Aide Mémoire

December 2018

Poliovirus Outbreak Response Assessment (OBRA)

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 ongoing
   - ✓ Assess vaccine management for each round
3. **Assess and strengthen surveillance sensitivity**
   - ✓ Assess efforts to enhance surveillance in outbreak context beyond baseline activities
   - ✓ Assess sustainability of surveillance system
2. **Assess progress towards interrupting transmission**
   - ✓ Root cause(s) of outbreak understood
   - ✓ Minimum 6 months since last case/isolate detected
   - ✓ Evaluate evidence that transmission has been interrupted

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

Overview of assessment

1. Planning

- OBRA planning begins as soon as outbreak confirmed
- Partners identify independent OBRA team leader early
- Plan for 2 or more assessments as needed
- Team expertise includes immunization, surveillance, C4D, vaccine management, and others as needed
- Conduct teleconference between OBRA team and the country 2 weeks before the OBRA to discuss situation analysis (e.g. previous reviews) and preparations
- GPEI Outbreak Preparedness and Response Task Team (OPRTT), including WHO and UNICEF Regional Offices leads global level coordination for OBRA support
- External desk review (EDR) to review of all relevant data may replace OBRA where warranted (e.g. an event, difficult context, with smaller team and limited or no field visits)

3. Report and debrief

- Team presents findings and recommendations to authorities before leaving the country, and reports on:
- 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 assessment is necessary.
- Alignment with IHR recommendations.
- **Where type 2 monovalent oral polio vaccine (mOPV2) was used**, complete inventory, and recommended safe storage or destruction of any remaining stock

2. Scope and timing

- **First EDR:** within 2 weeks of virus confirmation: assess surveillance and population immunity; engage with country for outbreak response planning
- **First OBRA:** comprehensive assessment 3 months from virus confirmation. 5-10 external evaluators for up to 10 days.
- **Follow-up EDR/OBRAs:** with Supplementary Immunization Activities (SIAs) where feasible, accounting for lab results and end of outbreak criteria. 3-5 external evaluators for up to 5 days. **Early focus on vaccination response. Later focus on surveillance completeness and quality. Every 4 months.**
- OBRA team numbers and composition to be adjusted for country and outbreak context.

4. *End of outbreak*

- **Criteria** are set to assess if an outbreak is over (page 2)
- **If the 'end of outbreak' criteria are not met** in a country or zone, the OBRA team will recommend next steps:
  - At 6 months without virus detected: strengthen internal / external support for response; continue EDR/OBRAs.
  - At 9 to 12 months without virus detected: put in place a 3-month emergency plan for a) surveillance, e.g. intense active case search in outbreak area; b) immunization, e.g. proven or innovative strategies for SIAs and routine immunization (RED approach); repeat OBRA after 3-4 months.
- **When criteria are met and/or the OBRA team is satisfied** that outbreak response has been sufficient, it recommends that the outbreak be considered over. **The WHO regional office** considers the OBRA findings, shares the report with the national and regional certification commissions and may confirm the outbreak is over and can be 'closed'.

Special circumstances

Endemic countries: OBRAs follow same principles; Country EOC to be involved in planning

Multi-country outbreak zone countries without cases:

- **With vaccination response-** Focus OBRA on:
  - Response quality / population immunity
  - AFP and environmental surveillance
  - Enhanced case / isolate detection
  - Analysis of chronically missed communities/children
- **Without vaccination response-** Focus OBRA on:
  - Enhanced surveillance, case detection, active search and environmental sampling
  - Areas bordering outbreak country, mobile populations

Event response assessment (ERA). ERA or EDR by independent external or national team to assess immunization response (e.g. bOPV/mOPV2), surveillance and vaccine management.

