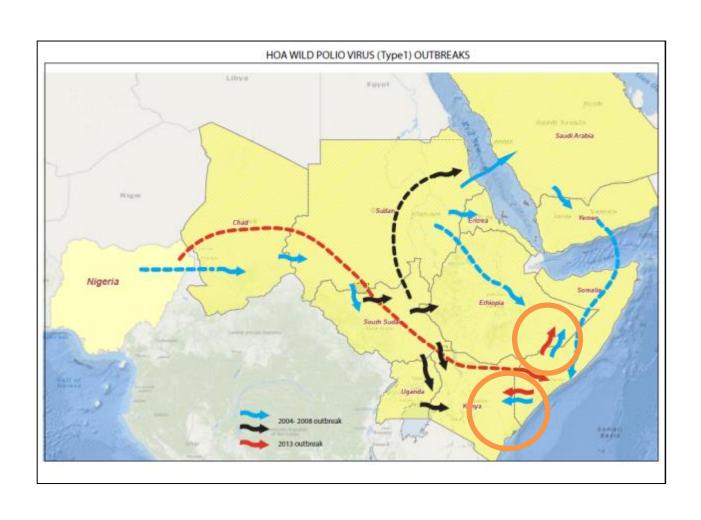
# HOA WPV1 Outbreak Response Assessment

(Somalia, Ethiopia and Kenya)
8<sup>th</sup> to 17<sup>th</sup> June

Nairobi 17<sup>th</sup> June 2015

# Spread of WPV1 in HOA-Historical perspective (2004-2013)



## **Outbreak**

- Somalia had a cohort of ~600,000 under five children not reached with vaccination for more than 4 years.
- First case notified in Banadir, Somalia on 9<sup>th</sup> May 2013 and a case was notified from Dadaab, Kenya on 17th May 2013.
- GPEI and countries mounted response rapidly with first campaign in Somalia on 14<sup>th</sup> May and in Kenya on 26<sup>th</sup> May 2013.
- Transmission spread further to Somali region to Ethiopia and Rest of Somalia.
- Case in Somalia in August 2014 is last confirmed polio case of AFRICA

# Horn of Africa Emergency Outbreak Response

## **Duration of emergency response: 12 months**

- 1<sup>st</sup> Phase: May 2013 to Oct 2013 (6 month period from notification)
- -2<sup>nd</sup> Phase: Nov 2013 to April 2014 (6-12 month after notification)
- Follow up Phases:
  - Sep 2014 to Feb 2015
  - Feb 2015 to Aug 2015

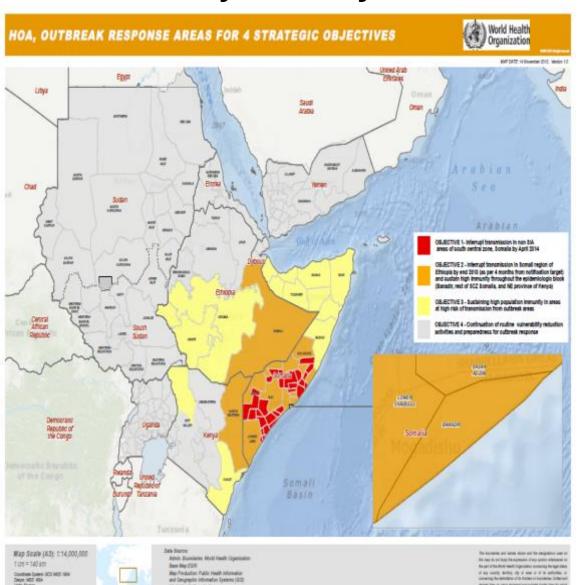
# HOA. OUTBREAK REPONSE AREAS FOR 4 STRATEGIC OBJECT Objective 3 areas Objective 1 areas (outbreak zones) (inaccessible zones) Objective 4 areas Objective 1 areas (Other areas to protect) (High risk areas) Arabia ACMS HAVE

# 4 objectives of Phase I (as defined early June 13)

- To interrupt WPV transmission in outbreak zone within 4 months (red areas)
- 2. To protect populations at high risk of WPV outbreak (orange areas)
- 3. To maximize opportunities for immunization in inaccessible areas of south central Somalia (grey areas)
- To protect populations in other areas that may be at risk due to population movement (green areas)

Preventive campaigns were also conducted in areas of HOA outside these zones to build up the population immunity

