Report

8<sup>th</sup> Meeting of the Expert Review Committee (ERC) on Polio Eradication in Nigeria

> Abuja, Nigeria 15<sup>th</sup>-16<sup>th</sup>December 2005

# **Executive Summary**

The 8<sup>th</sup>meeting of the Expert Review Committee (ERC) on Polio Eradication in Nigeria took place in Abuja Nigeria on 15<sup>th</sup> and 16<sup>th</sup>December 2005. The ERC notes that since its 7<sup>th</sup> meeting in September 2005, important progress has been registered in the Polio eradication Initiative as no wild poliovirus Type 3 (WPV3) has been reported globally except in Nigeria. Consequently monovalent OPV has become the principal tool for accelerating interruption of WPV transmission globally.

Important developments in Nigeria include a recently conducted measles vaccination campaign in the northern states that has provided a positive environment for immunization, wide-ranging consultations on the use of monovalent OPV with important national stakeholders and the adoption of a blue-print on strengthening routine immunization.

The progress in Polio eradication globally and in the African Region makes it more urgent that more progress is realized in addressing the persistent wild poliovirus transmission in northern states of Nigeria. While progress continues to be registered by Supplemental Immunization Activity (SIA) monitoring data, analysis of non-polio AFP cases indicates that over 30% of target age children may continue to be missed during SIAs in 7 priority northern states due to a combination of SIA operational issues as well as both overt and hidden non-compliance.

The ERC reviewed progress in improving surveillance quality, SIA quality and effectiveness, routine immunization strengthening and accelerated measles control. Detailed recommendations are included in the body of the report.

The ERC was informed about the reorganization of NPI and reassignment of the NC/CEO Dr Dere Awosika with effect from end of December 2005. The ERC expresses its most sincere appreciation of her dedicated leadership in the development of NPI from inception to date.

#### Summary of key Recommendations

- 1) To reduce the proportion of zero dose children to less than 10%, should be a priority milestone for the first quarter 2006 SIAs, particularly in those states/LGAs with more than 20% zero dose children.
- 2) In order to achieve rapidly the reduction of zero dose children a combination of activities, as listed below, is required to improve the quality of social mobilization and vaccination activities:
  - i. Settlement micro-planning should be started well in advance of the SIAs and its implementation should be closely monitored. High risk areas based on proportion of zero dose children and wild poliovirus should be prioritized for the implementation of the settlement micro-planning approach.
  - ii. All social mobilization activities should be fully integrated into other aspects of SIA micro-planning. Training and supervision of community mobilizers should be integrated with that of sweep group teams.

- iii. Ongoing efforts to ensure timely and continuous social mobilization should be supported. Dialogue with communities with a high level of noncompliance should be started several weeks ahead of the SIAs.
- iv. States and LGAs should be supported to develop strategies to reach missed children in urban areas. Such strategies could include the addition of 1 day of fixed posts in addition to the House-to-House activities, greater involvement of teachers and schools in mobilization efforts and other innovative strategies developed locally.
- v. Particular attention should be given to full enforcements of the ERC recommendations regarding appropriate selection of vaccination teams, which are acceptable to their communities as well as improving the quality of training and supervision.
- vi. The ERC strongly recommends that funds for social mobilization, microplanning and training activities are released at least 3-4 weeks prior to the start of the SIAs.
- vii. Implementation of Boosting Childhood Immunization (BCI) and Local Immunization Days (LIDs) strategies should be prioritized in communities/settlements with highest proportion of zero dose children, high rates of non-participation and hard-to-reach populations and areas.
- 3) Supplementary in-process and end-process monitoring of 40-50 children/community should be conducted outside homes (e.g. in the streets, market-places), in addition to the ongoing house-to-house monitoring.
- 4) The ERC reaffirms the recommendation that 4 SIA rounds be conducted between January and June 2006. Plans should also be established to ensure funds are available for 4 additional SIA rounds between July and December 2006.
- 5) The ERC recommends that as a matter of urgency, the Honorable Minister of Health should ensure that mOPV is licensed for use in Nigeria, preferably by the end of December 2005.
- 6) Monovalent OPV 1 should be used during the January and February 2006 NIDs. The use of mOPV or tOPV during the April and May SNIDs should be guided by a close analysis of the evolving WPV epidemiology. All routine immunization activities should use tOPV.
- 7) The lessons learned from the measles campaign should be documented and disseminated as soon as possible. This documentation should include lessons that can be applied to improve quality of OPV, measles and all subsequent campaigns.
- 8) Prepare routine EPI annual work-plans and budgets based on the 5 year plan and budget. The annual plans should show budget gaps for each line budget item.

