World Health Organization

TECHNICAL ADVISORY GROUP ON POLIO ERADICATION FOR THE HORN OF AFRICA COUNTRIES

15th Meeting Report

6 to 8 September 2016
Nairobi, Kenya
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## List of acronyms

<table>
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<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AFP</td>
<td>Acute flaccid paralysis</td>
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<tr>
<td>bOPV</td>
<td>Bivalent oral polio vaccine</td>
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<tr>
<td>HOA</td>
<td>Horn of Africa</td>
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<tr>
<td>IPV</td>
<td>Inactivated poliovirus vaccine</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
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<tr>
<td>POSE</td>
<td>Polio Outbreak Simulation Exercise</td>
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<tr>
<td>RI</td>
<td>Routine immunization</td>
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<tr>
<td>SIA</td>
<td>Supplementary immunization activity</td>
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<tr>
<td>SOP</td>
<td>Standard operating procedure</td>
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<tr>
<td>TAG</td>
<td>Technical Advisory Group</td>
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<tr>
<td>UNICEF</td>
<td>United National Children’s Fund</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WPV</td>
<td>Wild poliovirus</td>
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Executive Summary

The 15th Horn of Africa (HoA) Technical Advisory Group (TAG) meeting was held in early September just weeks after the 2016 Nigeria wild virus outbreak. The TAG expressed alarm at the imminent prospect of reintroduction of wild virus into the Horn.

Developments during the year 2016 increased the possibility of wild virus importation into the Horn, and subsequent transmission. These included:

- reduction in the scope and number of SIAs in HoA countries during the year (e.g., Eritrea and Tanzania having had none)
- global shortages of both bOPV and IPV vaccine necessitating reductions in SIAs and constraining response capacities in case of future HoA outbreaks
- forecasted funding reductions and/or uncertainty of funding in some countries
- significant subnational surveillance gaps in several countries, which increase the possibility of undetected transmission for unduly long periods (as happened in Nigeria).

Given the previous experience of Nigeria virus spreading to the HoA and causing outbreaks in the Horn no fewer than three times in the last 12 years, and coupled with the developments listed above, the TAG concluded that HoA countries are at high risk of WPV transmission if importation occurs.

Finally, conflict and insecurity in four countries of the Horn (Sudan, South Sudan, Somalia, and Yemen) have resulted in over 1 million children being inaccessible, some or all of the time, for immunisations.

In the face of the above realities, there are only two things that HoA countries can do to protect themselves:

1. Improve overall surveillance by addressing subnational surveillance gaps and validating at least 50% of AFP cases. Quarterly risk analyses should be conducted by all countries which may also identify immunity gaps.
2. Strengthen outbreak preparedness and response plans and test these plans though POSE simulation exercises (except in security-constrained countries like South Sudan and Yemen where POSE exercises are unfeasible). Gaps identified by POSE need to be immediately corrected to ensure that countries can respond rapidly and effectively to virus importation.

In addition to conclusions and recommendations, both cross-cutting and country specific to address the above major concerns, the TAG had a number of conclusions and recommendations to address related issues. While they are detailed in the main body of the report, they included inter alia:

- closing of population immunity gaps
- improving routine immunisation
- further strengthening of communications capacity across the entire programme, including for outbreak response
- fixing laboratory performance issues
- further planning for transitioning of polio assets.

Finally, the TAG made a series of country specific recommendations which are detailed below.
I. **Preamble**

The 15th meeting of the HOA TAG was held from 6 to 8 September 2016 in Nairobi, Kenya under the chairmanship of Dr. Jean-Marc Olivé. The meeting was opened by Dr Jackson Kioko the Director of Medical Services, Ministry of Health, Kenya. In attendance were representatives of Djibouti, Eritrea, Ethiopia, Kenya, Sudan, South Sudan, Somalia, Uganda, Yemen and Tanzania, and representatives of CDC, USAID, UNHCR, Red Cross, Core Group, Rotary and BMGF.

The last (14th) HOA TAG meeting was held on 16 to 18 February 2016 in Nairobi, Kenya, followed by a teleconference in June 2016 to discuss the implementation status of the 14th TAG recommendations.