## Horn of Africa outbreak response Phase 2 Objectives for Nov 2013 -April 2014



**Objective 1:** Interrupt transmission in non SIA areas of SCZ, Somalia by April 2014

Objective 2: Interrupt transmission in Somali region of Ethiopia by end 2013 & sustain high immunity throughout the block (Banadir, rest of SCZ Somalia, and NE province of Kenya)

**Objective 3:** Sustaining high population immunity in areas at HR of transmission from outbreak areas

**Objective 4:** Continuation of routine vulnerability reduction activities and preparedness for outbreak response

# HOA plan to close the outbreak and strategies for risk mitigation

Wild Polio Virus Type 1

### Objectives for Sep 14 to Feb 15



- 1. Strengthen sensitivity of surveillance to detect lowest level of transmission
- 2. Urgently close the outbreak by interrupting transmission in Somalia and Ethiopia with no further cases.
- 3. Mitigate risks.

# HOA plan to close the outbreak and strategies for risk mitigation

## Objectives for Feb 15 to Aug 15

- 1. Strengthen sensitivity of surveillance to detect lowest level of transmission
- 2. Keeping HOA polio free:
  - a) Close the outbreak in Somalia and maintain it polio free and final outbreak response assessment of HOA
  - b) Steps to boost population immunity and surveillance in conflict affected areas (Yemen, South Sudan)
  - c) Outbreak prevention and preparedness for response
- 3. Stopping cVDPV2 and
- 4. IPV introduction and strengthening of RI

## Outbreak response assessments

- By interagency team of experts to assess the progress and provide recommendations to ensure that transmission is interrupted at earliest.
- Was conducted at regular intervals
  - 2 in Kenya (last in April 14)
  - 3 in Ethiopia (Last in Nov 14)
  - 3 in Somalia (last in Sep 14)
- The current assessment conducted simultaneously in Kenya, Ethiopia and Somalia.

## Objectives of the current assessment

 Determine as accurately as possible whether or not polio transmission has been stopped

- Determine the level of support the countries require in order to achieve or maintain levels of surveillance sensitivity and population immunity sufficient enough to reliably achieve/ maintain a polio-free status
- Provide recommendations for strengthening AFP surveillance and to ensure that a comprehensive and adequate outbreak preparedness plan is in place.

# Schedule

Date	Activity	Venue
8 <sup>th</sup> June	<ul> <li>Meeting with MoH, WR, UNICEF Rep</li> <li>Briefing by country team</li> </ul>	Panafric Hotel
9 <sup>th</sup> -11 <sup>th</sup> June	• Review	Panafric Hotel
12 <sup>th</sup> June	<ul> <li>Debriefing in country</li> </ul>	Panafric Hotel
13 <sup>th</sup> /14 <sup>th</sup> June	<ul> <li>All three country teams arrive in Nairobi</li> </ul>	Panafric Hotel
15 <sup>th</sup> -16 <sup>th</sup> June	<ul> <li>Compilation of reports</li> </ul>	Panafric Hotel
17 <sup>th</sup> June	<ul> <li>Final HOA debriefing</li> </ul>	Panafric Hotel

# Assessment team (s)

Somalia	Kenya	Ethiopia	
Philip Smith (WHO)	Chris Morry (CI)	Chidiadi (WHO)	
Thomas Moran (WHO)	Claire Chauvin (BMGF)	Hans Everts (BMGF)	
Anindya Bose (UNICEF)	Sharon (Rotary)	Endale Beyene (USAID)	
Chimeremma Nnadi (CDC)	Hemant Shukla (WHO)	Ed Maes (CDC)	
	Kaushik Manek (Rotary)	Sam Okiror (WHO)	

# Methodology

- 3 teams: one each for Somalia, Ethiopia and Kenya
- Methodology in country:
  - Desk Review of relevant documents
  - Key informant interviews of national level officials,
     NGOs and other partner organizations involved in polio eradication activities
- Overall HOA review
  - HOA data review
  - Findings from the countries

# Subject areas of assessment

- Quality of outbreak response
- Coordination
- AFP surveillance sensitivity
  - Risk of undetected transmission
  - Ability to detect any new transmission at earliest
- Population Immunity: Quality of SIAs, RI and assessment of need for additional SIAs
- Communication strategy
- Plans to strengthen / maintain population immunity with special focus on known high risk areas and populations
- Outbreak preparedness and response plan
- Risks to maintaining polio free status