# 1. Introduction

The 8<sup>th</sup> meeting of the Expert Review Committee on Polio eradication in Nigeria was held in Abuja on the 15<sup>th</sup> and 16<sup>th</sup> December 2005.

The meeting was officially opened by Dr (Mrs) Dere Awosika, Chief Executive of the National Programme on Immunization (NPI) on behalf of the Honorable Minister of Health. She welcomed the ERC members, representatives of partner agencies and other participants to the meeting. She noted with appreciation the critical guidance that the ERC had provided over the last 12 months.

Representatives of Rotary, WHO, CDC, UNICEF and USAID made opening remarks. The partners congratulated the Government of Nigeria on the continued progress in revitalization of routine immunization, polio eradication and accelerated measles control. They all noted that there is still a lot more to be done and pledged their full commitment and support. Dr D. L. Heyman, Representative of WHO Director General for Polio Eradication expressed gratitude to the Government of Nigeria and all the partners for their commitment to Polio Eradication. He reaffirmed WHO's full commitment to supporting routine immunization and Polio eradication.

Professor Etim Essien, acting ERC chairman welcomed all participants to the meeting. He noted with appreciation the enthusiasm and commitment of all partners.

This Report summarizes the main observations and recommendations of the  $8^{th}$  ERC meeting.

# 2. Implementation Status of 7<sup>th</sup> ERC Recommendations

The 7<sup>th</sup> ERC made 14 main recommendations aimed at addressing gaps in surveillance and laboratory, improving SIA quality, strengthening social mobilization, initiating the use of monovalent OPV and improving routine immunization activities.

The ERC noted with appreciation the very high level of implementation of the 7<sup>th</sup> ERC meeting recommendations.

# 3. Status of Wild Poliovirus Transmission

As of the 9<sup>th</sup>December 2005, 639 wild polioviruses had been confirmed in 19 states (Adamawa, Bauchi, Benue, Borno, Gombe, Jigawa, Kaduna, Kano, Katsina, Kebbi, Kogi, Lagos, Nassarawa, Niger, Plateau, Sokoto, Taraba, Yobe and Zamfara) and FCT. Three states (Benue, Gombe and Taraba) and FCT have not had any wild poliovirus isolated after the 4<sup>th</sup> SIA round conducted in September 2005. 75% of all confirmed wild poliovirus in 2005 were in 7 states with more than 20% zero dose children (Bauchi, Borno, Jigawa, Kano, Kebbi, Kaduna, Zamfara).

Of the 639 children with confirmed wild poliovirus, 413 had wild poliovirus type 1 and 226 children had wild poliovirus type 3. The proportion of all polio cases due to

WPV 3 dropped from approximately 50% during the period January-June 2005 to 15% during the period September-October 2005.

# 4. Surveillance and Laboratory

All 6 geo-political zones and states have achieved the targets for non-polio AFP rate (2.0 per 100,000 under 15 year olds) and stool adequacy rates (at least 80%) in 2004 and 2005.