Globally, at the end of 2015 a total of 74 WPVs type 1 were reported while as at 7th of September 2016, a total of 25 WPVs type 1 had been reported. After nearly two years without reporting any wild poliovirus, 3 new WPV type 1 cases have been confirmed in Nigeria with the first from 4-6 August 2016. In the context of repeated importations of wild poliovirus from Nigeria into the HOA countries since 2000, the 15th HOA TAG meeting was called with the following objectives:

1. To provide an update on the status of global polio eradication with particular emphasis to Nigeria and the Lake Chad Region and make recommendations for limiting re-importation to HOA.
2. To discuss status of surveillance and level of immunity in the HOA countries particularly in the hard to reach and inaccessible areas and make recommendations on how to guard against missing low level transmission.
3. To review and recommend communication strategies to address the remaining and emerging challenges in the HOA.
4. To review the status of preparedness to respond to outbreaks/polio events in the HOA countries.
5. To discuss strategies for improving routine immunization and highlight ways in which polio assets have supported routine immunization and how this will be sustained.
III. Conclusions and Recommendations

1. Context: The current 2016 Nigeria wild poliovirus (WPV) outbreak poses three major questions for the Horn of Africa:
   - Are there any ‘Borno-like’ situations in the Horn of Africa (HOA) where we could miss transmission for an extended period?
   - Are there immunity gaps (including in inaccessible areas) that pose a major outbreak risk if Nigeria WPV is introduced, and how do we close these gaps?
   - How can we reduce the risk of WPV moving into the HOA with mobile populations?

2. General Conclusions
The Nigeria WPV outbreak is deeply troubling. It places the HOA at very high risk of importation and spread, given population movement pathways, previous WPV importations, and existing immunity and surveillance gaps.

The planned reduction in the number and scope of supplemental immunization activities (SIAs) is concerning given existing immunity gaps and declining routine immunization (RI) coverage. Three HOA countries were unable to introduce inactivated poliovirus vaccine (IPV) or had interruptions in IPV supply further exacerbating population immunity gaps.

Conflict and insecurity continue to affect access to children in Yemen, Somalia, South Sudan and Sudan. There are currently greater than 1 million inaccessible children in the HOA.

For the last ten years, three different outbreaks in the HOA have been caused by the virus importation from Nigeria. The map below shows the movement pathways of the virus.

![HOA WILD POLIO VIRUS (Type1) OUTBREAKS](image)

Despite these ongoing challenges, some programme improvements were made since the last HOA TAG. HOA countries are congratulated for achieving most of the 14th HOA TAG recommendations, including POSE implementation. The TAG however notes that the international cross border meeting
recommended as a follow up to the one held in Djibouti in 2014 had not been implemented. This needs to happen before the end of 2016.

Social mobilization networks generated evidence to demonstrate their impact and value for the programme. In difficult and hard to reach areas of Somalia, South Sudan, and parts of Ethiopia, the frontline workers engage with families, communities, clan elders and religious leaders to build trust and awareness. Two years into the programme the networks matured and are yielding positive outcomes for polio and other health programmes.

TAG recognizes efforts of Somalia, Ethiopia, and South Sudan in maintaining and transitioning of these important assets. However, although the immediate funding gaps in sustaining these have been met, there is no GPEI funding foreseen for Somalia and Ethiopia beyond 2016.

Outbreak preparedness and response communication capacity are being strengthened across the region. Key government and GPEI communication staff from 17 countries have been trained. A standardized GPEI frontline worker curriculum for vaccinators and social mobilizers is at early stage of introduction in the region.

Nearly 30 experienced communication staff and consultants have been identified and are currently maintained in the regional roster, enabling rapid deployment of this workforce for immediate and prolonged response.

Stock balances of bOPV and IPV vaccines and vaccine wastage rates are being tracked at the regional level using the standardized global approach.

The TAG endorses the HOA SIA calendar presented with amendments for Kenya (amended due to no SIA planned for the rest of 2016 and substantial RI coverage decline in 2015).

### HOA SIA calendar, 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tr>
<td>Somalia</td>
<td>100%</td>
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<td>100%</td>
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<tr>
<td>Ethiopia</td>
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<td>100%</td>
<td>33%</td>
<td>25%</td>
<td>100%</td>
<td>33%</td>
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<td>Kenya</td>
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<td>South Sudan</td>
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<td>Sudan</td>
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<td>Uganda</td>
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<td>Djibouti</td>
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<td>Eritrea</td>
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<tr>
<td>Tanzania</td>
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<tr>
<td>Yemen</td>
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<td>100%</td>
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TAG recommended additional SIA
3. Conclusions specific to the meeting objectives

**Objective 1:** To provide an update on the status of global polio eradication with an emphasis on Nigeria and the Lake Chad Region, and make to recommendations for limiting poliovirus importation to the HOA

Genetic sequencing indicates that poliovirus circulated without being detected for about 5 years in and/or around Nigeria and neighboring countries. **There is an imminent risk of poliovirus importation to HOA countries**; therefore all HOA countries should urgently strengthen surveillance, close population immunity gaps, and ensure outbreak preparedness and response readiness.