# Subject areas of assessment

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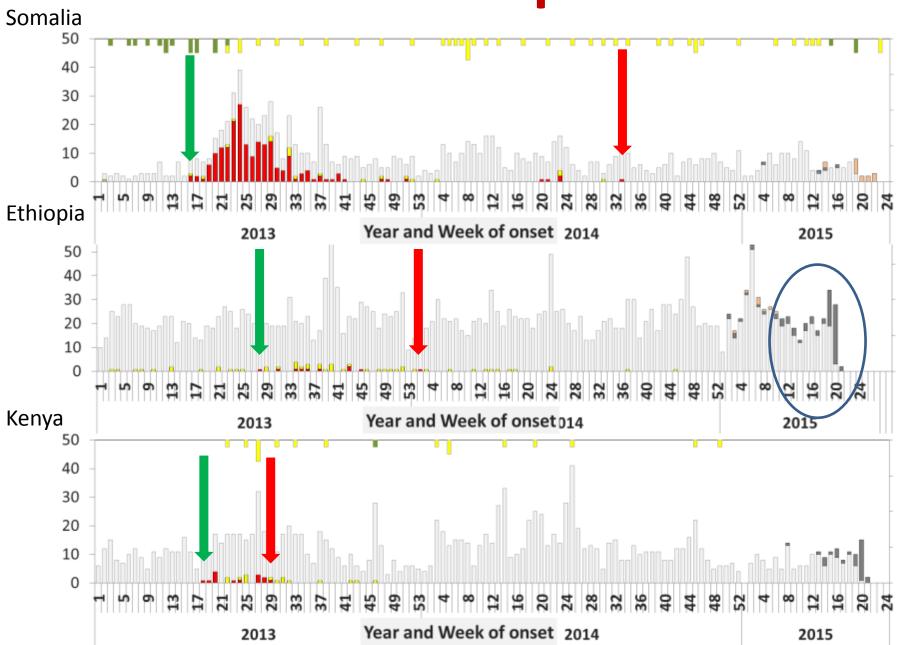
# Speed and appropriateness of outbreak response activities as per WHA Resolution, 2006 (WHA59.1)

Indicators	Somalia	Kenya	Ethiopia
Activation of outbreak response within 72 hrs. of notification	Yes	Yes	Yes
At least three large scale OPV SIAs	Yes	Yes	Yes
SIA coverage at least 95% as evaluated by PCM data	No	No	No
Initial response SIA conducted within 4 wks. of notification	Yes	Yes	Yes
At least 2 SIAs since date of onset of last WPV	Yes	Yes	Yes

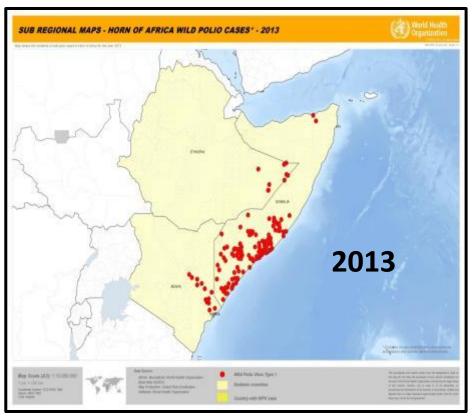
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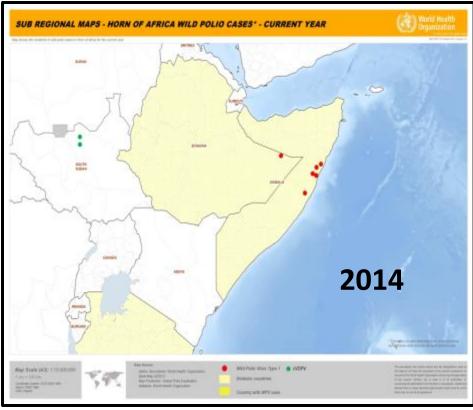
Indicators	Somalia	Kenya	Ethiopia
Rapid analysis of AFP and lab data conducted	Yes	Yes	Yes
Response plan prepared within two weeks of outbreak notification	Yes	Yes	Yes
Response plan was followed during outbreak response	Yes	Yes	Yes
NP AFP rate>2 at sub-national level during the outbreak and for at least one year after	Yes	Yes	Yes
% Adequate stool ≥ 80% at sub- national level for at least one year after	No	Yes	No

# **Outbreak: Epi curve**



## WPV: HOA, 2013-14





• Ethiopia: 9

• Somalia: 194

• Kenya: 14 [14<sup>th</sup> July]