Between October 2004 and November 2005, 86% (666/774) of LGAs achieved a nonpolio AFP rate of at least 2 per 100,000 under 15 year old population. This represented a slight decline as compared to the previous 12 months i.e. October 2003 to November 2004, when 88% (683/774) of the LGAs achieved non-polio AFP rates of at least 2 per 100,000 under 15 year population. The proportion of LGAs that achieved the stool adequacy rate of 80% also declined from 78% (604/774) during the period October 2003-November 2004, to 64% (497/774) during the period October 2004-November 2005.

Two major laboratory performance indicators i.e. availability of results within 28 days of receipt of specimen and NPENT isolation rate were consistently above the target for both Ibadan and Maiduguri Polio laboratories in 2004 and 2005.

Innovations put in place to improve surveillance quality include cascaded AFP surveillance training and surveillance peer reviews in 2 states i.e. Borno and Yobe. The peer reviews established that active surveillance facility visits were routinely conducted to some extent in all LGAs, most DSNOs and focal points had clear understanding of AFP stool collection procedures and monthly surveillance review meetings were conducted regularly. However the peer reviews also documented several weaknesses including weak supervision at all levels, weak data analysis and use of data and the majority of PHC coordinators were not trained in surveillance.

The findings of the peer reviews are being used to re-orient surveillance plans and activities. The next phase of surveillance peer reviews will be conducted in February 2006.

Recommendations:

- The ERC endorsed the use of surveillance peer reviews as an important tool in documenting best practices and addressing gaps in surveillance activities. The participation of DSNOs and focal points in the surveillance reviews that ensured their involvement in problem identification was especially welcome. The ERC also recommended that a mechanism for monitoring the implementation of recommendations to address gaps identified should be put in place.
- 2) Analysis of data on orphan viruses, especially in those states with a low number of confirmed polio cases should be conducted regularly to assess potential surveillance gaps and guide corrective action including peer reviews.

# 5. Supplemental Immunization Activity (SIAs)

Several factors/tools available to ensure high quality or enhance the impact of SIAs were discussed. These include (a) enhanced quality of vaccinator team performance, (b) implementation of SIAs during the low transmission season (c) mOPV (d) advocacy and community mobilization (e) timely availability of funds (f) technical assistance (g) institute a more systematic involvement of schools and teachers to facilitate acceptance, as demonstrated by the measles campaign, prior to the start of the SIAs and (h) religious and government information on OPV from Saudi Arabia. It was pointed out that every effort should be made to ensure the timeliness, adequacy and availability of these factors/tools at all levels within the country, especially in the highest risk areas.

#### 5.1. Micro-planning

Emphasis on evidence-based SIA micro-planning is one of the interventions being adopted to enhance SIA quality. Since the November 2005 SIAs, the focus of microplanning has shifted from the ward level down to the settlement level. High risk settlements are identified based on surveillance and epidemiology data as well as on SIA monitoring core indicators. The most important data is OPV status of non-polio AFP cases. Settlements with zero OPV dose cases especially those in urban areas are considered highest risk settlements.

Supervision has evolved in line with settlement micro-planning. There is now emphasis on supervision of preparation and implementation of activities required for quality SIAs in specific settlements. Increased accountability is placed on supervisors in specific settlements for breakthrough WPV cases and/or new AFP cases with zero OPV doses.

Settlement micro-planning has also resulted in improvement in the preparation of settlement and daily route maps. These now include information on key institutions, influencers, social amenities, landmarks and AFP cases by street. One vaccination team is deployed to each settlement.

Settlement mobilization i.e information is provided to all opinion leaders with a strong focus on areas with known non-compliance, is an integral part of the settlement micro-planning approach.

To improve vaccination team selection, opinion/traditional leaders now select vaccinators from their community and all vaccination teams are coded. Recorders are chosen by ward heads while settlement supervisors/ward focal persons are selected by ward heads/councilors. Vaccination teams are trained in their wards and training is conducted in local languages by settlement supervisors. The ERC welcomes this initiative but notes that the vaccinators should be selected on the basis of the Team Selection Guidelines while ensuring acceptability to the local community.

