TECHNICAL ADVISORY GROUP ON POLIO ERADICATION IN THE HORN OF AFRICA

5TH MEETING, NAIROBI, 8-9 MARCH 2010

1. PREAMBLE:

The 5th Meeting of the Technical Advisory Group on Polio Eradication for the Horn of Africa (HOA/TAG) was held from 8th to 9th March 2010 in Nairobi, Kenya under chairmanship of Dr Ciro de Quadros.

Since the last meeting of the TAG, strong and promising progress has been made towards polio eradication in the Horn of Africa. The TAG notes in particular that the most recent wild poliovirus detected anywhere in the Horn of Africa was in June 2009 in the "re-established" transmission area of southern Sudan and in July 2009 in northern Kenya.

While recognizing this progress, the TAG is deeply concerned that the opportunity this affords may not be exploited unless there are major and immediate changes in certain aspects of the programme, particularly in southern Sudan which appears to be the key to eradication in this area. The TAG stresses that, in the setting of 're-established transmission' in southern Sudan, a minimum of 12 months with zero polio cases as verified by extremely high quality AFP surveillance would be required to consider that the risk of ongoing transmission is declining. At this point, the TAG highlights only 8 months have passed without virus in the southern Sudan, while the overall rate of detection of AFP cases has declined.

Even with the improvement of activities within the Horn of Africa, the TAG stresses that the intense poliovirus transmission in Chad continues to be a grave risk, requiring robust, sustained surveillance and SIAs over the coming 24 months. Another new factor is the appearance of VDPVs which reinforce the importance of robust multi-year surveillance and SIA plans as well as up-to-date outbreak response guidelines and activities.

As a result of this high possibility of ongoing, undetected transmission within the Horn of Africa (especially Southern Sudan and bordering areas of north Sudan, Kenya, Uganda and Ethiopia), combined with the type 3 epidemic in neighbouring Chad, the TAG urges urgent and immediate action by countries, WHO, UNICEF and other partners to assure the full implementation of the recommendations outlined below.

2. CURRENT SITUATION

North Sudan

North Sudan has international borders with 5 countries and affected by civil war since 2003. Many people were displaced internally and also to Chad. The population movement is huge and caused repeated wild poliovirus importations since last indigenous poliovirus in 2001. In spite of the insecurity in Darfur that resulted in loosing lives during the immunization campaigns, polio eradication efforts continued in North Sudan.

Since the last HOA TAG meeting in February 2009, the North Sudan AFP surveillance indicators have sustained the certification standard. The rates of the non-polio AFP detection and adequate specimens' collection were above 2 and 95% respectively in 2009. All states reported 2 or more non-polio AFP cases per 100,000 children below 15 years of age in 2009. A few gaps at the sub-national level in some states of Sudan were identified. Therefore, the programme undertook focused actions in these states in order to rectify these gaps. North Sudan has reported 2 confirmed polio cases due to separate importation of P3 poliovirus from Chad and 5 confirmed P1 polio cases in 2009. The genomic sequencing of the latter indicated a link with the poliovirus circulating in Southern Sudan.

The routine coverage of OPV3 dose among infants has improved in the last five years. The coverage rate increased from 79% in 2006 to 91% in 2009. Darfur states has achieved 80% coverage rate as a result of several accelerated routine immunization rounds.

The SIAs continued in 2009 as a response to the 2009 polio cases. Five NIDs rounds were conducted in February, March, April, June and October 2009 in addition to two SNIDs rounds in July and December 2009. The result by finger marking post-campaign monitoring of these campaigns was 95% or above. As a result of the routine immunization activities and SIAs, the immunity profile is maintained at high level as indicated by the proportion of children < 60 months who received 7+ OPV.

North Sudan team has drafted a plan to address the following issues:

- surveillance gaps at sub-national level;
- supplementary immunization activities 2010;
- Protection of populations from importations or re-introduction of wild poliovirus through sustaining population immunity;
- Improving cross-border coordination activities (SIAs/AFP surveillance; and
- Sustaining high level commitment for Polio Eradication activities.

Southern Sudan

Southern Sudan suffered an outbreak of WPV1 during 2008 (24 cases) and 2009 (40 cases). All the states reported polio cases (except WBG). During 2008–9, 18 SIAs (13 NIDS, 4

SNIDS, 1 mop-up) were conducted (5 tOPV, 12 mOPV1). Since June 2009, no polio cases have been identified in Southern Sudan.

The surveillance data analysis showed considerable improvement in the last six months. South Sudan achieved the international standard in most of the surveillance indicators yet some gaps exist specially at the county level. the denominators used in calculation of those indicators are extrapolated from the campaigns figures though it is nearly double that of the official census target, South Sudan achieved NPAFP rate of 2.4 per/100,000 <15 and stool adequacy rate above 85% A study of reverse cold chain is undergoing as well as a community study about the reasons behind refusal of vaccination in a community in Western Equatoria State.

