in Nigeria. Failure to take advantage of the current situation would have catastrophic consequences nationally and globally.

The ERC emphasizes that now is the time for intensification of efforts to eradicate polio in Nigeria. The country is on the threshold of a major achievement that will not only benefit Nigerians for generations to come, but will benefit the global community. The enormous efforts made to date must be reinforced and carried through to final success.

Major Recommendations:

1. **An aggressive mop-up strategy**: The national programme should immediately adopt an aggressive mop-up strategy to respond rapidly and effectively to any remaining poliovirus transmission.

2. **Addressing remaining quality gaps in high risk LGAs**: The implementation of LGA specific plans in high risk LGAs should be closely monitored to ensure that all children are reached with vaccine. Any high risk LGA failing to achieve necessary levels of IPD quality should be immediately targeted for special advocacy and operational action.

3. **Government oversight and commitment**: the ERC urges the Federal Government and State Governments to continue to take a leadership role on polio eradication in line with the Abuja Commitments, to stay focussed on polio eradication during this critical period for the programme, and to make every effort to ensure the engagement and accountability of Local Government authorities.

4. **Engagement of traditional leaders**: the national programme and partners should continue to fully engage traditional leaders in polio eradication activities. The ERC requests traditional leaders to ensure 100% of Ward and Village Heads play a supervisory role in IPDs in HR/VHR LGAs, and to track this closely.

5. **IPD Schedule**: the ERC recommends sub-national IPD rounds in October 2010, national rounds in November 2010, and January and February 2011, with two additional sub-national rounds before mid-2011.

6. **Community Mobilization**: a thorough and detailed analysis of patterns of non-compliance should be conducted and a comprehensive strategy developed to address this issue in areas and populations where it is a significant barrier to polio eradication.
**Introduction:**

The 20th Expert Review Committee for Polio Eradication and Routine Immunization was convened on 4-5 October 2010 in Abuja. The meeting was convened against the background of dramatic reduction of poliovirus circulation in Nigeria in 2010, and the urgent need to ensure that actions are taken to complete the job of polio eradication.

The ERC was welcomed by the Executive Director of the NPHCDA, who asked key questions of the ERC:
- What specific advice can the ERC give on the roadmap for finishing polio eradication in Nigeria?
- What different approaches or processes can be used to assess risks to achieving eradication?

The ERC was very pleased to have representatives of key states and partner agencies participate fully in the meeting, including the four global spearheading partners (WHO, Rotary, UNICEF, CDC). This report summarizes the main findings, conclusions and recommendations of the 20th meeting of the ERC.

**Report on the Abuja Commitments**

The ERC received a report on the progress in achieving the Abuja Commitments made by all the State Governors of Nigeria in February 2009. More than half of all the states in the country now have functioning State Task Forces for PEI/EPI. The most substantial compliance with the commitments continues to be in the endemic states. The ERC welcomes the progress and the continued monitoring and reporting on the Commitments by the national programme, while noting the gaps against the indicators.

**Report on the 19th ERC Recommendations:**

The ERC noted the report on the status of implementation of the 19th ERC recommendations. The national programme has clearly made major efforts to address the recommendations, including implementing the full SIA schedule. There is evidence of continued improvements in the immunization status of children in endemic states, and overall in high risk LGAs, following implementation of recommendations specific to these areas. Certain elements of the recommendations have not yet been successfully addressed. In particular the ERC notes that implementation of recommendations for high risk LGAs is uneven, and that the repeating of immunization activities in wards with high levels of missed children during SIAs remains unsatisfactory.

**Current epidemiological situation:**

As at 4 October 2010, a total of 8 WPV cases with onset in 2010 have been reported, along with 16 cases due to cVDPV2. This compares to 376 WPV cases and 149 cVDPV2 cases at the same time in 2009, and constitutes one of the most dramatic reductions in poliovirus circulation seen in any endemic country in the history of the programme.

The very low transmission of wild poliovirus has now been sustained for 12 months; there have been only 16 cases of polio due to wild poliovirus reported in
Nigeria since 1 September 2009. In the previously most endemic states, Kano, Katsina, and Jigawa, no WPV has been reported in 2010.