• Total: 217

• Ethiopia: 1 [5<sup>th</sup> Jan]

Somalia: 5 [11 Aug]

Kenya: 0

Total: 6

## **HOA Transmission**

Country	Area	No. of Polio cases	Date Onset last case	Time gap between 1 <sup>st</sup> & last case
Ethiopia	Somali	10	5 <sup>th</sup> Jan 2014	28 weeks
Kenya	NE Kenya	14	14 <sup>th</sup> July 2013	13 weeks
Somalia (195)	Banadir	72	19 <sup>th</sup> July 2013	14 weeks
	Other Accessible SCZ	22	14 <sup>th</sup> August 2013	14 weeks
	Inaccessible SCZ	98	26 <sup>th</sup> Nov 2013	31 weeks
	Puntland	3	11 <sup>th</sup> Aug 2014	37 weeks

# Subject areas of assessment

- Quality of outbreak response
- Coordination
- AFP surveillance sensitivity
  - Risk of undetected transmission
  - Ability to detect any new transmission at earliest
- Population Immunity: Quality of SIAs, RI and assessment of need for additional SIAs
- Communication strategy
- Plans to strengthen / maintain population immunity with special focus on known high risk areas and populations
- Outbreak preparedness and response plan
- Risks to maintaining polio free status

## Coordination

- HOA coordination office
  - Established in Feb 2014 (9 months after 1<sup>st</sup> case)
  - Never received full scale support (2 member team!)
  - Good coordination among partners and countries including cross border coordination.

#### • Countries:

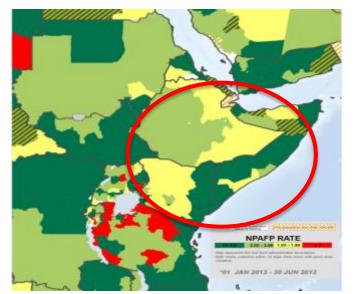
- Somalia: Overall good coordination mechanism; however, coordination at national level is currently suboptimal due to transition in leadership and movement of WHO office to 'inside Somalia'.
- Kenya and Ethiopia: Good coordination at all levels
- Coordination issues in fund flow to ground level.

# Subject areas of assessment

- Quality of outbreak response
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### **HOA: NPAFP Rate 2013 to 2014**

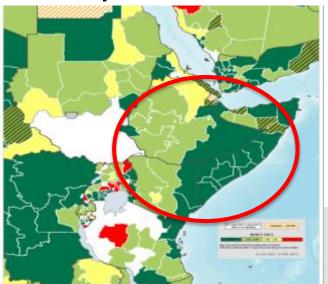
#### Jan to June 2013



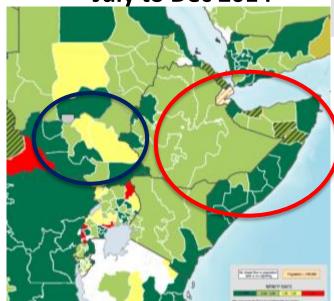
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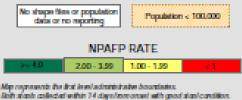