**Objective 2:** To discuss the status of surveillance and immunity in HOA countries particularly in hard-to-reach populations and inaccessible areas, and to make recommendations on how to detect low level poliovirus transmission

Surveillance indicators continue to improve at the national level, but significant subnational gaps remain. Over 1 million children are inaccessible in Somalia, Yemen, South Sudan and Sudan, making HOA countries at high risk of poliovirus transmission if importation occurs. HOA countries must seize all opportunities to reach and vaccinate all unreached children.
Laboratory problems compound the efforts to detect transmission in a timely way. Lab performance continues to be negatively impacted by sub-optimal communication between lab and field staff on critical issues like pending samples and test prioritization, and conflict-affected countries continue to batch samples. Operational improvements are needed to ensure timely specimen receipt, prioritized testing, and results feedback to programme staff for action.

**Objective 3:** To review and recommend communication strategies to address remaining and emerging challenges in the HOA

The overall social environment remains conducive to polio campaigns as evidenced by high campaign awareness and vaccine acceptance in the HOA. However, children are still being missed for both operational and social reasons. Although the proportion of missed children is not substantial (2-7%), nearly every third child missed is due to the child being absent during the time of vaccination. Further analysis to better understand reasons for these absences is important to address these gaps. Given the very high risk of WPV importation, maintaining and strengthening existing communication capacity, including crisis communication, is of utmost importance for the programme.

**Objective 4:** To review the status of preparedness to respond to polio outbreaks/events in the HOA

Developing outbreak preparedness and response readiness is critical at this point in time as the HOA is at high risk of poliovirus importation. The Polio Outbreak Simulation Exercise (POSE) has proven to be a great opportunity to strengthen country outbreak preparedness and response readiness, and the TAG congratulates countries that have implemented POSE and are correcting identified gaps.

**Objective 5:** To discuss strategies for improving RI, highlighting ways that polio assets have supported RI and how this will be sustained.

The 2015 World Health Organization (WHO)-United Nations Children’s Fund (UNICEF) best estimates indicate very encouraging progress at increasing RI in Ethiopia but a concerning decline in Kenya, Yemen and South Sudan.

**OPV3 Coverage, HOA countries, 2013 - 2015**
In summary and considering:

- the WPV outbreak in Nigeria and the high risk of its spread,
- the previous history of WPV importation to HOA from Nigeria,
- the reduction in the scope and number of SIAs in HOA countries and the persistent low RI coverage,
- the global shortage of bivalent oral poliovirus vaccine (bOPV) and IPV,
- the uncertainty of available funds, and
- the remaining subnational surveillance gaps in HOA,

the TAG concludes that HOA countries are at high risk of WPV transmission if importation occurs.

4. RECOMMENDATIONS

Cross cutting recommendations

Surveillance:

- Conduct quarterly risk analysis to identify areas at risk (including the functionality of surveillance in inaccessible areas and for mobile populations).
- Address the ‘unknown immunization status’ of acute flaccid paralysis (AFP) cases through a quality investigation (Ethiopia, Kenya, Somalia, Uganda, and Tanzania).
- Extend validation of AFP cases to all HOA countries (target: at least 50% of AFP cases with validation).
- Accelerate environmental surveillance implementation as planned in remaining HOA countries (South Sudan and Ethiopia) while ensuring no negative impact on AFP surveillance.
- Conduct community stool sampling in silent areas with large enough populations to report AFP cases.
- The HOA Coordination Office should disseminate the Nigeria Polio Weekly Update and the Lake Chad Sitrep to all HOA countries.

Improving population immunity:

- Achieve the highest possible SIA quality and ensure all high risk groups are reached, particularly given the global bOPV/IPV shortage.
- Continue efforts to strengthen RI especially in high risk areas.
- Strengthen vaccine management monitoring to ensure optimum use of limited vaccine supply.
- Ensure effective immunization activities across borders and migration pathways.
- In light of the emergence of WPV1 in Nigeria, the international cross border coordination meeting that was supposed to have been held before the 15th HOA TAG should be conducted before the end of 2016.

Outbreak preparedness and response:

- Countries that conducted POSE should correct gaps identified, and where indicated, repeat POSE to ensure improved response readiness.
- Conduct POSE periodically to ensure continued response readiness.
- Somalia, Yemen, Ethiopia, Kenya and Djibouti conduct POSE and update national preparedness plans before the end of the first quarter, 2017.
- HOA Coordinating Office to conduct HOA-wide POSE with participation by regional and headquarters staff.
Communication:
- Each country should prepare a communication component for their national outbreak response plans to include updated social mapping of high risk populations, analysis of reasons for missed children, and assessment of communication staff capacities.