The SIAs data showed that the coverage of the last year NIDs by finger marking through the Independent Monitors ranges from 70% to 90% with improvement in the last two rounds but still there are some immunity gaps at the county level and as shown by analysis of surveillance data.

Despite the improvement of the routine vaccination as reflected by doubling of DPT3 coverage (44% in 2009 as compared to 22% in 2008) yet a lot of effort is needed to improve the situation of routine vaccination in all the ten states

Lots of activities were implemented to get this significant change in the last few months including enhanced collaboration between WHO, UNICEF, and MOH, CDC, USAID, Rotary, RC and other NGOs on SIAs, establishment both of polio control room and surveillance cell with recruiting the suitable staff. Many of the vaccancies among both national and international staff have been covered. A team of special Stoppers has been requested to strengthen the field support. A lot of activities to improve the quality of campaign conduction including updating the guidelines as well as training on micro-planning on all levels before the campaigns have been conducted. During the campaigns doubling the campaign supervisors and introduction of innovative monitoring tools like using polio cards and school home work forms will help in improving the implementation of the campaign. Efforts have been done to improve the quality of the independent monitors and hence the data collected through them. More than 2000 social mobilizers have been recruited by UNICEF to improve the campaigns and a network of communication was established.

As regards the SIAs, South Sudan is planning to conduct two NIDs in October and November 2010 and one or two SNIDs during the period June-August according to the epidemiological situation. As regards the AFP surveillance an external surveillance review will be conducted in 2010 as well as three desk reviews over the coming 9 months.

Uganda

Uganda had been polio-free since 1996 (13 years) but was re-infected in January 2009 with a virus that was genetically linked to that of Southern Sudan. A total of 8 confirmed cases of wild poliovirus type 1 in 2009 localized in 2 districts in northern Uganda (Amuru and Pader) with evidence of local transmission in Pader district. The risk factors of the outbreak were

low immunity profile among children below 5 years of age. The rapid risk analysis identified twenty nine districts as being at high risk for continued transmission mostly along the borders of Southern Sudan, Eastern DRC, Kenya and part of central region.

The 29 districts implemented polio immunization response activities in March and April 2009 while 12 of the 29 carried out additional rounds in August and October 2009 following break through transmission. Overall, a total of 5 rounds four with mOPV and one nation-wide tOPV round combined measles were implemented. Independent monitors conducted indicate that while reported coverage was always above 100%, only up to 85% of children monitored were actually immunized. Further more just over 60% of the districts attained a coverage of 90% and above for independent monitoring coverage for all rounds.

Routine immunization coverage with 3 doses of OPV increased from 62% to 86% in 1999-2004, with a decline to 83% in 2005 all through 79% in 2008 and rose again to 83% in 2009. This was attributable to erratic gas supply from national level and vaccine shortage in most districts during period 2006-2009). The proportion of districts achieving OPV3 coverage of 80% and above rose from 20% in 2000 to 66% in 2004 and dropped to 49% in 2008. The updated risk analysis for 2009 identified 21 high risk districts that will be focused on in 2010.

Surveillance performance indicators at national level have been sustained above the target since 2005 AFP detection rate rising from 2.13 to 3.64 while stool adequacy rates remained above 80% as at end of 2009. However, risk analysis identified gaps mainly in districts bordering Turkana region of Kenya and western part of the country bordering DR Congo.

To address the existing challenges, the country has planned to support districts with large numbers of unimmunized children to effectively implement RED approach, Advocacy through the cultural institutions, parliamentarians, and partners for sustainable financing of routine immunization, ensuring vaccine and logistics availability; revamping the cold chain system and implementing Child Health Days plus strategy twice each year in April and October.
Regarding surveillance biannual updates of district risk analysis will be done to guide activities including deployment of international and national STOP teams; strengthen contact tracing sampling and community based disease surveillance including private sector involvement.

Kenya

The last indigenous case of polio was reported in 1984. The country conducted Polio National Immunization campaigns conducted for 5 years (1996 – 2000) in line with polio eradication strategies as per WHA resolution. Preventive polio campaigns in selected high risk districts were conducted in 2001, 2002, 2005. The Country documentation report on polio free status was submitted and accepted by ARCC in 2005. In September 2006, Kenya suffered an outbreak of WPV due to importation within a refugee camp in North Eastern Province linked to Somalia. Two WPV1 cases were confirmed and interventions carried out effectively controlled the outbreak. Another outbreak occurred in February 2009 in Turkana

district, Rift Valley Province. This was linked to Southern Sudan, a total of 18 WPV1 were confirmed in *t*he three Turkana Districts. The last case had onset 30th July 2009.

