Status of polio surveillance in transition countries

Jamal Ahmed
SUSTAINING ESSENTIAL POLIO FUNCTIONS IN THE CONTEXT OF POLIO TRANSITION
Virtual Meeting of the Global Polio Partners Group (PPG) - Surveillance “Deep Dive - I”
May 11, 2022
• GPEI Polio Surveillance Action Plan
  – Risk assessment
  – Priority countries versus GPEI supported countries
  – Priorities in the action plan: AFP incl. CBS, ES, Lab, Information Management
• Surveillance performance
  – Overview
  – Trends for 2022*
• Funding/resource allocation
• Management and accountability
• Risks
GPEI Strategy and GPEI Surveillance Action Plan
Global action plan developed to effect objectives of the GPEI strategy

Global Polio Surveillance Action Plan 2022–2024

Global Polio surveillance Action Plan available here
## Risk Assessment – key factors

**Transition NOT a consideration in the risk assessment**

### Polio-specific risk
Includes:
- **WPV and VDPV epidemiology over the past decade**, with countries with prolonged and/or recurrent poliovirus circulation at higher risk; and
- **population immunity level**, including essential immunization, with countries with a higher number of underimmunized populations at higher risk.

### Country fundamentals
Includes:
- **governance and fragility**, recognizing that fragile countries and countries with weaker governance are at higher risk;
- **economy**, recognizing that countries with weaker economies and/or dependent on external financing are in need of greater GPEI financial support;
- **human resource capacity**, recognizing that countries with lower human resource capacity need more in-country technical support; and
- **health system indicators**, recognizing that countries with weaker health systems require more focused polio-specific surveillance system development and support.

### WHO regional office prioritization
- **WHO regional** risk assessments included to further adjust risk.

### Other programme factors
Includes:
- **current outbreak status** (for low-risk countries, risk is automatically increased if the country has an ongoing outbreak);
- **surveillance performance** (underperformance, especially delayed timeliness of detection elevates the risk); and
- **expert input** by the GPEI Surveillance Group. (Without fundamentally changing the overall risk assessment, feedback from members of the Surveillance Group was used to make adjustments.)
Country-level risk assessment (as of January 2022)
Countries classified as Very High Risk, High Risk and Medium High Risk considered priority countries

- Prioritization adjusted biannually with detailed data review occurring annually
- Changes also made if outbreak occurs in otherwise low risk countries
- Following WPV1 detection in Malawi, Malawi and neighbouring countries included in priority countries
Acute Flaccid Paralysis (AFP) and Environmental surveillance
Focus is on enhancing quality at subnational level and improving timeliness of detection

Priorities for 2022/2024

• Cross-cutting
  – **Improve timeliness** at every level in priority countries
  – Facilitate a **skilled workforce** and promote integration
  – Expand the use of electronic data collection tools

• AFP surveillance
  – Targeted efforts to identify and **address subnational gaps** in priority countries
  – **Targeted** community-based surveillance
  – **Implement focused M&E activities**, including critical review of surveillance processes and data for action
  – Promote integration of AFP surveillance with other health programmes

• Environmental surveillance
  – **Improve quality** of ES in underperforming countries
  – Strategic expansion of ES network

<table>
<thead>
<tr>
<th>Countries planning to initiate, expand, or optimize environmental surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHO region</strong></td>
</tr>
<tr>
<td>African</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
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<tr>
<td>South-East Asian</td>
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<tr>
<td>Western Pacific</td>
</tr>
<tr>
<td>European</td>
</tr>
<tr>
<td>Americas</td>
</tr>
</tbody>
</table>

*ES has not been operational during COVID-19 pandemic and needs to be reactivated
Major activities

• **Assess** information and data management needs for priority countries
  – Joint assessment starting with VHR and HR countries

• **Upgrade** archaic polio information systems to web-based systems
  – Special focus on labs
  – Interoperability a priority

• Develop an **online system to track specimen collection and transport**
  – Implementation in at least 4 priority countries

• **Adapt** the information management system and **shift from paper-based to electronic data collection tools**
  ✓ Tools for active surveillance e.g. eSurv, ISS other ODK-based tools
  ✓ Tools for case investigation e.g. electronic CIF
  ✗ Community-level tools e.g. AVADAR

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### Upgrading from archaic IFA systems to WebIFA

<table>
<thead>
<tr>
<th>Country</th>
<th>Country field surveillance</th>
<th>AFP and/or ES</th>
<th>Status for planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAK</td>
<td>Afghanistan</td>
<td>AFP and ES</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>Pakistan</td>
<td>AFP and ES</td>
<td>Completed</td>
</tr>
<tr>
<td>UGA</td>
<td>South Sudan</td>
<td>AFP and ES</td>
<td>Underway</td>
</tr>
<tr>
<td></td>
<td>Uganda</td>
<td>ES only</td>
<td>Underway</td>
</tr>
<tr>
<td>NIE</td>
<td>Nigeria</td>
<td>AFP and ES</td>
<td>Haulted</td>
</tr>
<tr>
<td>BAN</td>
<td>Bangladesh</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td>EMR</td>
<td>ALL Eastern Mediterranean countries</td>
<td>AFP and ES</td>
<td>2022/23</td>
</tr>
<tr>
<td>ETH</td>
<td>Ethiopia</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td>KEN</td>
<td>Kenya</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td></td>
<td>Somalia</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td>SA</td>
<td>(As a regional reference lab)</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td>SEN</td>
<td>Niger</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td></td>
<td>Senegal</td>
<td>AFP and ES</td>
<td>2022</td>
</tr>
<tr>
<td>CIV</td>
<td>Côte d’Ivoire</td>
<td>AFP and ES</td>
<td>2023</td>
</tr>
<tr>
<td>CMR</td>
<td>Cameroon</td>
<td>AFP and ES</td>
<td>2023</td>
</tr>
<tr>
<td></td>
<td>Chad</td>
<td>AFP and ES</td>
<td>2023</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo</td>
<td>AFP and ES</td>
<td>2023</td>
</tr>
</tbody>
</table>
Laboratory Network
Implementation of direct detection and expansion of sequencing capacity prioritized