Laboratory surveillance:
- HOA Coordination Office facilitate communication between lab and surveillance staff to avoid delays in testing and results sharing.
- HOA Coordination Office harmonize African and Eastern Mediterranean Regional lab data and closely coordinate regional lab networks. To facilitate this process, lab coordinators from African and Eastern Mediterranean regions should participate to the HoA meetings.
- HOA countries to develop/improve standard operating procedures (SOPs) for prioritizing, shipping and tracking samples, and minimizing batching.
- Ensure all HOA countries have access to alternate labs if needed.
- Report and investigate all positive samples from classical environmental surveillance or from “bag-mediated filtration systems”.
- Secure laboratory assets (including WHO-supported government and short term contract staff) until a long-term polio transition plan for lab-supported surveillance is implemented.

Transitioning of polio assets:
- Maintain GPEI and other donor funding to mitigate WPV importation risk and maintain HOA polio-free status.
- Ensure through polio transition planning that all surveillance, immunization, and social mobilization activities in Somalia, Sudan, South Sudan, and Ethiopia are maintained through 2019.

Country specific recommendations

Somalia
- Conduct a national surveillance review before the end of 2016, using the opportunity to validate AFP surveillance in recently accessible areas.
- Explore geo-mapping of validated AFP cases (especially in South and Central Somalia).
- Explore reasons for non-isolation of Sabin-like virus in Puntland (0% in 2016).
- Roll out the mapping project in Puntland and Somaliland.
- Conduct POSE with representatives from Kenya and Ethiopia, and update the national outbreak response plan.

Ethiopia
- Urgently address AFP surveillance degradation, particularly stool sample quality (percentage of zones achieving both indicators fell from 68% to 50% in 2016).
- Continue to improve the quality of AFP case investigation to minimize unknown immunization status.
- Escalate the outstanding issue of importation of lab supplies to the highest political level.
- Scale up community based surveillance particularly in Somali and Afar regions.
- Present accountability framework outcome at the next TAG.
- Conduct POSE by late October 2016.
Kenya
- Conduct surveillance review before end of 2016.
- Follow up environmental surveillance (sampling and results availability) weekly.
- Conduct one subnational (47%) round targeting north-eastern Kenya and Nairobi.
- Given devolution, revitalize RI.
- Conduct POSE by the end of 2016.
- Strengthen community based surveillance in insecure areas.

South Sudan
- Security situation permitting, conduct surveillance review and revamp surveillance activities.
- Expand NSTOP programme.
- Ensure appropriate compensation for frontline NID workers.
- Conduct 100% SIA in November 2016 (using vaccines from the August postponed campaign).
- Sustain polio coordination cell and secure participation of all partners involved in health delivery, including NGOs.
- Include all health sector partners, particularly NGOs, in efforts to improve coordination.

Yemen
- Conduct surveillance desk review by the end of 2016, focusing on identifying gaps in sensitivity and populations not covered by surveillance.
- Extend the community based surveillance network to other governorates.
- WHO Yemen to urgently address the shipment of samples to appropriate laboratories, prioritizing hot cases and improving the shipment tracking system.
- Implement transit vaccination teams around inaccessible areas.
- Continue to monitor the VDPV situation in Aden and take immunization action if needed.

Sudan
- Conduct a surveillance review by the end of the first quarter, 2017 with a particular focus on identifying high risk and inaccessible communities.
- Ensure that all high risk communities and areas are included in SNIDs in Q4 2016 and Q1 2017.
- Immediately implement plans for SIADs in newly accessible areas as soon as it is possible.
- Closely monitor transit and cross border vaccination to reduce the risk of WPV importation.
- Conduct POSE at sub-state level, building on the experience of recent national POSE.

Djibouti
- Implement 2015 surveillance strengthening plan and report progress to the HOA TAG.
- Implement community stool sampling in areas of low surveillance performance.
- Update national outbreak preparedness and response plan and conduct POSE by end of first quarter, 2017 building on the experience of recent exercise.

Next meeting of the TAG
The next meeting of the HOA TAG is proposed for 4 - 6 April, 2017 (venue to be determined). The TAG will also meet via teleconference on 6 December 2016.
Annexure: 1 – List of Participants

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Jean Luc Kagayo, UNICEF
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