The ERC welcomed the settlement micro-planning approach. The use of vaccination status of non-polio AFP cases to guide this process was particularly appropriate given that the states with > 20% zero dose accounted from the highest proportion of confirmed polio cases.

# **5.2.** Monitoring and Supervision

Improving the quality and effectiveness of supervision during SIA implementation is one of the innovations that have been applied to improve SIA quality. To enhance supervision, the size of the sweep vaccination teams was reduced from 12 to 6 members in February 2005. Each team has 1 supervisor, who should preferably be a female, who is able to enter houses. Other innovations to improve supervision include cluster supervision by agencies, strengthened inter-sectoral collaboration including the involvement of the military, the National Youth Service Corps (NYSC) and a higher focus of supervision in higher risk wards. Simplification of in-process and end-process monitoring forms was also undertaken to improve supervision and monitoring.

The ERC noted with appreciation the implementation of previous ERC recommendations aimed at strengthening supervision e.g. increased involvement of NYSC. It was emphasized that measures to improve capacity in the north e.g. temporary re-deployment of staff from the South, should be accompanied by long term capacity building efforts in the North.

The ERC noted with concern the discrepancy on proportion of missed children as shown by SIA monitoring data and surveillance data.

#### 5.3. Cold Chain and Logistics Operations

The status of cold chain equipment down to LGA and ward levels continues to be regularly reviewed and updated. To date, 70% of the 2001 cold chain replacement plan has been actualized with close to US\$ 26.5 million of the planned US\$ 37.8 million budget having been spent.

Quarterly updates of the cold chain inventory at state, zonal and national level have been institutionalized while indelible pen markers have been successfully used during polio and measles SIAs conducted in 2005.

Remaining challenges include the need to implement continuous re-training of state and LGA cold chain officers to improve vaccine management as well as to strengthen cold chain equipment maintenance through appropriate private sector partnerships.

The ERC welcomed the cold chain/logistics report and indicated that this reflected notably the contribution of polio eradication initiative in strengthening an important element of the routine immunization system. Such an analysis is recommended to be undertaken in respect of transport logistics.

#### **5.4. Hard-to-reach populations**

Hard-to-reach populations identified by a detailed analysis of surveillance and SIA data are largely in border LGAs, riverine areas, urban locations and other areas with mobile populations.

The Boosting Childhood Immunity (BCI) approach has been used to deliver services to these communities. BCI delivers all antigens. Local Immunization Days (LIDs) have also been used to deliver all antigens to the hard to reach populations. These activities have been facilitated by advocacy to states, funding by some states and LGAs, financial support from some partners and the use of monitoring data to re-direct and expand these activities. Monitoring data have shown that these innovations have contributed between 10-30% of children receiving OPV3/DPT3 in the targeted areas.

The ERC welcomed the BCI and LID initiatives to reach the hard-to-reach populations and recognized that these initiatives could play an important role in reducing the number of zero dose children. It was however pointed out that these approaches may not be sufficient to reach the un-reached/missed children in urban settings. The ERC noted the important potential value of these strategies to improving community acceptance and participation in eradication activities in areas with high proportion (>20%) of zero dose children.

The ERC recommended that additional information on cost per child reached by these innovations be documented and used to guide advocacy with national authorities as well as with partners.

# **5.5. Social Mobilization**

A comprehensive social mobilization strategy that is community based, family focused and integrated is being implemented in Nigeria.

This strategy includes the identification of key influencers, community mobilization and dissemination of key messages. Key activities being implemented include approaching parents in-between rounds, delivering key messages during the rounds, promoting integrated messages of routine immunization, polio eradication and accelerated measles control, dialoguing with mass media as well as traditional media. There is involvement of religious leaders as well as civil society groups such as women groups, Fulani and minority groups....etc. Advocacy activities had included one-on-one visits to Governors and LGA chairmen.