However, both WPV1 and WPV3 continue to circulate, and transmission of cVDPV type 2 also continues in key high risk states, including Kano and Borno, despite the use of tOPV throughout the country in the March 2010 IPDs, and in the July/August mop-up round in high risk LGAs. Genetic data indicates that WPV1 detected in Sokoto in April, and in Borno in June and August, is a continuation of transmission in these areas from 2009. The pattern with WPV3 is more dispersed, although with the exception of the case in Delta in January, the remaining three WPV3 cases are related to north and north-western transmission transmission chains present in 2009 (the Kebbi WPV3 case is related to transmission both in north-western Nigeria in 2009, and to cases detected in the neighbouring Niger republic in 2010). VDPV genetice shows continuation of transmission in various areas in the north, mostly local, but with some evidence of movement of virus, and with a single transmission chain causing all the cases in the north-east (Borno, Yobe, Jigawa).

There is continues genetic evidence of exportation of wild poliovirus from Nigeria to neighbouring countries in 2009 and 2010, even though the absolute burden of WPV has been decreasing. It is significant that the remaining known pockets of WPV transmission are in the far north-west and north-east of the country, where cross border movements are significant. The transmission of WPV and cVDPV across these borders, to and from neighbouring countries, will remain a factor until all circulating poliovirus is interrupted.

Detailed case investigations show that polio cases, whether due to WPV or cVDPV, are overwhelmingly un-immunized or under-immunized. There is a high preponderance of failure to immunize due to reported non-compliance, and community surveys around cases confirm the importance of non-compliant and under-informed communities in sustaining poliovirus transmission.

Programme developments

The ERC noted some key developments since their last meeting:

- **Efforts to improve quality in high risk LGAs.** Following the March ERC meeting and the development of LGA specific plans for the 85 high risk LGAs, the overall proportion of wards with less than 90% coverage in these LGAs has declined to 15% in September from 25% in March. Although improvement is not uniform, the engagement of traditional leaders and intensified efforts on quality have had an impact.

- **Innovative social mobilization and communications efforts.** Interventions such as majigis, and communications DVDs, coupled with the engagement of traditional leaders and the mobilization of their networks, have been expanded particularly in high risk areas and there is evidence of positive impact.

- **Continued efforts to engage political leaders and improve accountability.** The Abuja Commitments continue to be monitored quarterly and the national programme maintains an active strategy of engagement of national, state, and local government political leaders.

- **The sustained engagement of traditional and religious leaders.** Particularly in northern states the engagement of traditional leaders has expanded and been
sustained since March. While engagement is by no means uniform, and there remains plenty of scope for improving the impact of traditional leader engagement, this development continues to be very encouraging.

- **The evidence of more children being reached with immunization during IPDs.** Monitoring data from IPD rounds in 2010 show an overall improvement in the proportion of wards achieving 90% coverage. The reported improvements are supported by AFP surveillance data showing a continued improvement in the immunization status of children under five years of age.

- **Efforts to close surveillance gaps.** The programme of peer reviews targeting areas not meeting both surveillance indicators, and areas reporting orphan viruses has been actively pursued. The proportion of LGAs not meeting both surveillance indicators has declined from 22% in 2008 to 14% in 2009, and to 12% in 2010.

### Conclusions and Recommendations

#### Eradicating polio and identifying risks

The ERC has identified three main conclusions in its deliberations.

The first is that the programme in Nigeria is continuing to improve performance and is reaching more children with vaccine, even in many high risk, chronically poor performing areas. Significant developments, including the engagement of political and especially traditional leaders, the adoption of high risk LGA operational plans, the introduction of new communications and social mobilization tools, and the persistent efforts of programme staff to deal with the detailed operational issues of eradication activities are resulting in better programme performance.

The second is that despite improved performance there remain significant gaps and issues that threaten the final achievement of polio eradication in Nigeria unless they are addressed. Some of these gaps are known; not all high risk areas have significantly improved, and they still harbour large numbers of non-immune children, and there is very clear evidence that areas of significant programme importance, in particular Borno, Kano, and pockets in the north-west, are sustaining transmission of either wild poliovirus or cVDPVs. The areas sustaining transmission are major threats to the rest of the country and by extension to the whole continent, and transmission there must be stopped as rapidly as possible.

The third is that the programme is strengthening its capacity to collect and use data to identify risks so that they can be addressed, but this capacity is not yet adequately developed and much more work can be done with existing data to better define risks and issues; more systematic use of existing data will also help to identify additional data needs, and analysis needs. The improvement of independent monitoring data through scaling up the process piloted in August will add significantly to the capacity of the programme to identify and act on areas of risk.

#### Guarding against complacency

The ERC notes that the experience of countries that have eradicated polio is that activities get more intense in the final stages of eradication than at any other time in
the programme. The ERC considers that the national programme must intensify
activities to ensure that the remaining coverage and quality gaps are addressed.
The progress currently being achieved must be consolidated and accelerated to ensure
that polio eradication in Nigeria is completed. The ERC emphasizes that now is the
time for redoubling of efforts as only the completion of eradication can bring the
full benefit of all the efforts made to date.

