Aide Mémoire

Version 5 - 2025

Poliovirus Outbreak Response Assessment (OBRA)

The scope and timing have been revised in version 5 to reflect changes in the program and after feedback from GPEI agencies – ORPG (WHO, UNICEF, CDC, BMGF) and regional WHO/UNICEF teams.

Purpose: To assess whether vaccination and surveillance response is robust enough to detect and stop poliovirus transmission, and what is needed to address gaps**.** Polio OBRAs are to be timely, effective, practical and independent.

Objectives:

1. **Assess and strengthen efforts to increase immunization coverage and population immunity**
   - ✓ This is priority when transmission is ongoing
   - ✓ Assess vaccine management for each round
2. **Assess and strengthen surveillance sensitivity**
   - ✓ Assess efforts to enhance surveillance sensitivity to levels needed to detect virus transmission, and interruption
   - ✓ Assess sustainability of surveillance system
3. **Assess early progress towards interrupting poliovirus transmission**
   - ✓ Root cause(s) of outbreak understood
   - ✓ Outbreak SOPs being implemented in a timely and effective manner

Focus, scope and emphasis of assessment will evolve with each OBRA for any event or outbreak, given the time since the last poliovirus isolate, and local circumstances, as reflected in specific terms of reference for each assessment.

Overview of assessment:

Planning

- OBRA planning begins at outbreak confirmation
- GPEI Outbreak Response Preparedness Group (ORPG) and WHO and UNICEF Regional Offices lead the coordination for OBRA *(including global and regional OBRA focal points)*
- Multiple OBRAs may be planned over the course of an outbreak (quarterly). External desk review (EDR) to review all relevant data and organized by the ORPG and Regional Offices (RO) will replace subsequent OBRAs
- Partners identify independent OBRA team leader (minimum1 month before)
- Team expertise includes immunization, surveillance, C4D, vaccine management, gender and others as needed
- Conduct teleconference between OBRA team and the country at least 15 days before the OBRA to discuss situation analysis (e.g. previous reviews) and preparations
- Team numbers and composition to be adjusted for country and outbreak context.
- Standardized OBRA tools to be shared and utilized by OBRA teams

Scope and Timing

- The first OBRA should be **conducted 6 months** after the outbreak notification and after at least 2 SIA response rounds are implemented.
- During the outbreak response, GPEI/ORPG can deploy quarterly **support missions**, joint or individual by the partner agencies (as needed and feasible), to address the identified bottlenecks, support the country programme and to assess the progress.
- **Final assessment after at least 12 months without poliovirus detection – to consider closure of the outbreak**
- **Extended outbreaks *with persistent circulation/ consequential geographies should have at least one OBRA every year*** to support the country program ***to assess* progress *of the OB response towards interrupting transmission.***

The planned OBRAs can be implemented using one of two methodologies, depending on the circumstances:

a) **OBRA Field Mission (In-Country):** Deployment of an **OBRA team** (**5–8 external evaluators**) for **1 to 2 weeks**. This includes a **surveillance desk review**, which should be conducted and shared with the OBRA team **at least one week before the mission start date**.

Report and debrief

- Team presents findings and recommendations to authorities before leaving the country, or at the end of virtual external desk review and reports on:
  - Status of implementation of previous recommendations
  - Additional assessments undertaken (e.g. routine immunization, cold chain, microplans, surveillance, etc.)
  - Whether available evidence supports that poliovirus transmission was interrupted and if follow-up OBRAs are necessary.
  - Where type 2 containing oral polio vaccine (nOPV2/ mOPV2/ tOPV) was used, complete inventory, and recommended safe storage or destruction of any remaining stock.
  - List with clear OBRA recommendations are outlined and OBRA recommendations tracker is shared

b) **OBRA Virtual desk review (Regional Level):** To accommodate a high volume of OB countries, virtual OBRAs or external desk reviews at the regional level are encouraged.

Note: Multi country OBRAs can be considered for both virtual desk reviews and field OBRAs if more than one country is affected.

End of *the* Outbreak

Closure of the outbreak can only be done if there is **no virus detected at least in the last 12 months** and there is evidence of high-quality surveillance sensitivity. One additional month can be considered if there are pending lab results - to be confirmed.