A total of eight rounds of mOPV1 were conducted in response to the 2009 outbreak. The last two rounds conducted in August and October 2009, used the Short Interval Additional Dose (SIAD) approach. House to house strategy was used with each round having two passages. Kenya is still at risk for importation in the North West as well as the North East borders as these areas are most vulnerable because of the weak health systems and difficult accessibility. AFP surveillance performance indicators at the national level have met the certification standards, but sub- national level gaps still exist. All the Provinces attained target for detection rate of 2/100,000, while stool adequacy for two provinces i.e. Nairobi and Central was below 80% in 2009. The population immunity as indicated by the non-polio AFP cases is above 80% for 4 out of 8 provinces, (Central, Coast, Eastern and Nairobi). Immunity is particularly low in North Eastern Province, for the last 3 years this has been below 80%.

The country conducted risk analysis based on the following criteria; Low OPV3 coverage $\leqslant$ 80% in the high risk districts, presence of special populations (refugees, IDP, nomads), high cross border movement ,unreached populations during campaigns, insecurity especially in the high risk districts and poor state of infrastructure in these high risk areas. Based on the risk analysis, 30 districts were selected for preventive SIAs subject to availability of funds.

The main challenges the country is facing are; inadequate budgetary support from the government , lack of funds for outreach, frequent stock outs of vaccines and inadequate supply of gas for maintaining cold chain , creation of new districts without adequate infrastructure, poor community linkage in surveillance and weak involvement of stake holders and private sector in EPI and disease surveillance .

The strategies in place to address the challenges include; RED strategy and DQS roll out to reach the high number of unvaccinated children, integration of immunization with high impact interventions, targeted sensitization, and regular review meetings and support supervision for disease surveillance at the district level. Conducting preventive SIA in the 30 districts subject to adequate resource mobilization as recommended by HoA TAG

Ethiopia

At the end of 2009, Ethiopia reported national Penta 3 (DPT-HepB-Hib) coverage of 81%. Nevertheless, 18 zones mostly in Oromia and Amhara regions account for 60% of unimmunized children. These regions have experienced outbreaks of vaccine preventable diseases, and specifically for Oromia region cVDPV outbreaks from 2008 -2010.

Three years after interrupting indigenous WPV transmission, the country experienced it first importation December 2004, when a wild poliovirus was confirmed in Tigray Region - bordering Sudan. Since then, there have been 4 additional outbreaks in different parts of the country - the latest being the one in Gambella Region in April 2008. A series of outbreak response polio campaigns were conducted in 2009 targeting Gambella Region with extension to the neighbouring zones of Oromia, Benishangur Gumuz, Amhara and Tigray. No WPV

case has been confirmed since April 2008. Due to the perceived risk on the Somali – Somalia border, a couple of OPV rounds were conducted. Additional sub-national rounds will be conducted in any area as guided by the WPV epidemiology.

To address the transmission of cVDPV-2, three rounds of tOPV were conducted in East Hararghe zone of Oromia region with the last case of cVDPV-2 in February 2009. However, 2 genetically linked cases of cVDPV-3 have been isolated in April 2009 and January 2010 with a possibility of circulation.

Ethiopia has maintained certification level AFP surveillance for more than 5 years. However there are disparities in surveillance performance among regions and zones with weak performance in border areas due to insecurity problems, difficult terrain and weak infrastructure. This coupled with large numbers of unimmunized children, weak infrastructure; in border areas constitute remaining risks of transmission along the Ethiopia-Sudan, Ethiopia-Kenya and Ethiopia - Somali borders. To address the gaps, the programme plans to institutionalize community based surveillance using the network of 30,000 Health Extension Workers deployed at Kebele level.

Due to the heterogeneity of the problem and risks, 2-pronged approach has been adopted to maintain good surveillance and population immunity nationwide; and to tailor strategies for the high risk border areas due to the peculiarities described above. The country will strengthen active surveillance using woreda focal points nationwide; enhanced routine immunization in zones with large numbers of unimmunized children and low population immunity; increase supportive supervision at all levels. To assess the achievements and take corrective measures, regular quarterly and annual review meetings will be conducted.

The critical enabling factors will be to ensure availability of resource (Financial, Human and material) to conduct the planned activities (SIAs, routine immunization, surveillance and outbreak response) through high level advocacy and resource mobilization.

Eritrea

The last wild poliovirus reported in Eritrea was a type 1 imported into Gash Barka zone of Eritrea from Darfur region of Sudan in April 2005. Sequencing results indicated that the virus originated from northern Nigeria. In response to the importation, two rounds of house-to-house NIDs were conducted synchronized with Sudan.

Risk analysis done early 2009 pointed to the highest risk being in the Sudan border. Accordingly, two SNIDs rounds were implemented in February and March covering four bordering districts and a nationwide round combined with measles was implemented in May 2009. All these rounds achieved a modest coverage of between 75 and 85% with no independent monitoring.