Strategic Priorities for the national programme

In the light of the developments over the last 12 months, and the current situation, the
ERC considers that the strategic priorities for polio eradication in Nigeria for the
coming 12 months are:

- **Adopt an aggressive, intensive mop-up strategy** to respond rapidly and
effectively to any new WPVs or cVDPVs
- **Fix known quality problems** by addressing the quality and coverage gaps in
persistently under-performing high risk LGAs
- **Thoroughly review the risks to achieving eradication** of polio from Nigeria to
ensure efforts are effectively targeted to address them
- **Maintain high levels of population immunity** in all states through appropriate
SIAs and through strengthened routine immunization
- **Maintain high quality surveillance** to ensure that any poliovirus is rapidly and
reliably detected

Recommendations

The ERC notes that the recommendations of the 20th meeting should be taken in
conjunction with recommendations of previous meetings which remain valid.

Government and traditional leaders

1. The ERC congratulates the Federal and State Governments on progress to date to
honour the Abuja Commitments, and urges them:
   - to continue to lead polio eradication in Nigeria, to report on the Commitments
     on a quarterly basis, and to make every effort to ensure accountability of Local
     Government authorities for reaching every child.
   - to form State and LGA Task Forces for polio eradication and immunization in
     the all areas that have not yet instituted these groups by the end of 2010.
   - to stay focussed on polio eradication during this critical period for eradication
   - to work with the governments of neighbouring countries, in particular Niger,
     Chad, Benin, and Cameroon, to share information and jointly plan activities to
     ensure that all populations in border areas are reached.
   - to finalize arrangements with the World Bank for a further buy-down for OPV
to ensure that adequate supplies are available to complete polio eradication.
   - to maintain a rolling 12 month planning timeframe for polio eradication
activities, recognizing that the next 12 months may be the most intensive
period for polio eradication in Nigeria.

2. The national programme and partners should continue their efforts to fully engage
traditional and religious leaders in polio eradication activities, given the clear
impact that their engagement has had on improving access to children.
Supplementary Immunization Activities (SIAs) Schedule

The ERC considered the epidemiological situation as well as the recommendations of the 19th ERC meeting. The recommended schedule is intended to set the stage for eradication of polio from Nigeria. The schedule should be regarded as flexible enough to be varied according to changes in epidemiology or vaccine supply.

3. The ERC recommends the following SIA schedule:

The ERC endorses programme plans for 2010 as follows:
- October: a sub-national IDP targeting all states in the northern zones. The vaccine of choice is bOPV.
- November: a national IPD round should be carried out in conjunction with the planned Child Health Days, however it should be ensured that the quality of the IPDs is not compromised. The vaccine of choice is tOPV.

The ERC proposes the following schedule for 2011:
- The ERC endorses programme plans for two national IPD rounds in January and February 2011. One of these rounds should use bOPV and one tOPV. These rounds may be held in conjunction with planned national measles campaigns, however this should be done such that the quality of IPDs is not compromised.
- Two sub-national IPDs should be planned in the first half of 2011, with the extent dependent on the epidemiology but in principle covering the northern zones. For the purposes of planning one round should be with bOPV and with tOPV, but this may be varied depending on the epidemiology.
- Two sub-national IPDs should be planned for the second half of 2011, with the extent and vaccine of choice dependent on epidemiology. These rounds may be supplemented by extensive mop-ups as required (see below).

4. The Government and the World Bank should fast track arrangements for a further buy-down for OPV for supplementary immunization activities to ensure availability of vaccine for crucial planned activities.

Mopping up in response to circulating poliovirus

5. Mopping up should now be a central part of the strategy of the national programme. Any WPV (effective immediately), or cVDPV (effective following the November tOPV round) detected in any state should trigger a mop up response. The mop-up round(s) should be timed taking into account planned IPDs, but even if IPDs are being carried out in the affected area at least one additional mop-up round should be implemented. In the event of concurrent WPV and cVDPV infection in any area mop-up plans should ensure that both threats are addressed.

