TECHNICAL UPDATE:
POLIO ERADICATION AND ROUTINE IMMUNIZATION STRENGTHENING

Gavi Board pre-meeting
December 9, 2014, Geneva
SESSION OUTLINE

• Global polio eradication update

• Overview of Polio Endgame Strategic Objective 2:
  • IPV introduction and OPV withdrawal
  • RI strengthening in polio focus countries

• Specific implications for Gavi
GLOBAL POLIO ERADICATION UPDATE
Endgame Plan, 2013-18

- Poliovirus detection & interruption
- Routine immunization strengthening, OPV withdrawal & IPV introduction
- Facility Containment & Global Certification
- Legacy Planning
Outline

• Progress
• Priorities
• Risks
• Summary
Wild Poliovirus type 1 (WPV1) Cases, 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>93</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>14</td>
</tr>
<tr>
<td>Nigeria</td>
<td>53</td>
</tr>
<tr>
<td>Somalia</td>
<td>194</td>
</tr>
<tr>
<td>Cameroon</td>
<td>4</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>0</td>
</tr>
<tr>
<td>Iraq</td>
<td>0</td>
</tr>
<tr>
<td>Syria</td>
<td>35</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>9</td>
</tr>
<tr>
<td>Kenya</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>416</strong></td>
</tr>
</tbody>
</table>

Israel = Env. positive isolates (2013 – 136)
Gaza = Env. positive isolates (2013 – 7)
WPV1 Cases, 2014*

<table>
<thead>
<tr>
<th>Country</th>
<th>2013 (Full year)</th>
<th>2014*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>93</td>
<td>270</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>14</td>
<td>23</td>
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<tr>
<td>Nigeria</td>
<td>53</td>
<td>6</td>
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<tr>
<td>Somalia</td>
<td>194</td>
<td>5</td>
</tr>
<tr>
<td>Cameroon</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Iraq</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Syria</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Kenya</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>416</strong></td>
<td><strong>318</strong></td>
</tr>
</tbody>
</table>

Israel = Env. positive isolates (2013 – 136 ; 2014-14 , last 30 Mar 2014)
Gaza = Env. positive isolates (2013 – 7 ; 2014- 1, Jan)

*Data as of 02 December 2014 (including advance notifications as of this date)
WPV1 Cases, 2012-14*

*Data as of 2 Dec 2014 (including advance notifications as of this date)
YTD WPV1 Cases Africa & Nigeria, 2013-14*

*Data as of 1 Dec 2014 (including advance notifications as of this date)
WPV Cases, Previous 6 Months

Last Case Iraq, 7 April
Syria: 21 Jan

Last Case Somalia, 11 Aug
Ethiopia: 5 Jan

Last Case Cameroon, 9 Jul
Equatorial Guinea: 3 May

Last Case Nigeria, 24 Jul
Preventing International spread

• Public Health Emergency of International Concern (PHEIC) declared by DG, WHO, on 5 May 2014; extended 31 July & 13 November, 2014

• Risk mitigation in high risk countries
  – Intensification of mass vaccination campaigns
  – Additional investment of > $120 million in 2014

Countries currently exporting wild poliovirus

Countries with circulating wild poliovirus, but NOT currently exporting
5 ‘Readiness Criteria’ to Stop Type 2 OPV ‘on track’ - SAGE, Oct 2014

1. mOPV2 stockpile & response capacity
2. surveillance & notification of type 2 virus
3. bOPV licensed for routine immunization
4. at least 1 dose IPV for all OPV-using countries
5. WPV2 'certification' & type 2 containment

**Trigger for tOPV withdrawal:**
validation of elimination of 'persistent cVDPV2s'
Current Status – Vaccine-derived Poliovirus type 2

'Persistent' cVDPV2: Nigeria & Pakistan

2014 = 48 cases
The Endgame in 2015

- Focus on Surveillance (AFP, Env)
- Africa Scenarios
  - Mop up Nigeria
  - Outbreak prevention
- Pakistan/Afghanistan surge
- cVDPV2 cessation
- Major emphasis on Pre-requisites of OPV2 withdrawal & RI strengthening
Program Priorities in 2015

- Surveillance
- Keeping Africa/ME polio free
- Pakistan/Afghanistan surge
- Pre-requisites of OPV2 withdrawal
- Enhanced engagement with RI
Risks

• Head of State commitment
  – Pakistan – Emergency Ops, Military
  – Afghanistan – New leadership
  – Nigeria – Elections in Feb
  – C Africa – Stopping outbreaks

• Insecurity, conflict

• Impact of Ebola outbreak

• Increasing costs
Summary

- Africa can stop WPV in 2014
- Outbreaks in final stages of control
- Pakistan program not yet on track
- Intense efforts to reduce risk of international spread
  - Pakistan situation, conflict & insecurity still pose risks
- Engaging and building trust with communities in key areas remains a critical priority
- Steps to mitigate impact of the Ebola outbreak
Overview of Polio Endgame

Strategic Objective 2

RI strengthening in polio focus countries
Strengthen immunisation services in ‘focus countries’, introduce IPV and withdraw OPV globally

High immunization coverage is essential to achieving the goals of the polio endgame. In this Plan, the GPEI commits to working with immunization partners to strengthen immunization systems.
First Gavi-supported IPV introduction
Nepal 18 September 2014