The Forum on Religious and Traditional Leaders and the Media on Immunization and Child Survival has sent out several communication materials to its members prior to recent OPV and measles SIAs.

The deployment of community social mobilizers in high risk areas is also yielding positive results as indicated by the declining proportion of non-compliance in these areas.

Despite the general progress made in establishing the strategy and structures for social mobilization, several challenges remain to optimize activities and their impact. These include pockets of missed children, persistent non-compliance, fatigue, fears of too many rounds, resistance for other reasons and low levels of inter-personal skills of vaccinators.

Priority social mobilization activities in 2006 include an evaluation of social mobilization strategy, increased participation of town announcers, support to health workers between the rounds, publicizing dialogue with leaders through community broadcasting,

strengthening IPC, increased data analysis, strengthened alliances with civil society organization and increased community participation.

The ERC welcomed the social mobilization report and congratulated the team for the progress registered. The role of community social mobilization was discussed at length. It was agreed that this be looked at as a component of the whole social mobilization strategy and not in isolation.

Recommendations:

- 1) To reduce the proportion of zero dose children to less than 10%, particularly in those states/LGAs with more than 20% zero dose children, should be a priority milestone for the first quarter 2006 SIAs.
- 2) In order to achieve rapidly the reduction of zero dose children a combination of activities, as listed below, is required to improve the quality of social mobilization and vaccination activities:
  - i. Settlement micro-planning should be started well in advance of the SIAs and its implementation should be closely monitored. High risk areas should be prioritized for the implementation of the settlement micro-planning approach.
  - ii. All social mobilization activities should be fully integrated into other aspects of SIA micro-planning. Training and supervision of community mobilizers should be integrated with that of sweep group teams.
  - iii. Ongoing efforts to ensure timely and continuous social mobilization should be supported. Dialogue with communities with high level of non-compliance should be started several weeks ahead of the SIAs.
  - iv. States and LGAs should be supported to develop strategies to reach missed children in urban areas. Such strategies could include the addition of 1 day of fixed posts in addition to the House-to-House activities, greater involvement of teachers and schools in mobilization efforts and other innovative strategies developed locally.
  - v. Particular attention should be given to full enforcements of the ERC recommendations regarding appropriate selection of vaccination teams, which are acceptable to their communities as well as improving the quality of training and supervision.
  - vi. The ERC strongly recommends that funds for social mobilization, micro-planning and training activities are released at least 3-4 weeks prior to the start of the SIAs.
  - vii. Implementation of Boosting Childhood Immunization (BCI) and Local Immunization Days (LIDS) strategies should be prioritized in communities/settlements with with highest proportion of zero dose

children, high rates of non-participation and hard-to-reach populations and areas.

- 3) Supplementary in-process and end-process monitoring of 40-50 children/community should be conducted outside homes (e.g. in the streets, market-places), in addition to the ongoing house-to-house monitoring.
- 4) The cold chain status in Nigeria should be published and disseminated. This report should include management of cold chain equipment and logistics management performance indicators.
- 5) A similar analysis to the cold chain study should be conducted on the contribution of the polio eradication initiative to strengthening transport logistics for routine immunization and shared with the ERC.
- 6) Continue to support ongoing advocacy for funding for innovations to reach the un-reached outside of SIAs. To facilitate this advocacy, additional information should be collected on the cost per child reached through innovative approaches such as BCI and LIDs.
- 7) The ERC requested a report of the upcoming evaluation of social mobilization activity be made at the next ERC meeting.

# 6. Routine Immunization

A National Blueprint on strengthening Routine Immunization and strategic activity plan was presented to the Extra-ordinary Council on Health in August 2005. These documents were endorsed by ICC partners in November 2005.

There has been increased vaccine security and supply over the last two years through PSAs with UNICEF, improved funding, staff deployment by NPI and agencies, bimonthly meetings of cold chain officers, training and improved cold chain capacity.