AFP surveillance indicators at national level have remained above the recommended levels with AFP detection rates of 7 and 7.8 in 2008 and 2009 respectively and stool adequacy rates of 94%in both years. However, these performance indicators at the sub-national level indicate gaps that have been identified and are being addressed.

Reported routine OPV3 coverage dropped from 70% as at end on 2008 to only 63% in 2009. Survey results however suggest a level of coverage just above 80% indicating problems with completeness of reporting as well as the denominator to mention but a few.

Chad

Chad is experiencing a major outbreak of wild poliovirus type 3 with total of 67 cases reported in 2009 up from only 35 type 3 in 2008. Already 3 WPV type 3 cases have been confirmed in 2010 the most recent being 8th January 2010. In the last one year, wild polioviruses linked to Chad have been confirmed in Nigeria, Cameroon and Central African Republic emphasizing the growing critical importance of rapidly interrupting transmission in Chad.

In response to ongoing outbreak a total of 8 rounds using tOPV and mOPV3 were carried out targeting clusters of Regions at a time. Independent monitoring data however confirm that the quality of SIAs remained very poor especially in the capital city Ndjamena and the surrounding districts where most of the population resides. Plans are in place to implement 5 national rounds in January, March, April, October and November using a mix of bOPV, mOPV3 and tOPV. The country continues to face major challenges in implementing polio eradication activities due to poor infrastructure, shortage of human resources and insecurity. However, the most recent development that saw the President launch SIAs for the first time in March 2010 and declared war on polio in Chad is a major step towards the implementation of high quality SIAs.

A desk review for AFP surveillance and a Technical Advisory Group meeting were conducted in October 2008 followed by deployment of experienced international staff has led to some improvement in surveillance indicators. The number of NP-AFP cases increased from 231 to 351 in 2008 and 2009 respectively. The NP-AFP rate is at 5.2 in 2009 up from 3.7 in 2008 while the stool adequacy remains at 84% in during both years. However the fact that the number of compatibles still remains high 30 in 2009 up from 21 in 2008 and with six out of the 18 regions not meeting at least one of the indicators is further evidence that surveillance is still sub-optimal and improvements made should be widely applied and consolidated.

Somalia

Somalia has been polio free for almost 3 years now (the last WPV in Somalia occurred in March, 2007). This success is attributed to several factors, among which the well established polio network with staff present in all districts, the high community acceptance for polio vaccination and support of AFP case reporting, the support of religious leaders and clan elders, the ability of the polio staff to secure the commitment of de facto local leaders and authorities to conduct polio eradication activities and the dedication of more than 190 local staff and thousands polio eradication volunteers. Somalia also benefits from the support of

generous donors and PEI partners. However, the volatile security situation continues to limit the ability the polio staff to conduct good quality immunization activities in some areas

In 2009, Somalia maintained good AFP surveillance system with key indicators above certification standards at national level. For 2009, all regions and districts have achieved AFP key indicators above certification standards; however, 2 districts from South and Central zones have not achieved these indicators and will be the object of special attention in 2010

In view of the persistent very low routine immunization, the 2008 HoA TAG recommended to take opportunity of all immunization activities to boost population immunity profile to WPV. These recommendations have been successfully implemented. Two rounds of mOPV SIAs have been conducted in June and July 2009, reaching 3 millions of children aged < 5 years. Additional opportunities for OPV delivery were provided through Child Health Days during which 1 million children aged less than 5 years received OPV.

Priorities for Somalia in 2010 will be to maintain a highly sensitive surveillance system in all districts, conduct at least 2 rounds of SIA in all districts of Somalia with coverage > 95% for all children aged <5 years as measured by independent monitoring of finger marking, to support delivery of OPV through CHDs and to work with partners to improve routine immunization

Djibouti

Djibouti has been polio-free since the last clinical case of 1999, since then the polio eradication program has undertaken many efforts to sustain the polio free status by strengthening the population immunity as well as the AFP surveillance system.

Djibouti has implemented most of the 2008 TAG recommendations, except the IM due to lack of funds. However and despite all the efforts made, Djibouti remains among countries that are at risk for importation due of the following factors:

- High cross border movement
- Mobile population difficult to track
- Fragile AFP surveillance system
- Low routine immunization coverage in HRA

In 2009, Djibouti has detected 6 AFP cases, reaching an AFP rate of 2.46; The 6 cases received a minimum of 3 OPV doses each. A case from Somalia was detected and cross notified. The stool sample adequacy was 66.67%.No compatible cases in 2009 (2 cases pending classification).

Lot of efforts were also made in preparation for certification, the NCC was restructured and updated with new members, the 2008 National Certification document was submitted and approved by the RCC while the 2009 update is in process.