- The extent of any mop-up should at minimum consist of the affected LGA(s) and a significant surrounding area of multiple LGAs, across states where necessary, and should be based on epidemiological, virological, operational, and other relevant factors. Where there is evidence of linkage of transmission to a potential reservoir area, that area should also be mopped up.
- NPHCDA should form a national mop-up task team in conjunction with partners, with responsibility for working with relevant state teams to
coordinate:
- the initial investigation and risk assessment (within 72 hours of report)
- the determination of the extent of the mop-up and the vaccine of choice
- the development of a detailed, special mop-up plan for the area concerned which will be followed in the mop-up and subsequent SIAs
- the availability of resources and vaccine
- the deployment of competent, experienced, additional human resources to support quality changes

- Mop-ups should be intensively monitored (every ward) and any ward with less than 90% coverage re-immunized within one week of the round. Traditional leaders should be engaged to ensure that they can provide oversight of mop-up quality.
- A rotating buffer stock of five million doses each of bOPV and tOPV should be maintained to allow for rapid implementation of mop-ups; funding should be secured for this buffer stock and its use and rotation should be managed by the national task force.

Improving SIA quality and reaching more children

6. The ERC is extremely concerned by major remaining quality gaps in several states but in particular in Borno. The national programme should make every effort to engage political and traditional leaders in Borno to resolve these gaps.

7. The mechanism of Enhanced Independent Monitoring piloted by the national programme in August can significantly improve data quality, and should be rapidly scaled up and implemented in all areas conducting IPDs from October 2010. Independent monitoring should continue to be supplemented by LQAS as per current practice.

8. Specific actions must continue to be taken to address issues in high risk LGAs:
- the implementation of LGA-specific plans should be closely monitored, and plans updated prior to each IPD round.
- particular attention should be paid to vaccinator team selection, training, and supervision, and to detailed microplanning and mapping of households to ensure all communities are reached
- the ERC requests Traditional Leaders to ensure that 100% of Ward and Village Heads play a supervisory role in IPDs in high risk LGAs, and to track indicators of their involvement closely.
- State Governors are again urged to use any meeting opportunity with Chairmen of high risk LGAs immediately prior to each IPD round, to review past performance, identify problems, and decide on solutions.
- Chairmen of high risk LGAs should chair daily review meetings during IPDs to ensure problems are identified and addressed.
- re-visit teams should be scaled up in high risk LGAs to increase opportunities to find and immunize missed children; the impact of these teams should be closely evaluated.

9. The proportion of under-immunized children must be reduced to less than 10%, and the proportion of children with more than 3 doses increased to at least 80% and maintained at this level in all states, by the end of 2010. Particular attention
should be paid to Kano, Katsina, Yobe, Zamfara, Jigawa, and Borno, which still have unacceptably high proportions of under-immunized children.

10. From the October 2010 IPDs, as a standard response, in any ward where monitors find more than 20% missed children following an IPD round the activity should be repeated. This process should be documented according to a standard format, including the number of children reached in the repeated activity, and reported at state and national level following each IPD round.

Analysing and identifying risks to eradication

11. A full analysis of existing data to identify risks to the programme should commence as soon as possible. A small team of experts should be convened to conduct this review, but the national programme should begin to correlate available data immediately to inform the risk analysis. The analysis should be completed prior to the November IPD round.

Surveillance & Laboratory

12. The ERC endorses national programme objectives for strengthening surveillance as follows:
- continued detailed analysis of surveillance data to identify any potential situations of risk, with particular attention to the highest risk areas and most vulnerable populations
- continued intensive peer surveillance reviews at state and LGA levels
- addressing the recommendations of peer surveillance reviews conducted in 2009 and 2010 to date, and ensuring that any state conducting a review has a plan of action to address findings and that actions under the plan are monitored
- review of the system of reporting sites as a part of any peer review, to ensure that sites and informers included in the system are appropriate to ensure the highest possible level of sensitivity
- contact sampling for cases without adequate specimens to increase sensitivity.

13. Plans for activities complementary to AFP surveillance should be finalized as soon as possible:
- supplementary environmental surveillance in key areas should be introduced before the end of 2010
- the assessment of levels of antibody to poliovirus in children through a seroprevalence survey in the highest risk states should be finalized before the end of 2010, to validate evidence of declining poliovirus circulation and establish a baseline for population immunity.

14. A joint national-international surveillance review should be carried out in the first quarter of 2011.

Social Mobilization and Communications for polio eradication

15. A thorough and detailed analysis of patterns of non-compliance should be conducted and a comprehensive strategy developed to address this issue in areas and populations where it is a significant barrier to eradication.
16. To inform a detailed analysis of risks, core communication staff, with support from partner agencies, should review all data sets related to community sentiment and behavior around OPV and routine immunization, including the CDC barriers study, the recently conducted UNICEF qualitative and quantitative studies and campaign monitoring results from recent IPDs.