The WHO regional office will confirm the end of the outbreak, if applicable, based on the assessment report and recommendations and communicate to global level and ORPG (in alignment with RCC in case of WPV importation). Exceptionally, official closure can be considered earlier (6 to 9 months without detection) in case there is evidence that OB response performance was of high quality and surveillance indicators are optimal for the last 12 months.

Special circumstances:

Endemic countries: OBRAs follow same principles, country EOC to be involved in planning

Multi-country outbreak zone: countries without cases but with vaccination response. Focus on:
- Response quality / population immunity
- Enhanced AFP and environmental surveillance
- Enhanced case / isolate detection
- Analysis of chronically missed communities/children and implement activities to address this gap.

Multi-country outbreak zone: countries without cases and no vaccination response conducted or planned. Focus on:
- Enhanced AFP and environmental surveillance especially along bordering areas
- Analysis o***f*** population movement especially areas bordering outbreak country, mobile populations
- Cross boarder collaboration and coordination especially for SIAs.

Assessment of programme areas (technical worksheets and data collection tools available separately)

Focus primarily on high risk areas and populations:

- History of infection or higher likelihood of missed transmission, areas of poor surveillance or immunity
- Special populations, such as conflict affected or displaced, border areas, mobile populations including migrants and nomads, minorities or underserved

A. Outbreak Response Planning and Coordination

- Declaration of public health emergency
- Cross border notification and collaboration when applicable
- Polio EOC is operational and technical committees formed and active
- Presence of comprehensive response plans, with budget, to reach every child with vaccination and to strengthen surveillance
- Integration efforts of OBR activities when feasible
- OB response performance according to SOPs timelines
- Use of resources: financial and surge
- Timely request, receipt, and disbursement of funds

B. Polio Surveillance sensitivity, data quality & laboratory

- NPAFP rate and stool adequacy indicators at lowest administrative level possible (at least 100,000 children <15 years); proportion of stool samples collected within 14 days of paralysis onset, 60-day follow-up for cases with inadequate samples
- Active surveillance sites: facility selection criteria, system, frequency, and priority setting, mix of public, private, large and smaller facilities
- AFP contact sampling protocols and practices
- Records of supervisory visits and reports, training and reporting, commitment, knowledge at all levels visited
- Sabin-like virus in stools or in the environment and /or VDPV emergence after campaigns
- Laboratory achievements and challenges
- Assessment of existing or new environmental surveillance sites, where appropriate
- Data assessed for consistency, anomalies, regular analysis and used for action
- Final classification; availability of results at all levels; presence of compatible cases and their investigation
- Surveillance trainings/re-freshers for public health staff particularly surveillance officers
- Polio and AFP surveillance sensitization among healthcare workers, community informants and leaders

C. SIAs quality and monitoring

- Preparedness timeline, micro planning, training,
- Strategies in place for special / mobile populations
- Vaccines, supplies and funding (adequacy, timeliness, vaccine management knowledge and skills)
- Documentation quality (tally sheets, vaccine management tools, survey materials)
- Detailed plans for and availability of supervisors
- Reporting (timeliness, completeness), review meetings, and feedback (to levels above and below)
- Independent monitoring before, during and after campaigns with feedback / Coverage monitoring /LQAS
- Quality improvement plans developed after each SIA

D. Population immunity & Routine immunization performance

- OPV and IPV coverage (OPV3 in last 3 years and available surveys/studies) in general and special populations; trend analysis, sustainability of immunization coverage
- Vaccine supply chain, evidence of stockouts / shortages
- Identify populations with limited access, refugees, etc; Describe refusals and health-seeking behaviours.
- Implement mobile teams and targeted strategies

E. Advocacy, communication and C4D / SBC

- Assessment of communication plans for SIAs and RI, including integration with micro plans

Use lessons learned and prior experience; strategies to reach missed children; timing of sensitization; communication training for community health workers (e.g. on RI and SIA)