Two SIAs were implemented in 2009 with a national administrative coverage of 108% and 105% respectively, the 2nd round also included Vit A and deworming; As recommended by TAG, special plans were developed for mobile populations. The CHDs (6 days) was an opportunity to immunize children with OPV country wide.

Djibouti has made significant progress in improving immunization coverage through routine EPI.

The way forward is to continue with 2 SAIS/year and use other immunization opportunities (CHD, RVW…). Prioritization will be made on high risk Areas, continuation in assessing mobile population and inclusion in immunization activities, improving management at sub national level and implementing IM after each SIAs. Efforts planned for strengthening of the outreach activity, capacity building on M&E (especially at district level) training of staff involved in routine immunization and implementation of the EPI communication strategy
Strengthening of AFP surveillance system at sub national level with strengthening of AFP active search at all levels (health facilities & community) is a priority with capacity building and Cross border collaboration.

Yemen

Yemen was polio free until February 2005 when it experienced an explosive outbreak of WPV1, as a result of importation from Sudan. The relatively low routine OPV coverage in the 4 years prior to the outbreak was one of the factors which result in 480 polio cases. The last case of the outbreak had onset in February 2006.

AFP surveillance is functional with all governorates achieving the target non-polio AFP rate of above 2 during the period to 2006 to 2009. The stool adequacy has been 85% in 2006, 67% in 2007, 95% in 2008, and 93% in 2009.

Yemen conducted 2 rounds of NIDs in 2007, one round in November 2008, and 2 rounds in 2009. All 2007, 2008, and 2009 NIDs rounds achieved coverage of over 90%.

Routine OPV coverage had also improved to 86% in 2006 and in 2007, 87% in 2008, and 86% in 2009. The country plans to conduct at least 2 rounds of NIDs.

3. CONCLUSIONS AND RECOMMENDATIONS

General conclusions

The Technical Advisory Group recognizes the progress and achievements made by the countries in surveillance and supplementary immunization activities. Despite the last detection of wild poliovirus in July 2009, the TAG is concerned that WPV transmission

might still be occurring undetected, since significant immunity gaps and sub-optimal AFP surveillance performance remain in high risk areas in most countries. These areas are also at risk for spread of wild poliovirus in the event of importation from areas with active transmission such as Chad. The TAG noted that, in Southern Sudan, progress has been made recently in programme capacity through increased technical and logistical support but there still remain gaps in SIAs quality and AFP surveillance performance.

The TAG considers that the following issues must be addressed immediately to detect and interrupt transmission of wild poliovirus, improve population immunity and achieve certification level AFP surveillance.

Addressing surveillance gaps: Most countries in the epidemiologic block have surveillance gaps at sub-national level. This situation is of particular concern because the gaps are in high-risk areas with low population immunity. The risk of undetected transmission in these areas remains high.

Supplementary immunization activities: Although SIAs were implemented as recommended by the TAG in 2009, the quality of the activities was variable across and within countries as shown by independent monitoring evaluations. The implementation of the Short Interval Additional Dose (SIAD) campaigns in Kenya improved the quality of the rounds conducted and achieved high coverage while simultaneously reaching a higher number of children compared to previous rounds. The TAG recognizes that high quality implementation of SIAs will remain the main strategy to interrupt wild poliovirus transmission in the Horn of Africa countries during the period 2010-2012.

Social mobilization and communications activities: The TAG noted that social mobilization and communication activities remain essential components to ensure high quality immunization activities. The engagement of community leaders in planning and implementation of SIAs and use of culturally appropriate strategies were shown to be effective in high-risk areas.

Routine immunization activities: The TAG recognizes the importance of routine immunization activities to maintain population immunity against poliovirus and notes that several countries have made significant improvement in routine coverage during 2009. However, because routine immunization will not improve dramatically over the next few years, SIAs remain the priority strategy for interruption of wild poliovirus transmission in the Horn of Africa countries, at least for the next 2 years. The TAG endorses the efforts of several countries to provide OPV to children during Child Health Days, measles campaigns and other interventions during 2009.

Outbreak preparedness and response: The TAG noted that countries in the HOA had prepared outbreak response plans, but many were not able to implement the plans in a timely and effective way when outbreaks due to importation of wild polioviruses occurred.

Coordination and cross-border meetings of the Horn of Africa countries: The TAG noted that the coordination meetings of the HOA countries that took place in 2008 and 2009

were effective in promoting coordination, sharing information and conducting joint planning for implementation of priority activities. However, cross-border coordination meetings between countries with critical borders, such as Chad and Sudan, did not take place in 2009. The TAG noted with appreciation the appropriateness of the risk assessments and activity plans developed during the March 2010 coordination meeting.