Assessment of programme areas – Technical worksheets and data collection tools available separately

Focus primarily, but not only, 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

1. Coordination and quality of outbreak response

Planning and coordination

- Declaration of health emergency; cross border notification and collaboration when applicable
- Technical committees formed and active
- Presence of comprehensive response plans, with budget, to reach every child with vaccination and to strengthen surveillance
- Timely request, receipt, and disbursement of funds

SIA quality and monitoring

- Preparedness timeline, microplanning, 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

Advocacy, communication and C4D

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

2. Population immunity & routine immunization (RI)

- 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

3. Surveillance and data quality

- NPAFP and stool adequacy indicators at lowest admin level possible (at least 100,000 children <15 years); proportion of stool samples collected within 14 days of onset, 60 day follow-up for cases with inadequate samples
- Facility selection: system, frequency, and priority setting, mix of public, private, large and smaller facilities
- Community and contact sampling protocols and practise
- 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
- Final classification; availability of results at all levels; presence of compatible cases and their investigation

4. Vaccine management (mandatory when mOPV 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 mOPV stocks
- Documentation of robust search for tOPV and mOPV2
- Recommend safe storage or disposal of mOPV2
- Signoff by national or independent authority

Criteria to determine if an outbreak is over

- **No poliovirus of the outbreak serotype detected from any source (AFP, contact, environmental…) for at least 6 months since virus last detected**

AND

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

AND

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

* 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

** Strategies include: innovative vaccination outreach activities, including for transit points, camps, inaccessible areas; active case search, community surveillance; estimate of population as yet unreached by vaccination, by surveillance.

Note: *After comprehensive review of indicators, data quality, and qualitative information in 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.*

Polio Outbreak Response Assessment (OBRA)

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** i. Debriefing presentation ii. Executive summary (2 pages) to national authorities and GPEI partners **5. WHO regional office** to review and advise if outbreak ongoing or over **6. Country** provides **post-OBRA action plan** within one month

Selected key performance indicators for OBRA	*Target*
Planning and coordination	
Outbreak response timeliness	Timelines met, as set out in the Standard Operating Procedures for responding to a poliovirus event or outbreak (Version 3)
Outbreak coordination	Response plan, documentation of implementation, PLUS 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 (e.g.EDR) and field findings consistent	Qualitative assessment by OBRA team
Population immunity and routine immunization	
Vaccination status of NPAFP cases, 6-59 months of age	• 80% NP AFP cases have ≥3 doses OPV in infected & high risk regions • <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
SIA quality and monitoring	
Independent Monitoring (IM) results for last two SIAs	≥95% children marked in out-of-house post-campaign IM
LQAS results for last two SIAs	"Pass" threshold is ≥90%
Confidence in the results of the IM and LQAS	Qualitative assessment by the OBRA team
Special populations* covered by SIA	Evidence of accurate microplans; strategies reach populations
Response to evaluation outcomes and gaps identified	Evidence of actions taken, their effectiveness and impact
Vaccine management for mOPV2	
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
Advocacy, communications and C4D (communication for development)	
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 and addressed	Evidence of updated communication strategy after each round SIA to address missed children and refusals using IM
Surveillance and laboratory	
• ***AFP surveillance***	
Weekly surveillance reports received at all levels (e.g. district to state, state to national, national to region)	≥ 90%
NPAFP rate / children under 15 years of age / year	≥ 3/100,000 or national objective, if higher (overall outbreak zone) ≥ 2/100,000 (every first subnational level)
AFP cases investigated < 48 hours after notification	≥ 80%
AFP cases with 2 specimens collected 24-48 hours apart and <=14 days from symptom onset	≥ 80%, also consider assessment of time between symptom onset to notification
NPENT isolation rate in AFP stool samples	≥ 10% or national objective, whichever is higher
60 day follow up of AFP cases with inadequate stools	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

• ***Environmental surveillance***	
Samples collection schedule, and reporting	Environmental samples collected as per agreed collection site and frequency; results reported
NPENT isolation	Proportion samples positive for NPENT per site; Sabin-like isolation pattern for 2-3 months post SIA
• ***Laboratory***	
Specimens arrive in accredited laboratory in good condition	≥ 80%
Specimens arrive in accredited laboratory ≤3 days of being sent	≥ 80%
Final laboratory sequencing results available within ≤28 days of specimen receipt	≥ 80%
***Special populations include:** refugees, IDP, migrant, nomadic, history of refusals etc	