July to Dec 2013



July to Dec 2014





01 JAN 2014 - 31 DEC 2014

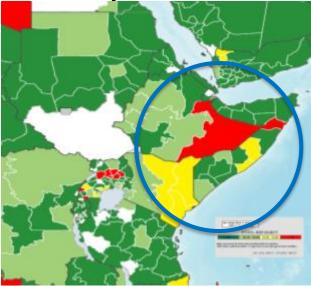
## **HOA: Adequate stool rate**

Jan to June 2013



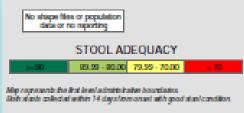


July to Dec 2013



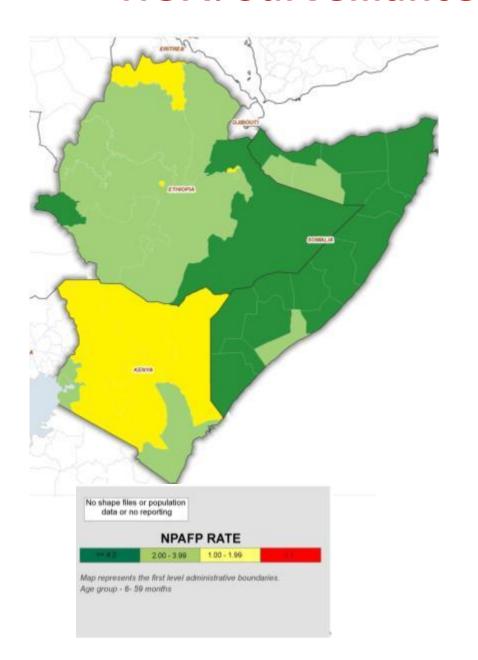
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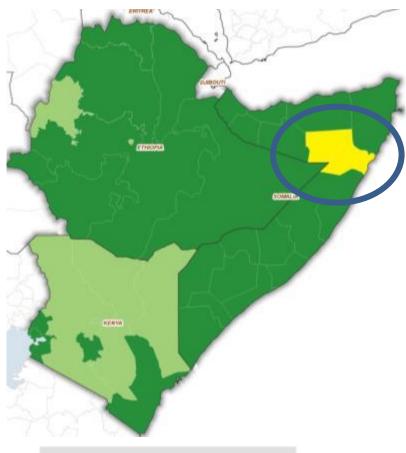


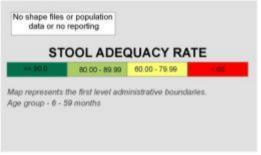


01 JAN 2014 - 30 JUN 2014

### **HOA: Surveillance indicators 2015**







## **Surveillance sensitivity**

### Kenya:

- Improvement following the outbreak
- Significant drop in AFP case detection in 2015.
- Active surveillance visits suboptimal in frequency and quality

#### Somalia:

- Improvement following outbreak
- Surveillance gaps remain in Sool and Nugal regions.
- Lack of evidence of AFP cases validation.

### • Ethiopia:

Improvement following the outbreak.

## Surveillance sensitivity

- Initiatives/interventions:
  - Expanded contact sampling in Somalia and Ethiopia and healthy children sampling in silent areas of Somalia
  - Intensified Active search in health facilities in Somalia and Ethiopia
  - Environmental surveillance started in Kenya
  - Community based surveillance in high risk areas of three countries (Impact not measured).
  - Good collaboration with UNHCR/ health facilities in refugee camps

## **Surveillance sensitivity**

#### • Lab:

- Good performance of KEMRI
- Delayed processing of samples in Ethiopia Lab.

#### • Risks:

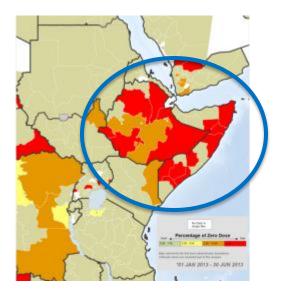
- Suboptimal surveillance at subnational levels
- Surveillance in areas with access challenges; inability to validate AFP cases in inaccessible areas.
- Dependence on SIA for case detection (39% in Kenya)

# Subject areas of assessment

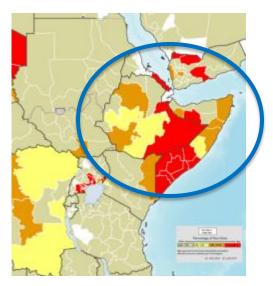
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## **O dose NPAFP cases**

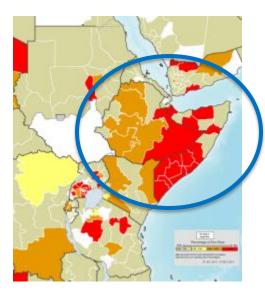
#### Jan to June 2013



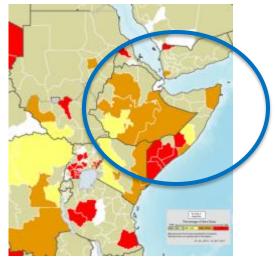
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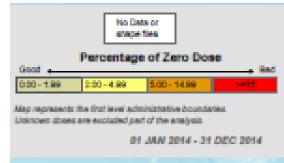