Phased implementation of direct detection (countries)

- Red: Phase 1: All VHR (8) + HR (6) + MHR (6)
- Orange: Phase 2: HR (3) + MHR (7)
- Yellow: Phases 3 and 4: other countries
- Gray: Not applicable

Current and planned expansion of sequencing capacity

- Green: Current
- Orange: Planned
- Gray: Not applicable
Global surveillance performance at country-level
Rebound in quality from the decline associated with COVID-19 ongoing

Non-Polio AFP rate
- less than 1
- 1 to less than 2
- 2 to less than 4
- 4 and more

Adequate Stool Collection Rate
(2 Stool samples collected with 14 days from onset)
- Less than 70%
- 70% to less than 80%
- 80% to less than 90%
- 90% and more

Rolling 12 months ending on
31 March 2022
Preceding Rolling 12 months ending on
31 March 2021

Data as of 12 Apr 2022
Global surveillance performance – provincial level
Sub-national gaps decreasing in AFR but persisting Southern Africa, parts of SEAR and WPR

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Rolling 12 months ending on 31 March 2022

Preceding Rolling 12 months ending on 31 March 2021

Data as of 12 Apr 2022
Trends of NPAFP rate in priority countries
Performance varied across risk tiers but no evidence variations linked to transition

* Annualized NPAFP rates for 2022

Data as of 9 May 2022
Trends on adequate stool collection rates, 2018-2022*
Performance varied across risk tiers but no evidence variations linked to transition

Data as of 9 May 2022
Surveillance Resource Allocation
All countries - regardless of transition status – received surveillance funds for 1st half of year

- **GPEI Surveillance Budget**
  - Endemics + AFR 10 + Somalia
  - Laboratory
  - HQ/RO

- **WHO Base Budget**
  - Countries previously supported and transitioned to integrated public health

- **Outbreak Budget**
  - Countries experiencing outbreaks and/or included in the outbreak zone

**Example from ongoing African Region Inter-country Review and Planning Workshop**

<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Outbreak</th>
<th>GPEI</th>
<th>WHO Base</th>
</tr>
</thead>
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</tr>
<tr>
<td>2</td>
<td>Botswana</td>
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<td></td>
<td>✓</td>
</tr>
<tr>
<td>3</td>
<td>Burundi</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>DRC</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ethiopia</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Kenya</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Malawi</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>8</td>
<td>Mozambique</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>9</td>
<td>Namibia</td>
<td></td>
<td>✓</td>
<td></td>
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<tr>
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<td>Rwanda</td>
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<td>✓</td>
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<td>11</td>
<td>South Sudan</td>
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<td>Tanzania</td>
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<td>Uganda</td>
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<td>Zambia</td>
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<td>✓</td>
</tr>
<tr>
<td>15</td>
<td>Zimbabwe</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Polio surveillance – management and accountability
GPEI fully involved in supporting countries address surveillance gaps

GPEI Surveillance Group in-person meeting
27 – 29 April 2022, Geneva Switzerland

African Region Inter-country Review and Planning Workshop
9 – 12 May 2022, Nairobi, Kenya

Eastern Mediterranean Region Inter-country Polio Surveillance Meeting
10 – 12 May 2022, Muscat, Oman
<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| **Overall GPEI funding under severe stress has implications for surveillance budget too** | - Fully funding GPEI FRR  
- Intensive effort underway on both resource mobilization  
- Active management of budget enhanced and work underway at all levels to enhance efficiencies |
| - Budget underfunded by USD100                                      |                                                                           |
| - Outbreak response pace has increased following challenges in preceding years |                                                                           |
| - Additional demands on outbreak response budget e.g. increased demand for nOPV2, importation of WPV1 |                                                                           |
| **Decreased flexible funding**                                       | As much possible, providing flexibility. This includes funds allocated for surveillance not being linked specifically to surveillance sub-elements (e.g. environmental surveillance, lab) |
| **Support for transition countries beyond 2022**                    | Supporting surveillance funding for all priority countries  
- DG committed to provide necessary support; RM efforts for 2023 should be supported |
| **Surveillance performance declining in transition countries due to decreased scrutiny at all levels** | Continued engagement with all relevant departments within WHO and across all levels  
- Maintaining GPEI monitoring  
- GPEI monitoring and support remains robust |

**Risks and mitigation**