17. The data from the recent CDC study highlighted the need for gender specific communication interventions. Communication and social mobilization activities for community level engagement, including majigi, which reach primarily men, should be complemented by special activities to work with women, including through a systematic plan for activities with FOMWAN.

18. The programme should review the GPEI global communication indicators and adapt them for the Nigerian context. The SMWG should report on progress against these indicators, and use them as part of the basis for reporting on the quality of communication support for IDPs in the next ERC.

**Strengthening Immunization Systems & Accelerated Disease Control**

The ERC received presentations on strengthening immunization systems, new vaccines introduction, and accelerated disease control and was impressed by the range of activities being undertaken by the NPHCDA, State Governments, and partners. The ERC also received informative presentations on the Midwives Service Scheme, and on Maternal and Newborn Child Health Weeks.

Following the recommendations of the 19th ERC Meeting a number of actions have been initiated by the national programme. The Routine Immunization Committee of NPHCDA reviewed the performance of States and prioritized 319 LGAs as high risk based on 2009 immunization performance (including the 85 polio HR LGAs). Specific interventions were planned to reduce the number of un-immunized children and consultative meetings were held with the States at the Zonal level in June/July 2010, with the objective to developing action plans in all states to reach unimmunized children. Work is continuing to improve data quality, and the monitoring data now available on the programme is much improved. Traditional leaders in northern states are being engaged to support and monitor routine immunization activities.

However, the national immunization system is still weak. Major problems of the reliability of data on coverage still exist. Monitoring information shows that stock outs of vaccine for routine immunization have been common in 2010, reducing programme effectiveness, although the ERC acknowledges that efforts are being made by the national programme to improve vaccine security and cold chain management.

The ERC again emphasizes that the maintenance of polio eradication in Nigeria, and the protection of the gains made in measles mortality reduction, and maternal and neonatal tetanus elimination will be dependent on strong immunization services. Increasing immunization coverage is a critical platform for achieving the health-related Millennium Development Goals.
Recommendations

Implementation: reaching children with vaccine

1. The ERC encourages all States to fully implement the new plans to reduce the number of unimmunized children, particularly in the identified high risk LGAs, to closely monitor implementation, and to report back on these activities during monthly RJ review meetings in each state.

2. States should regularly update their action plans for the delivery of immunization services, taking into account data on the monitoring of immunization sessions and vaccine availability, to improve the consistency of delivery of services. Poor performing areas and areas with large numbers of unimmunized children should continue to be identified and prioritized in these plans.

3. The 1, 2, 3 strategy, (implementing and monitoring (a) 1 routine session/week in all Health Centers implementing RJ services, (b) 2 outreach sessions/week from all Health Centers implementing RJ services, and (c) 3 LGA-level supervisory visits/month to supervise planned routine immunization activities) remains valid and should be fully implemented, as part of REW.

4. Every State & LGA should have a budget line item for routine immunization, to ensure the capacity to implement fixed and outreach immunization sessions; this should be tracked at State & Federal levels, as part of the monitoring of the Abuja Commitments.

5. Traditional Leaders should continue to be engaged by Federal, State, and LGA authorities, particularly for high risk LGAs with large numbers of unimmunized children, to systematically promote & support the broader immunization agenda, building on their very successful role in polio eradication.

Vaccine security and quality

6. The Federal Government should ensure that adequate funds for vaccine are released well in advance of requirements every year to enable a reliable supply of vaccine at national level.

7. The capacity of logistics officers involved in managing vaccine supply, cold chain, and logistics at national, state, and LGA level should continue to be strengthened through systematic training.

8. The National Logistics Working Group should develop and implement an effective management system for EPI vaccines, cold chain equipment, and spare parts. The effectiveness of this system should continue to be monitored with respect to vaccine availability and cold chain functioning through the monitoring system established for routine immunization.

9. All zones should have active Logistics Working Groups, to provide support to states in managing logistics issues. All zonal cold stores should be functional as soon as possible.
Data quality

10. The national programme should continue efforts to improve data quality and data management through:
   - monthly data quality checks
   - support to monthly review meetings at State and LGA level
   - State quarterly data quality self assessment
   - periodic immunization coverage surveys

Accelerated Disease Control

11. The ERC notes the plans for extensive measles elimination and MNTE activities, and urges that activities be planned and carried out taking into consideration the broad range of immunization activities being promoted in Nigeria. Close coordination of these activities will be required to ensure maximum impact.

Next ERC Meeting

The ERC proposes that its next meeting be scheduled for March 2011.