July to Dec 2013



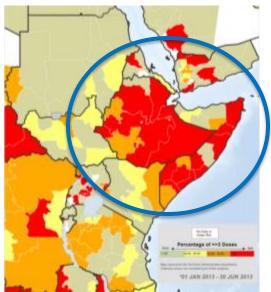
July to Dec 2014



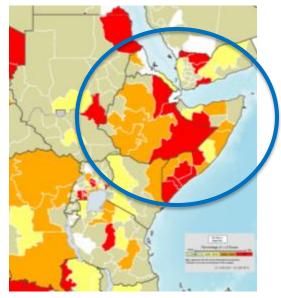


## ≥3 doses NPAFP cases

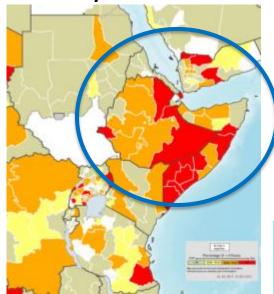
Jan to June 2013



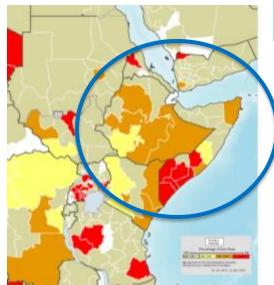
Jan to June 2014



July to Dec 2013

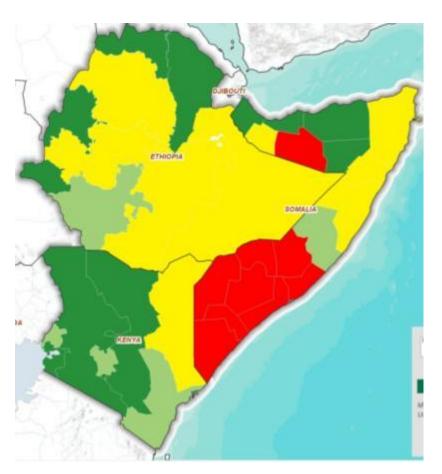


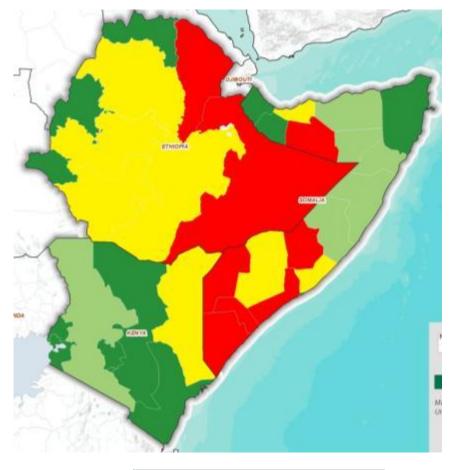
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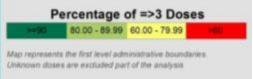


### **OPV Doses in NPAFP cases (6 to 59 Mo): 2015**









## **SIAs conducted**

	Somalia	Somalia Kenya	
Date of onset of last WPV	11 <sup>th</sup> August 14	14 <sup>th</sup> July 13	5 <sup>th</sup> January 14
Number of SIAs in infected area after last WPV	<ul><li>4 NIDs</li><li>2 SNIDs</li><li>3 HTR SIADs</li></ul>	<ul><li>4 NIDs</li><li>9 SNIDs</li><li>1 Mop up</li></ul>	<ul><li>2 NIDs</li><li>8 SNIDs</li></ul>
Number of SIAs since outbreak	<ul><li>15 NID</li><li>5 SNIDs</li><li>3 HTR SIADs</li><li>10 Mop ups</li></ul>	<ul><li>4 NIDs</li><li>14 SNIDs</li><li>1 Mop up</li></ul>	<ul><li>4 NIDs</li><li>13 SNIDs</li><li>2 Mop ups</li></ul>
Number of SIAs with tOPV since May 2013	<ul><li>1 Mop (2013)</li><li>1 SNID (2013)</li></ul>	• 1 NID (2013)	• 2 NID (2013, 2015)

## **SIAs: Planned Vs conducted**

Country	Chahua	2015						
	Status	Jan	Feb	Mar	Apr	May	June	
Somalia*	Planned		110% (b)	110% (b)	100% (t)	60% (t)	60% (b)	
	Done		110% (b)	110% (b)	X	X	NID (t)**	
Ethiopia	Planned		100% (t)	12% (t)	33% (b)	33% (t)		
	Done		100% (t)		12% (t)		33% (b)	
Kenya	Planned				70% (t)	22% (b)		
	Done				X	X		

<sup>\*2</sup> HTR SIADs in Somalia: None of this conducted in Puntland

<sup>\*\*</sup> Being conducted in all zones except Puntland

# Immunization response: SIAs

- Monitoring mechanism has been strengthened with expansion of IM. LQAS implemented in Kenya and Ethiopia (Piloted in Somalia).
- Reach to high risk population groups improved across the countries.
- Coverage as per IM (in house monitoring) is mostly between 90 to 95%.
- Delayed implementation of SIAs in all three countries:
  - No SIAs in Kenya since Dec 2014.
  - Puntland delayed campaigns (HTR SIADs and NIDs)