Recommendations

Southern Sudan

The TAG noted that the last confirmed polio case was reported in June 2009. However, TAG also noted that many of the improvements in campaign quality and programme capacity are recent and that surveillance gaps still exist at sub-state levels. Southern Sudan still constitutes the weakest link within the HOA region and there is need for the following urgent actions:

AFP surveillance:

- AFP surveillance activities should be enhanced with active case search instituted in all states. This activity should be done on monthly basis for the coming 6 month.
- In Silent areas (counties) a supplementary collection of stool samples from a sample of healthy children should be done
- Collection of samples from contacts of AFP cases should be continued
- The list of active surveillance and reporting sites should be updated within a month. All staff should provide plan and report on conduction of active surveillance visits
- A sample of AFP cases (about 25%) should be validated by international staff for quality and data integrity
- International field review should be conducted within the coming 6 months

Supplementary Immunization activities:

- Four full NIDs should be implemented in 2010 (February-March & October-November), two of them using tOPV and two with bOPV. Other SNIDs could be considered between March and October in accessible areas.
- Efforts to improve campaign quality should continue especially with respect to all operational aspects of planning, supervision and independent monitoring
- The international technical support should continue with the current level of intensification as well as international observation of SIAs

Ethiopia, Kenya, Uganda and north Sudan:

The TAG noted the efforts made by the countries to implement the last TAG recommendations including the improvement of the quality of SIAs as evidenced by the Independent Monitoring data presented. However, the TAG is very concerned that there are still major surveillance gaps particularly in the highest risk areas in each of the four countries

which do not give confidence that the recent transmission of wild poliovirus has been interrupted. TAG therefore recommends as follows:

Surveillance:
Each of the four countries to immediately revitalize active surveillance starting with the highest risk areas as identified in the risk analysis reports and should

- Review and update the current lists of active surveillance sites in the high–risk areas, conduct retroactive case search as per plans developed by the end of May 2010 and provide evidence of the visits carried out. The results of these searches should be used to update and focus plans for the subsequent SIAs interventions as well as the necessary additional activities to boost population immunity
- Validate at least one third of all AFP cases detected.
- Carry out quarterly desk surveillance reviews.
- In any of the countries that have not had an external in-depth surveillance review over the last two years, this should be carried out before the end on 2010.

SIAs schedule and quality:
Recognizing the continued risk of importation from Chad as well as the underlying risk of undetected transmission due to gaps in surveillance, TAG recommends that each of the four countries implements:

- Two SIAs rounds of either tOPV
- SIAs should be nationwide, but with special attention to the high-risk border areas.
- All quality related aspects must be critically reviewed an integrated in to the planning and implementation of the SIAs.
- Independent monitoring must be conducted and the findings used to respond appropriately. The results of the response activities should be documented.
- In addition, every opportunity should be taken to include OPV in other Child Health Interventions such as Child Health Days and measles campaigns.

Somalia

The TAG recognizes the difficult circumstances in Somalia particularly the security situation and the difficult access to many areas and has noted with satisfaction the fact that the last wild poliovirus in Somalia was reported almost three years ago and Somalia has been polio free since then. Somalia has maintained good AFP surveillance system in 2009 with key indicators above certification standards. Two rounds of tOPV SIAs have been conducted in 2009, reaching 3 millions of under five children. The TAG also noted that additional opportunities for OPV delivery were used through Child Health Days during which 1 millions of children under 5 years received OPV.

Recommendations

- To maintain the population immunity of under five children, and guard against possible importations and appearance of VDPVs, the TAG recommends the implementation of two NIDs in 2010 using tOPV.

- In view of the persistent very low routine immunization, the TAG recommends to continue using all opportunities of childhood interventions to boost population immunity profile to WPV by providing tOPV to under-five children during CHDs

Djibouti, Eritrea and Yemen

The last wild polioviruses detected in Djibouti, Eritrea and Yemen were in 1999, 2005 and 2006 respectively. These countries can be considered at lower risk in the Horn of Africa epidemiologic block. However, the risk assessments showed the following: (a) Yemen: security situation, leading to limited access to health services and poor surveillance performance. Population movements with other HOA countries also pose a risk for importations. (b)Djibouti: risk of importation from bordering countries due to a fragile health system and high cross border movements. (c) Eritrea: bordering areas with neighbouring countries where there is limited access to health services and identification of AFP cases

Recommendations:
These countries should:

- Maintain adequate immunity through routine EPI and resource permitting, two rounds of SIAs every year with TOPV and BOPV
- Sustain high quality surveillance throughout the countries especially in bordering and hard to reach areas.