Photo credit: Chandra Shekhar/UNICEF
Polio endgame 2013-2018 focus countries

Does not include regional or headquarters personnel

- >1000 personnel
- >100 personnel
- >40 personnel
- >10 personnel
- 1+ personnel

Note: Philippines, Haiti also have between 1-10 polio funded personnel but are not displayed
Source: GPEI partner HR databases
Polio endgame 2013-2018 focus countries

Focus countries: Angola, Afghanistan, Chad, DRC, Ethiopia, India, Nigeria, Pakistan, Somalia and South Sudan

Note: Philippines, Haiti also have between 1-10 polio funded personnel but are not displayed. Source: GPEI partner HR databases

Does not include regional or headquarters personnel

- >1000 personnel
- >100 personnel
- >40 personnel
- >10 personnel
- 1+ personnel
Areas of polio asset expertise

**Polio assets**
- Human
- Physical
- Systems / networks
- Experience

- Policy, planning and strategy development
- Capacity building
- Management and oversight
- Supervision, monitoring and evaluation
- Communication and social mobilization
- Disease surveillance and data analysis
- Partnerships and coordination
Monitoring Framework

Annual integrated EPI plan

- SMART objectives
- Activities to reach all districts and communities, in particular in high risk districts
- Roles and contributions of Polio-funded assets defined
- Fully costed
- Endorsement by the Government and the Inter Agency Coordination Committee

Use of polio funded personnel for RI

System or process indicators

Core coverage data nationally and by district
## Annual integrated EPI plans

<table>
<thead>
<tr>
<th>Country</th>
<th>Use of Polio assets (varying extents)</th>
<th>Annual EPI plan meeting 5 criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>✓</td>
<td>60%</td>
</tr>
<tr>
<td>Angola</td>
<td>✓</td>
<td>100%</td>
</tr>
<tr>
<td>Chad</td>
<td>✓</td>
<td>100%</td>
</tr>
<tr>
<td>DRC</td>
<td>✓</td>
<td>80%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>✓</td>
<td>80%</td>
</tr>
<tr>
<td>India</td>
<td>✓</td>
<td>100%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>✓</td>
<td>100%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Somalia</td>
<td>✓</td>
<td>40%</td>
</tr>
<tr>
<td>South Sudan</td>
<td>-</td>
<td>0%</td>
</tr>
</tbody>
</table>
Monitoring Framework

Annual integrated EPI plan

Use of polio funded personnel for RI

Documentation (qualitative/quantitative)
- What activities by whom, where and when
- Number and % of GPEI staff trained in RI
- Number and % of GPEI staff with RI in their ToR
- Accountability framework

System or process indicators

Core coverage data nationally and by district
How polio staff time is spent
Survey of mid-level managers to estimate time allocation of frontline polio staff

More than 50% of time spent on non-polio activities

<table>
<thead>
<tr>
<th>Country</th>
<th>Polio</th>
<th>Other activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>Nepal</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>India</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Somalia</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Overall</td>
<td>43%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Eligible population excludes assistants, secretaries, drivers, clerks, back office support (e.g. HR, finance, IT), and Rotary volunteers

Source: Polio Legacy Survey
Monitoring Framework

- Annual integrated EPI plan
- Use of polio funded personnel for RI
- Micro-plans
- Cold chain working
- Stock-outs
- % sessions held
- HF reporting
- Supervision
- System or process indicators
- Core coverage data nationally and by district
Monitoring Framework

Annual integrated EPI plan

Use of polio funded personnel for RI

System or process indicators
- Completeness of reporting
- # children receiving/not receiving DTP3
- DTP3 coverage
- DTP1-DTP3 dropouts

Core coverage data nationally and by district
Bihar, India: availability of all vaccines and diluents
January – December 2013

State: Bihar

| Session held | 26,674 |
| Percent (%)  | 65     |
| Dist with Minimum value | Arwal (16) |
| Dist with Maximum value  | Purnia (95) |

**HR Blocks: Bihar**

- **Total HR blocks**: 41
- **Session held**: 2,904
- **Percent (%)**: 70

Source: RI monitoring data
NRTRIS Database: October 2014; n=999

Reason for planned immunization sessions not being conducted in supervised areas (October 2014)

- 1 Visit with SMS
- < 10 Visits

Legend:
- Non availability of Vaccines / Logistics: 13%
- No trained health Worker: 7%
- Non availability of Funds: 34%
- Competing programmes: 5%
- Issues related with the community: 36%
- Others - PH, Renovations, Sick HW, New HF, Strikes, Faulty MP: 5%
Summary

- Overall, there is progress in the 10 focus countries to use polio assets to strengthen RI
  - Some countries doing well
  - Others require more focused attention
- Development of accountability frameworks for polio partner networks is best practices and needs to be replicated elsewhere
- Difficult to attribute coverage improvement to polio assets
  - Use of additional system indicators necessary
Implications for Gavi

- Engagement with immunization system strengthening and Polio Legacy
  - Strategic Plan 2016-20
  - Planning processes, Integrated National EPI plans
  - India – “Legacy in action”

- Strong collaboration between GPEI and Gavi has resulted in unprecedented speed in the IPV programme; focus of 2015 will be to translate this significant momentum into introductions

- Determining the role of Gavi in tOPV to bOPV Switch
THANK YOU - MERCI