### **Immunization**

#### Initiatives:

- Expanded age group campaigns and SIADs
- Expanded independent monitoring and LQAS
- Microplan validation to include nomadic populations
- HTR SIADs targeting high risk population groups in Somalia
- Permanent transit vaccination posts in Ethiopia and Somalia
- Joint vaccination with FAO (Puntland in Somalia)
- IPV in Dadaab camp (Kenya)
- Strategies for inaccessible areas (PTVP and SIADs) in place

## **Immunization**

#### • Risks:

- Immunity gaps in high risk zones, particularly in nomadic populations
- Inaccessible areas in Somalia
- Delayed/no campaigns in all the three countries (No SIA in Kenya since Dec 14, Puntland delayed campaigns)
- Low RI coverage particularly in high risk areas
- Quality of IM data?
- Quality of coverage/administrative data?

# Subject areas of assessment

- Quality of outbreak response
- Coordination
- AFP surveillance sensitivity
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- Plans to strengthen / maintain population immunity with special focus on known high risk areas and populations
- Outbreak preparedness and response plan
- Risks to maintaining polio free status

# Communication

#### Observations:

- Solid on-going social mobilization response in Somalia & Ethiopia; SIA-focused and RI communication in Kenya
- Strengthened social mobilization networks, partnerships, and platforms (DSMC/RSMC, IASC, School Strategy)
- Maintained high level of community awareness and vaccine acceptance throughout HoA
- Mixed strategies to reach high risk population groups.
   Notable progress in generating knowledge, tracking and reaching out to pastoralist population through livestock-related infrastructure and clan elders.
- Better use of social data and communication evidence for planning

## Communication

- Innovations in the HoA:
  - Roll-out of social mobilization networks in Somalia and Ethiopia
  - Use of cross-border communication platforms: BBC Somali service, Voice of America Somalia on SW and FM
  - Social profiling of WPV/VDPV cases, social data and better integration in microplans
  - Real time monitoring through mobile platforms
  - Engaging religious and clan leaders
  - "Mtoto Kwa Mtoto" school strategy for missed children

## Communication

#### Risk:

- Funding for SM networks to sustain the response (Somalia / Ethiopia)
- Staff turn over / vacancies linked to security (Somalia)
- Accountability for communication outputs / outcomes
- IPC training and quality of face-to-face interactions
- Religious / anti-vaccination sentiment (Kenya)

# Subject areas of assessment

- Quality of outbreak response
- Coordination
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# Outbreak preparedness and response plan

- Somalia:
  - No, being drafted

- Kenya:
  - Yes, needs strengthening/updation

- Ethiopia:
  - Yes, needs to be updated focussing on transition.

# Subject areas of assessment

- Quality of outbreak response
- Coordination
- AFP surveillance sensitivity
  - Risk of undetected transmission
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- Risks to maintaining polio free status

#### Risks to achieving/maintaining polio free status

- Risk of importation from endemic countries and risk of continued undetected low level transmission in Somalia and potential spread to Kenya and Ethiopia.
- Emergence of VDPV.
- Suboptimal surveillance sensitivity in some of high risk areas in Kenya and Somalia
- Existing gaps in population immunity

Q	A
Have the National authorities and supporting partners played their role?	Yes. In all the three countries Government played leading role including declaring outbreak as health emergency
Were recommendations of previous outbreak response assessment implemented?	Partially. Kenya and Somalia- Partially implemented. Ethiopia implemented all recommendations.
Did the outbreak response activities meet the outbreak response standards?	Partially. Overall HOA response has been rapid and robust, meeting most global standards. However, coverage in SIA has been <95% in most of the campaigns

Q A How likely is it that the Not likely. Available evidence suggests that transmission in region has stopped polio Kenya and Ethiopia has been interrupted. transmission? However, continued transmission in Somalia cannot be ruled out on the basis of existing evidence. Is population immunity **No.** There has been significant improvement in population immunity in all the three countries. sufficient enough to reliably However, gaps in population immunity still maintain a polio-free status? persist in Somali region of Ethiopia, South Central Somalia and NE Kenya. Is AFP surveillance **No.** There has been significant improvement since the outbreak. However, there existing **sensitivity** currently subnational gaps in surveillance. adequate to detect all transmission?