F. Vaccine management (mandatory when any OPV2 containing vaccine has been used)

- Detailed vaccine utilisation report available
- Use of management tools; knowledge of process
- Tallying, reporting and storage of stocks at all levels
- Visual inspection of OPV2 stocks
- Documentation of robust search for OPV2
- Recommend safe storage or disposal of OPV2
- Signoff by national or independent authority

G. Gender considerations in outbreak response

Gender specific considerations are included on OBR planning and implementation as per OBR SOPs *(Gender checklist):*

- *HR: gender balance of OBR surge deployed (internationals and nationals)* and *vaccination teams*
- *Data collection and analysis: use sex-disaggregated data (AFP surveillance, SIA missed children – LQAS, zero dose)*
- *Gender responsive – communication materials/ strategies*
- *Ensure meaningful engagement of women – all levels*
- *Ensure safe environment – PRSEAH – awareness and compliance at all levels*

Criteria to determine if an outbreak is over

1. **No poliovirus of the outbreak serotype detected from any source (AFP, AFP contact, healthy child, environmental) for at least 12 months since virus last detected**[1]

AND

2. **Surveillance criteria over previous 12 months met in infected/high risk areas (outbreak zone), and other areas at risk, including cross-border outbreaks**[2]
   - i) NPAFP ⩾3 per 100,000 population <15 years of age (or national objective, whichever is higher)
   - ii) ⩾80% stool adequacy among all AFP cases

AND

3. **Convincing evidence that areas of high risk or with conflict, displacement, hard to reach areas and populations have been identified and planned for, and that adapted strategies**[3] **have been successfully implemented to:**
   - i) detect any ongoing poliovirus transmission
   - ii) interrupt transmission of poliovirus

After comprehensive review of indicators, data quality, and qualitative information of the local context, the OBRA team has the responsibility to give the best possible opinion as to whether:

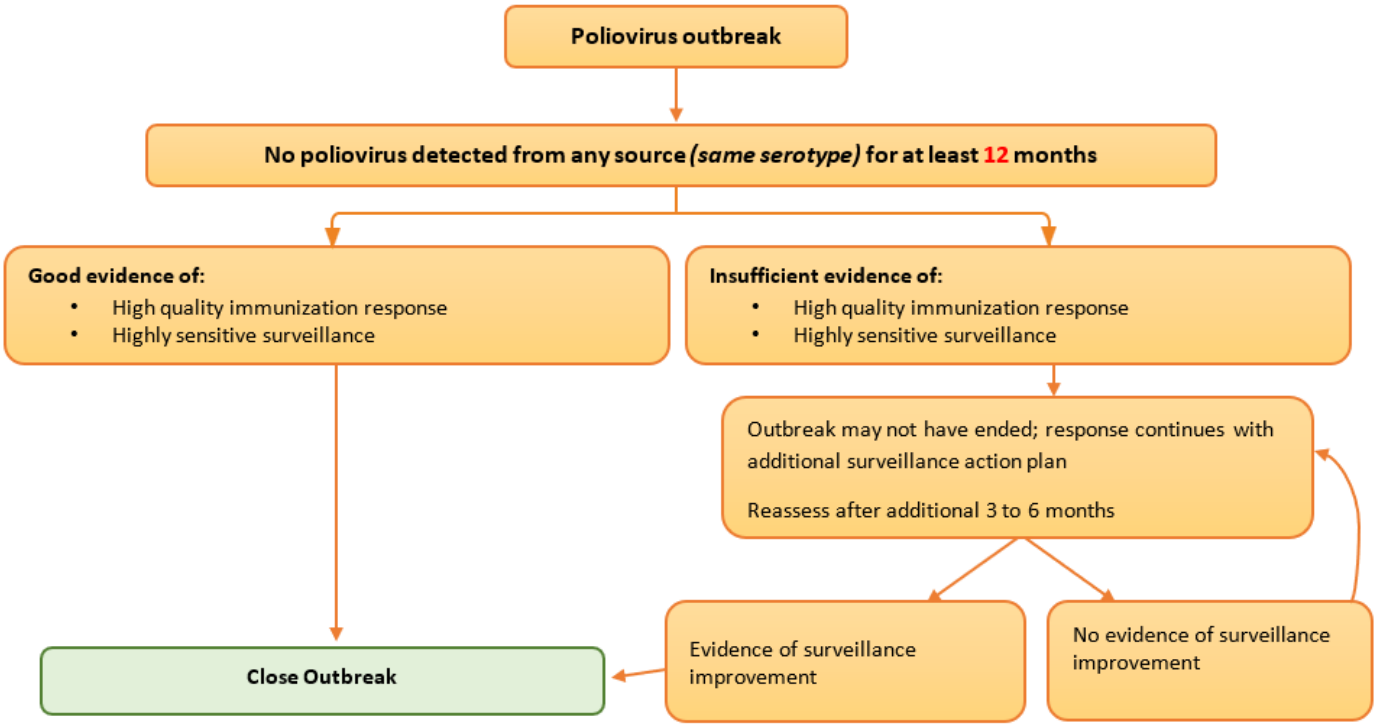
- i) an outbreak appears to be over, even if not all criteria are strictly met, or
- ii) an outbreak cannot be considered over, even in the absence of detectable virus isolation.