Cross-cutting Issues:

1. SIA Quality and Strategies

    - Countries should continue to use all opportunities to provide OPV to children during any CHDs, measles campaigns, and other health interventions that target mothers and children.
    - Independent monitoring (IM) should be done for all SIAs conducted. Independence of the monitors is a critical factor to ensure campaign quality. Countries should adhere to the standard guidelines regarding selection, training and timely reporting of the results to WHO within 15 days after a campaign.
    - Corrective actions taken as a result of IM evaluations should be implemented within 7 days and systematically documented and reported to WHO immediately, to facilitate international risk management.
    - Short Interval Additional Dose (SIAD) campaigns should be considered in geographically-isolated or security-compromised high-risk areas, as a means to improve campaign quality and coverage.
    - Specific strategies should be developed to address the unique challenges to reaching and fully vaccinating mobile populations, which clearly play an important role in virus transmission in the HOA.

2. AFP Surveillance

    - All countries should implement desk reviews of sub-national AFP surveillance performance on a quarterly basis, starting April 2010, and with immediate action taken by national authorities and WHO to address sub-national gaps that are identified.
    - The TAG recognizes that circulating VDPVs will be increasingly detected due to increased recognition and improved laboratory techniques. The GPEI should provide updated guidance to countries for investigation & response of cVDPVs by May 2010. In addition, the TAG recognizes that this problem should be addressed by regional TAGs in 2010.
    - Following detection of cVDPV, countries should conduct a detailed epidemiologic investigation and a full clinical assessment of the cases. The confirmation of circulating vaccine derived viruses should lead to an appropriate outbreak response.

3. Outbreak preparedness and response

    - All countries should update their outbreak preparedness and response plans with emphasis on maintaining population immunity, highly sensitive surveillance and appropriate and timely response, especially for high risk areas, by the end of April 2010.
    - Countries should ensure full implementation of these plans.

4. Routine Immunization

    - In order to reduce population immunity gaps in high-risk areas, PEI staff should systematically support all efforts to strengthen routine immunization activities in high risk areas, including supporting implementation of the Reaching Every District approach, staff training and capacity building in areas such as district level micro-planning and cold-chain maintenance.

5. Social mobilization

    - The TAG noted the many innovative efforts that countries have made to improve social mobilization and communication activities during 2009. The engagement of community leaders in micro-planning and implementation of SIAs in high risk areas and the use of culturally appropriate strategies were shown to be highly effective, as was demonstrated in Southern Sudan and Kenya. In the highest risk areas, local and international NGOs, community and faith based organisations should continue to be engaged to ensure quality communication support to SIAs and routine immunisation.

    - The TAG also notes that social mobilization and communication activities supporting implementation of SIAs are not systematically measured and

documented in al countries, and recommends that communication indicators are incorporated in all independent monitoring forms and are systematically reported on. The TAG stresses the importance of continuing to support the social mobilisation network that has been developed in Southern Sudan, including through direct support to NGOs and community based organisations and continuous training in interpersonal communication, in support of SIAs and RI. The TAG also stressed the need for advocacy efforts among local leaders and influencers along border areas, in particular on the border between Chad and Sudan.

- Social mobilization and communication activities supporting implementation of SIAs should be systematically measured and documented. Social mobilization and communication indicators included in the IM evaluation should be systematically reported.

6. Financing

    - While the TAG believes that it is feasible to meet the milestones described in the 2010-12 Strategic Plan for the Horn of Africa (specifically to stop transmission in outbreak countries by mid 2010 and to stop transmission in Chad and Sudan by end 2010), a reduction in funding now represents a direct and immediate threat to the success of the initiative and this is a major concern for the TAG. The success of these milestones and the schedule of SIAs described within this document will be reached only if funds are available in the field in the next 2 months. At the time of writing, it will not be possible for the GPEI to carry out all of the activities recommended unless additional funds are made available. This will inevitably increase the risk to those countries and areas within countries that are not currently at highest risk of new importations, and the TAG believes that the milestones will not be reached without these funds. Therefore, partner agencies should move urgently to facilitate the availability of funds.

    - The TAG recommends that each of the HoA countries convene an ICC within one month in order to review funding requirements and determine the capacity of governments, partners and donors to respond. Every effort should be made to advocate for funds at the country level, and funds should be provided in sufficient time to enable early procurement of vaccine, quality microplanning, training of vaccinators and implementation of SIAs.

7. The TAG endorses the recommendations of the Horn of Africa Coordination meeting held in Nairobi 5-6 March 2010 and urges that further HOA Coordination meetings be held two times a year. In addition, priority should be given to supporting cross-border coordination meetings between countries.

8. TAG Oversight:

- The Horn of Africa Bulletin should be enhanced to include the status of implementation by country of the major TAG recommendations, quarterly desk surveillance review recommendations and social mobilization indicators.
- One or two TAG members should visit the area within 3-4 months to independently inform the TAG as to the status of implementation of the urgent recommendations and the risks to achieving the end-2010 milestone.
- WHO and UNICEF should consult with the TAG Chair immediately following the Southern Sudan TAG assessment mission, to determine whether an ad hoc meeting of the full TAG is needed to provide further guidance during the final, critical 6 month period for achieving the end-2010 milestones.
- The full TAG should meet with country programmes, implementing partners and donors in 7-8 February 2011.