Q	A
Was the <b>communication response</b> to outbreak adequate?	<b>Yes.</b> All three countries had good communication response strategy in place. Sustained high level of vaccine acceptability despite repeated campaigns.
Is country well <b>prepared for responding</b> to any new outbreak?	Partially. Ethiopia and Kenya have outbreak preparedness and response plan. However they need to be strengthened and updated. Somalia needs to develop outbreak response plan.
Is there strong outbreak response communication strategy in place?	<b>Partially.</b> The communication response plan needs to be strengthened and updated.

Q	A
Does the region/ countries have additional unmet financial or human resource needs?	<b>Yes.</b> Unmet human resource need in Somalia and HOA office. Unmet financial resources for surveillance in Kenya and SM in Somalia.
What are the <b>risks</b> to maintaining polio free status?	<ul> <li>Risk of importation from endemic countries</li> <li>Risk of continued undetected low level transmission in Somalia and potential spread to Kenya and Ethiopia.</li> <li>Suboptimal surveillance sensitivity in some of high risk areas in Kenya and Somalia</li> <li>Existing gaps in population immunity</li> <li>Population movement within HOA countries</li> </ul>

## **Conclusions**

# Conclusions (1)

The assessment team commends the overall robust outbreak response in the HOA with strong vaccination, communication strategy and strengthened surveillance.

## Conclusions (2)

- The assessment team believes that transmission in Kenya and Ethiopia has been interrupted; however, continued undetected low level transmission cannot be ruled out in Somalia
- In Somalia issues related to transition of WHO EPI leadership and challenges in national level coordination are concern and need to be addressed on priority basis.
- The assessment team recognizes the significant improvement in surveillance in most areas. Gaps in surveillance at subnational level exist in some high risk areas particularly in Kenya and Somalia.

## Conclusions (3)

- There has been improvement in population immunity in all the three countries. Gaps still persist in Somalia, much of Ethiopia and NE Kenya.
- Delays in SIA campaigns in all the three countries, particularly no SIAs in Kenya since Dec 14 pose a serious risk to maintain polio free status.
- Despite repeated campaigns, community support for polio vaccination has remained consistently high.
   Caregiver awareness and acceptance of services contribute to a conducive and enabling environment for high coverage in all countries.

## Conclusions (4)

- Outbreak preparedness and response plans, including communication response plans, exist; however, they are not comprehensive.
- Coordination mechanisms were established immediately after confirmation of the outbreak in the countries. A regional HOA coordination mechanism was put in place after 9 months of outbreak and has been very effective in coordinating with countries and among partners.
- Detailed plans for transitioning of polio surge assets are lacking.

#### Somalia

- Put the WHO team leader in place at the earliest.
- Establish a national coordination mechanism.
- Develop and implement a six-month work-plan as early as possible to operationalize the outstanding recommendations made by HOA TAG and previous outbreak assessment and present the progress in next HOA TAG.
- Provide documentary evidence of implementation of recommendations including validation of AFP cases, improvement in surveillance, improved reach to high risk populations and improvement in population immunity.

#### Somalia

- Continue using strategies to reach children in inaccessible areas
- Improve surveillance in Nugal and Sool.
- Ensure the regular data analysis, feedback and
   SITREP
- Conduct tOPV rounds as early as possible

 Somalia outbreak response should be assessed again after three months.

#### Risk mitigation:

- Kenya and Ethiopia should conduct quality SIA campaigns in high-risk areas as per the existing schedule to further improve population immunity.
- The program should look at the reasons for delay in implementing SIAs and should take measures to ensure that no 'planned SIAs' are delayed in future.
- Countries should prioritize implementation of RI improvement plans in areas with population immunity gaps.

#### Surveillance:

- Active surveillance visits should be further strengthen in frequency and quality.
- Community based volunteers should be optimally used wherever appropriate.

#### Coordination:

- Mechanism should be sustained and expanded to include EPI.
- The HOA coordination office should be maintained for at least six months more and intensify its focus on improving coordination in Somalia by having weekly TC with the partners.

- Outbreak response preparedness:
  - Revise and update by the end of Q3 2015,
  - Conduct a simulation exercise by the end of Q1 2016.
- Communication:
  - Develop transition plans for polio communication assets.
  - Somalia: Continue to build the quality of its social mobilization network ensuring that it focuses upon and reaches nomadic and high-risk groups.
- Develop transition plans for polio surge support to ensure that adequate capacity is present in high-risk areas.

# Thank you!