[1] Consider waiting an additional month (13m) to finalize any pending laboratory results from the past 12 months, if necessary.

[2] Criteria to be met at 1st admin level, or 2nd admin level for populous countries (e.g. India, Pakistan, Nigeria), and other high-risk areas as determined by the OBRA team

[3] Strategies include: innovative vaccination outreach activities; active case searches, community-based surveillance; estimate of population as yet unreached by vaccination and surveillance

Outbreak response assessment decision tree for closure



OBRA deliverables

1. **OBRA planned and implemented**
2. **OBRA team provides actionable recommendations** for next phase
3. **National authorities briefed** before departure
4. **OBRA lead provides final report**
   - Debriefing presentation *(ppt)*
   - Narrative report *(2 weeks after)* to national authorities and GPEI partners
5. **WHO regional office** to review and advise if outbreak is ongoing or over *(in case of closure to align with RCC)*
6. **Country** provides **post-OBRA action plan** within one month

OBRA toolkit

The available generic tools for OBRA will be optimized for each assessment (led by the OBRA team lead) as per the specific context. Two language versions of OBRA toolkit are available (English and French).

1. OBRA preparedness tracker (regions)
2. **Checklist of OBRA key documents for review** *(to be shared with the OBRA team 2 weeks before assessment)*
3. **OBR Assessment criteria** *(key indicators) – desk review*
4. **OBR Assessment – Activities** *(OBR plan)*
5. **OBR SOP performance tracker** *(key activities – timeliness/ completeness)*
6. **Data collection tools** *(key interviews – field mission)*
7. **Follow up OBRA recommendations - tracker**
8. **Final OBRA debriefing template**