Data management for routine immunization monitoring has been strengthened. A system of data collection, collation and feed-forward is now fully established and being used by all states. Feedback is implemented regularly and the data used to guide innovative strategies (BCI, LIDs), advocate for increased local ownership and improve data quality.

Recommendations:

- 1) Prepare routine EPI annual work-plans and budgets based on the 5 year plan and budget. The annual plans should show budget gaps for each line budget item.
- 2) The results of the planned state reviews of the Private Sector Vaccine Distribution (PSVD) should be presented at next ERC meeting.
- 3) The ERC congratulated the Federal Government of Nigeria for its financial support to the procurement of vaccines for routine immunization and urges that

this financial support be continued and that the MoU with UNICEF be strengthened and maintained.

# 7. Accelerated Measles Control Activities

A catch-up campaign was conducted in 19 Northern States on 6-10 December 2005 targeting 30 million children. This campaign was implemented using 24,104 vaccination posts. Mobile teams were used in hard-to-reach areas. Micro-planning was initiated in June 2005 and continued through to October 2005. Integrated social mobilization was implemented during the November OPV SIAs. Waste management was by burn and bury where there were no incinerators. To date, 26.25 million children, representing 87% of target population have been vaccinated. The coverage is expected to rise as the campaign is still ongoing in several states. 44 AEFI have been reported to date.

The ERC congratulates the Programme for the successful implementation of this initial phase of accelerated measles control in he 3 northern geo-political zones. The ERC recognizes the very significant contribution that this exercise will make in reducing childhood mortality and thereby support attainment of Millennium Development Goals (MDGs). The contribution of the measles campaign to strengthening immunization safety through the use of auto-disable syringes was especially welcome.

**Recommendations:** 

- 1) Support for the second phase of the measles catch-up SIA in 2006 should be provided. The dates for these campaigns should be firmed up and case based measles surveillance including laboratory support should be put in place.
- 2) The lessons learned from the measles campaign should be documented and disseminated as soon as possible. The lessons should be applied to improve quality of OPV, measles and all subsequent campaigns.

# 8. Planned Activities: 2006

It is proposed that 8 rounds of high quality SIAs are conducted in 2006, with 4 of these rounds being implemented by June 2006. In accordance with the recommendations of the 7<sup>th</sup>ERC meeting, monovalent OPV will be used during these rounds. To this end, consultations were held with key stake-holders in the country including core group, Northern Governors' Forum, NAFDAC, Health Commissioners as well as National Members of the ERC.

Recommendations

 The ERC recommends that 4 SIA rounds be conducted between January and June 2004. It is proposed that 2 NIDs be conducted in January and February 2006 and 2 SNIDs conducted in April and May 2006. The specific states for the SNIDs should be carefully considered by the programme on the basis of recent poliovirus epidemiology and population immunity gaps. Plans should also be established to ensure funds are available for 4 additional SIA rounds between July and December 2006.

- 2) The ERC reaffirms its standing recommendations for mop-up operations and further recommends that type-appropriate monovalent oral poliovirus vaccine (mOPV) should be used in such operations.
- 3) The ERC recommends that as a matter of urgency, the Honorable Minister of Health should ensure that mOPV is licensed for use in Nigeria, preferably by the end of December 2005.
- 4) Monovalent OPV 1 should be used during the January and February 2006 NIDs. An analysis of the WPV epidemiology should be conducted prior to the February 2006 NIDs and in the event that a particular state is found to have high levels of WPV3, trivalent OPV (tOPV) should be considered for use in this state. The use of mOPV or tOPV during the April and May SNIDs should be guided by a close analysis of the evolving WPV epidemiology. All routine immunization activities should continue to use tOPV.

# 9. Date of 9<sup>th</sup> ERC Meeting

It is recommended that the 9<sup>th</sup> ERC meeting takes place on 16<sup>th</sup>-17<sup>th</sup>March 2006.