Annex: List of participants:

5th Meeting of the Horn of Africa Technical Advisory Group for Polio Eradication
Nairobi, Kenya 8-9 March 2010

Technical Advisory Group members[1]

1. Dr Ciro de Quadros (Chairman), Washington DC, USA
2. Dr Yagob Yousef Al-Mazrou; Saudi Arabia
3. Dr H. El Zein Elmousaad, Amman, Jordan
4. Professor Francis Nkhrumah; Legon Ghana (Unable to attend)
5. Ms Sue Gerber, CDC, USA (unable to attend)
6. Professor Redda Teklahaimanot; Addis Ababa, Ethiopia
7. Mr Carl Tinstman, Boulder, Colorado, USA
8. Dr Rafah Aziz, London, United Kingdom (Unable to attend)

Technical Advisors

9. Dr Bruce Aylward, WHO/HQ
10. Dr Ahmadu Yakubu UNICEF, ESARO
11. Dr Faten Kamel WHO/EMRO
12. Dr Abdalla Elkasabany, WHO/EMRO
13. Dr Samuel Okiror WHO/AFRO
14. Ms Liliane Boualam, WHO/HQ
15. Dr Elias Durry WHO/HQ
16. Dr Benjamin Nkowane WHO/HQ
17. Dr James Alexander CDC/USA
18. Dr Ann Buff, CDC/USA
19. Mr Jonathan Veitch, UNICEF/WHO/HQ

National Representatives and participants

20. Representative, MOH Chad
21. Mr Abdallah Ahmed Hade, MOH Djibouti
22. Representative, MOH Eritrea
23. Dr Tazita Hailu, MOH Ethiopia
24. Representative, MOH Kenya
25. Mr Ali Ibrahim Ismail, MOHL, Somaliland
26. Dr Angok Gordon Kuol, MOH, South Sudan
27. Dr Jacinta Sabiti, MOH Uganda
28. Dr Ali Ben Break, MOH Yemen

Partner Representatives (International/Regional)

29. Ms Ellyn Ogden, USAID, Washington DC, USA
30. Mr Tim Petersen, Gates Foundation, Seattle, USA
31. Representative, Rotary International, USA
32. Dr Sue Goldstein, Member, Task Force on Immunization

33. Mr Robert Davis, IFRC, Regional Office, Kenya
34. Dr Cornelia Davis, USAID Regional Office, Kenya

UNICEF Secretariat[2]

35. Dr Moktar Omar Ahmed, UNICEF, Djibouti
36. Dr Imran Mirza, UNICEF, Somalia
37. UNICEF, South, Sudan
38. Dr Neelam Bhardaj, UNICEF, Sudan
39. Dr Maha Mehanni, UNICEF, Sudan
40. UNICEF, Ethiopia
41. UNICEF Eritrea
42. UNICEF, Kenya
43. UNICEF Uganda
44. UNICEF, Yemen

WHO/AFR Secretariat

45. Dr David Okello, WHO Representative, Kenya
46. Dr Nasir Yusuf ,IST/ESAWHO/AFRO
47. Dr Placide Gbedenou, WHO/Chad
48. M. Embaye Asfaha, WHO/Eritrea
49. Dr Mohamed Adem, WHO/Ethiopia
50. Dr Mohammed Duale, WHO/Kenya
51. Dr Shem Kiptoon, WHO/Kenya
52. Mr Andrew Bakainaga, WHO/Uganda

WHO/EMR Secretariat

53. Dr Marthe Everard, WHO Representative, Somalia
54. Dr Mohammad Abdur Rab, WHO Representative, Sudan
55. Dr Abdi Mohamed, Head, WHO, South Sudan Office
56. Dr Karim Djibaoui, WHO/Djibouti
57. Dr Abraham Mulugeta Debasey, WHO/Somalia
58. Dr Raoul Kamadjeu, WHO/Somalia
59. Mr Ali Hasan, WHO, Somalia
60. Ms Meaza Tadesse, WHO/Somalia
61. Dr Salah Haithami, WHO/ Sudan
62. Dr Yehia Mustafa, WHO/south Sudan
63. Dr Anthony Laku, WHO/south Sudan

WHO Admin Staff

1. Ms Pauline Gichobi, WHO/Somalia
2. Ms Carolyn Gathenji, WHO/Somalia
3. Mr Paul Makosa, WHO/Somalia
4. Ms Ruth Kormait, WHO/Somalia
5. Ms Evelyn Hinga, WHO/Somalia