Selected key performance indicators for OBRA	
A. Planning and Coordination of outbreak response activities	
Planning and coordination	
Outbreak response timeliness	Timelines met, as set out in the Standard Operating Procedures for responding to a poliovirus event or outbreak
Outbreak coordination	Response plan, documentation of implementation, and chronogram and/or preparedness checklist in use
Cross-border coordination, where relevant	Evidence of routine cross border notification for surveillance and coordination of SIAs
Data review and field findings consistent	Qualitative assessment by OBRA team
B. Polio Surveillance sensitivity, data quality & laboratory	
AFP surveillance	
Completeness of weekly zero reporting (WZR) – at all levels (reports received at all levels)	≥ 80%
NPAFP rate / children under 15 years of age / year	≥ 3/100,000 endemic or OB affected countries at national level ≥ 3/100,000 endemic or OB affected at subnational level
Proportion of districts with ≥100 000 population aged <15 years that meet the NPAFP rate target	≥80%
AFP cases investigated < 48 hours after notification	≥ 80%
AFP cases with 2 stool specimens collected ≥24 hours apart, both within 14 days of paralysis onset, AND received in good condition in a WHO accredited laboratory	≥ 80%
NPEV isolation rate in AFP stool samples	≥ 10% or national objective, whichever is higher
Proportion of inadequate AFP cases with a follow up exam for residual paralysis completed within 60–90 days of paralysis onset	≥ 80% Records of completed comprehensive 60-day follow-ups and documented evidence of expert review.
Case detection in special populations*	Proportion of AFP cases from special populations, of all AFP cases, varies according to setting. *If possible, assess surveillance quality among special populations.*
Environmental surveillance	
<u>Samples collection schedule, and reporting:</u> Proportion of ES samples collected in the assigned month or proportion of samples are collected at the recommended hour of day	ES samples collected in the assigned month ≥ 80% ES collected at the recommended hour of day ≥ 80%
<u>EV isolation (national)</u>: Proportion of ES sites meeting EV detection sensitivity target of ≥50% <u>ES EV detection rate:</u> Proportion of samples where EV was detected If possible, to assess trend of Sabin-like detection during outbreak response.	≥ 80% ≥50% Sabin-like isolation pattern for 2-3 months post SIA
Laboratory	
<u>Specimens arrive in accredited laboratory:</u> Proportion of AFP cases with two stool specimens arriving in good condition at a WHO accredited lab. <u>Timeliness of stool specimen shipment:</u> Proportion of AFP cases with stools that arrive at a WHO-accredited lab within 3 days (domestic shipment) or 7 days (international shipment) of specimen collection.	≥ 80% in good condition ≥ 80% within ≤3 (domestic shipment) or 7 days (international shipment) of specimen collection.
<u>Final laboratory sequencing results available:</u> Proportion of specimens with sequencing results available within 7 days (AFP) or 14 days (ES)* from arrival at the sequencing lab	≥ 80% *The overall turnaround time is ≤35-day target is achievable for positive samples in countries with full laboratory capacity and ≤46-day target for countries without full laboratory capacity.*

C. SIA quality and monitoring	
SIA preparedness monitored	SIA preparedness dashboard updated and used before each SIA
Independent Monitoring (IM) results for last two SIAs	≥90% children marked in out-of-house post-campaign IM
LQAS results for last two SIAs	"Pass" threshold is ≥90%
Confidence in the results of IM and/or LQAS	Qualitative assessment by the OBRA team
Special populations* covered by SIAs	Evidence of accurate micro plans; strategies to reach populations
Response to evaluation outcomes and gaps identified	Evidence of actions taken, their effectiveness and impact (Quality improvement plans – developed and implemented after each SIAs)
D. Population immunity & routine immunization	
Vaccination status of NPAFP cases, 6-59 months of age in infected and high-risk regions	• 80% NP AFP cases have ≥3 doses OPV • <5% cases are zero dose
OPV3 & IPV routine vaccination coverage for past three years (or indicate what IPV was introduced)	>90% coverage OPV3 and IPV, comment on target population (denominator), validity
Special populations	Evidence of targeted strategies conducted to provide RI
E. Advocacy, communications and C4D / SBC	
Evidence-based C4D strategy represented in outbreak response plan and implemented in timely manner	Social / formative research based C4D strategy Evidence of timely implementation with adequate capacity
Reasons for missed children, especially for refusals, are analysed from campaign data and addressed	Evidence of updated communication strategy to address missed children and refusals (including sex-disaggregated data)
F. Vaccine management (mandatory when OPV2 has been used)	
Vaccine utilization records and validation forms	Submitted ≤14 days from end of SIA
Vaccine stockouts or shortages	No vaccine stockouts or shortages, adequate cold chain
G. Gender considerations in outbreak response	
Gender integration in OBR planning and implementation	Evidence of implementation of gender-specific actions as per OBR SOPs *(Gender checklist):* ○ Tracking ratio of women to men in OBR recruitment in nationals and internationals *(ex: OBR surge, vaccination teams)* ○ Evidence of data collection, analysis and use of sex-disaggregated data *(ex: OBR sitreps, SIAs results dashboards, SIA reports – missed children, zero dose and refusals etc);* ○ Gender analysis conducted and utilized for improving OB response: SIA microplans, SBC interventions, Surveillance reporting, deployment of HR etc. ○ Gender responsive IEC materials (according with gender and social roles) ○ Tracking ratio of women to men attending OBR trainings ○ PRSEAH/ gender awareness and inclusion in OBR training packages
*(Special populations*include: refugees, IDP, migrant, nomadic, history of refusals)*	