Global and Regional update on Polio Eradication Activities

Kenya Paediatric Association
Pride Inn, Mombasa
April 26, 2018
Presentation Outline

1. Background information
2. Poliovirus detection & interruption
3. OPV2 withdrawal, IPV introduction, immunization system strengthening
4. Containment & Global Certification
5. Transition Planning
6. Remaining Challenges
7. Way forward
8. Conclusion
2013-2018 Polio Eradication & Endgame Strategic Plan

- Dev. by GPEI in consultation with national MOHs, donors, scientific experts, stakeholders, and global health initiatives,

- 4 objectives

- Goal- complete eradication & containment of all wild, vaccine-derived and Sabin polioviruses by 2018
2013-2018 Polio Eradication & Endgame Strategic Plan

Objectives

• Poliovirus detection and interruption

• Immunization systems strengthening & OPV withdrawal

• Containment and certification

• Transition planning
Objective 1

Poliovirus Detection and Interruption
Objective 1 update

- WPV2 has been eradicated. Eradication declared by the Global Certification Commission in September 2015.

- WPV3 - Last case seen in Nigeria in November 2012.

- WPV1 is still in circulation.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endemic countries</strong></td>
<td>Have never stopped indigenous wild poliovirus (WPV) circulation: Afghanistan, Nigeria and Pakistan.</td>
</tr>
<tr>
<td><strong>Outbreak countries</strong></td>
<td>Have stopped indigenous WPV circulation but affected by outbreak of imported WPV or circulating vaccine-derived poliovirus- DRC, Syria, Somalia, Kenya,</td>
</tr>
<tr>
<td><strong>Key at-risk countries</strong></td>
<td>No longer poliovirus-infected, but at high risk of outbreaks due to low levels of immunity and presence of surveillance gaps- 15 countries</td>
</tr>
<tr>
<td></td>
<td>Cameroon, Central African Republic, Chad, Equatorial Guinea, Ethiopia, Guinea, Iraq, Lao People's Democratic Republic, Liberia, Madagascar, Myanmar, Niger, Sierra Leone, South Sudan, Ukraine</td>
</tr>
</tbody>
</table>
Poliovirus Detection & Interruption: Key countries
<table>
<thead>
<tr>
<th>Total cases</th>
<th>Year-to-date 2018</th>
<th>Year-to-date 2017</th>
<th>Total in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WPV</td>
<td>cVDPV</td>
<td>WPV</td>
</tr>
<tr>
<td>Globally</td>
<td>8</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Endemic Countries</td>
<td>8</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Non-Endemic Countries</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
## Case breakdown by country

<table>
<thead>
<tr>
<th>Countries</th>
<th>Year-to-date 2018</th>
<th>Year-to-date 2017</th>
<th>Total in 2017</th>
<th>Onset of paralysis of most recent case</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WPV</td>
<td>cVDPV</td>
<td>WPV</td>
<td>cVDPV</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syria</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Figures exclude non-AFP sources. Lao PDR cVDPV1, all others cVDPV2. NA= Dates prior to 2016*
Poliovirus situation in West, Central, Horn of Africa

• **Nigeria:**
  - 4 WPV1 & 2 cVDPV2 in 2016. Date of onset of most recent case - 21/08/2016.
  - No cases in 2017 or 2018.
  - Regional response in progress in the Lake Chad basin region

• **Democratic Republic of Congo:**
  - 22 cVDPV2 cases in 2017, 3 cVDPV2 cases in 2018. Date of onset of most recent case - 31/01/2018.
  - Series of SIAs conducted. Response is still in progress

• **Somalia:**
  - 2 cVDPV2 from environmental samples in Oct & November 2017.
  - 3 cVDPV2 from environmental samples 4th Jan & 11th Feb 2018. Genetically linked to the 2017 cVDPV & all from same District.
  - 2 large scale immunization responses so far conducted.

• **Kenya:**
  - 1 cVDPV2 from environmental sample taken from Kamukunji, Nairobi on 21March
  - Related to cVDPV2 isolated in Somalia
  - field investigations and risk assessments to assess any potential risk of circulation
  - strengthen surveillance for acute flaccid paralysis (AFP) cases, including by conducting active case searches.
  - The frequency of sampling from the environment is being increased
  - Vaccination Response; Nairobi 5-9 May, Wider coverage in June
Lake Chad basin outbreak Response

- A regional outbreak response in the Lake Chad basin region following 2016 WPV outbreak in Northern Nigeria
- using mOPV2
- Countries: Nigeria, Cameroon, CAR, Chad, Niger
- Phase 3 of outbreak response implemented in January 2018 in compliance with recommendations of Nov 2017 Outbreak Response Assessments in the countries and Dec 2017 TAG meeting.
- Synchronised SIAs in all Lake Chad basin countries are planned for April 2018.
<table>
<thead>
<tr>
<th>Country</th>
<th>Wild Polio Viruses</th>
<th>Vaccine Derived Polio Viruses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AFP Case</td>
<td>Environment</td>
</tr>
<tr>
<td></td>
<td>Latest date of</td>
<td>Specimen collected</td>
</tr>
<tr>
<td></td>
<td>onset</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>5- Jan -2014</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
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</tbody>
</table>

All outbreaks of cVDPV were closed (latest Mad closed Jan 2017 and Dec 2016 in Mozambique – 7th – 11th August, 2017)
Objective 2: Immunization systems strengthening & OPV withdrawal
IPV introduction & tOPV to bOPV switch

• In April 2016 a globally synchronized switch from trivalent OPV to bivalent OPV implemented in 155 countries.
• IPV introduced in high risk countries prior to the switch.
• Due to global shortage of IPV, some countries are yet to introduce IPV.
• In context of IPV shortage, countries requested to consider a 2-dose Fractional IPV Dose (1/5 of Full IPV dose) schedule administered via the intradermal route.
What are the Remaining Risks?
Remaining Risks

1. **Re-importation of WPV Transmission**
   - On-going circulation of WPV/ VDPV in DRC, Afghanistan, Pakistan and Lake Chad region with background of Low population immunity;
   - Sub optimal routine immunization coverage in sub national levels especially in high risk and insecure areas;
   - Delay in IPV introduction in 5 countries in ESA and long term stock out to some countries;
   - Emergence of cVDPVs
2. **Surveillance gaps (Sub National)**
   - Risks of missed transmission/delay in prompt detection due to subnational surveillance gaps
   - Delay in timely classification of AFP cases
   - Delay in response to any WPV or VDPV events or outbreaks per SOPs
   - Delay in shipment and loss of specimens in transit due to courier services limitation

3. **Immunisation and outbreaks responses gaps**
   - Sub optimal SIAs qualities/Experiences of H-H campaigns

4. **Full compliance & accelerated containment and transition planning**
   - Laboratories with stool specimens/potentially infectious materials
   - Human resources capacity and funds shortage due to polio ramp down.
Conclusion

• Polio remains endemic in three countries – Afghanistan, Nigeria and Pakistan.

• Until poliovirus transmission is interrupted in these countries, all countries remain at risk of importation of polio, especially those with weak public health and immunization services and travel or trade links to endemic countries.

• Kenya urgently needs to address surveillance gaps in view of the fact that it is one of the Key at risk countries and has been flagged by the ARCC for poor surveillance performance.
Asante sana