POLIO GLOBAL ERADICATION INITIATIVE

Response to

type 2 vaccine-derived polioviruses

prior to global tOPV withdrawal

Interim Guidelines

August 2015

Summary

Prepare for prompt action for any area or population at risk of VDPV2 emergence.

From August 2015 until the tOPV-bOPV switch date, initiate rapid response mop-up immunization within 14 days of diagnosis for every report of VDPV2 from clinical or environmental sources, without waiting for, and regardless of, final classification. Plan and conduct at least 3 tOPV rounds in areas at risk.

If cVDPV2 is found, adapt and expand the response further to stop circulation, in line with the standard operating procedures for outbreak response, including one round with IPV if not already used for SIAs in that area.

Purpose

The purpose of this document is to offer new strategic guidance on the operational response to isolation of vaccine-derived polioviruses type 2 (VDPV2) from any source in the period leading up to the global withdrawal of trivalent oral polio vaccine (tOPV), anticipated to occur in April 2016[1].

The Global Polio Eradication Initiative released new Standard Operating Procedures for responding to a poliovirus outbreak, including cVDPVs, an approach endorsed by the World Health Assembly in May 2015. Released in July 2015, new Guidelines for reporting and classifying VDPVs provide details on the field investigation required when a new or already circulating VDPV is detected (http://www.polioeradication.org/Resourcelibrary/Resourcesforpolioeradicators.aspx)

This companion paper offers guidance as to next steps for an immediate operational vaccination response to any newly detected VDPV2 effective immediately.

Context

With continued progress towards global interruption of wild poliovirus transmission, it is increasingly important to manage the risk associated with circulating vaccine-derived poliovirus (cVDPV) that can cause paralysis. In the last 10 years, almost 500 children were paralyzed by cVDPV, largely type 2.

To eliminate this risk of paralysis due to continued use of type 2 live oral polio vaccine, the globally synchronized withdrawal of (tOPV) is scheduled in April 2016 , referred to as the 'switch date', at which time bivalent types 1 and 3 oral polio vaccine (bOPV) will replace tOPV use in in all routine and supplementary polio immunization activities.

[1] Or alternate date in 2016 or 2017 to be recommended by SAGE.

One of the key pre-conditions for the tOPV-bOPV switch is the interruption of all persistent transmission of cVDPV2 (any evidence suggesting circulation of greater than 6 months after the date of first detection of the cVDPV2 strain).

Prior to the switch date, it is therefore critical that all potential outbreaks of cVDPV be stopped immediately and not allowed to take hold, i.e. to become persistent. The timeline no longer allows for watching and waiting to find out if a type 2 vaccine-derived virus strain is circulating or is being excreted by an immune-deficient individual. Furthermore, a recently emerged VDPV is easier to stop before the virus adapts further for widespread circulation. It is therefore necessary to replace the 'watch and wait' approach with a strategy for immediate response.

Going forward, even while further field investigations are initiated to classify a VDPV, an immediate vaccination response is required for any new appearance of VDPV2, regardless of subsequent classification status (iVDPV, cVDPV or aVDPV). Concretely, therefore, as soon as a new VDPV is identified, plans must be initiated for appropriate and targeted immunization activities, while investigations leading to VDPV classification go on in parallel (http://www.polioeradication.org/Resourcelibrary/Resourcesforpolioeradicators.aspx)

Applicability

This guidance applies to any situation in which VDPV2 is isolated from any child or adult with acute flaccid paralysis, or from an environmental sample, from August 2015 until withdrawal of the type 2 component of OPV.

Supplementary immunization activities to prevent and rapidly eliminate VDPV2

Principally, the main risk factor for emergence and circulation of VDPV2 is low population immunity to type 2 poliovirus.

Objective 1 – Plan and implement campaigns to prevent emergence of cVDPV2 in high risk areas

- Based on risk analysis that identified areas at high risk of cVDPV2 emergence, multiple large-scale tOPV SIAs have been planned which must be implemented in advance of tOPV withdrawal, in line with the global calendar for supplementary immunization activities.

Objective 2 – Early rapid local response to prevent further circulation (must not wait for VDPV2 classification)

- Whenever any VDPV type 2 is isolated, i.e. as soon as notification is received from the reference laboratory, take immediate action
- Immediately plan local mop up activities with tOPV to take place within 14 days
- Implement supplemental immunization activities (SIAs) within 14 days as follows:
    - Plan to implement 3 mop up rounds

- Ensure an interval of 14 to 28 days between rounds
- Determine the size of target population and geographic scope based on risk of spread and estimated duration of circulation before detection
- Adapt each campaign to improve coverage and reach missed children, from results and lessons learned from the preceding rounds
- Complete 3 mop-up rounds of tOPV, even if the circulation of the VDPV strain is not confirmed .

Objective 3 – Expand to large-scale supplemental immunization activities <u>if cVDPV confirmed</u>

- Cover all areas at risk and any possible source of the cVDPV - to stop circulation quickly – in line with the GPEI Standard operating procedures for outbreak response
- Ensure vaccination of a minimum of 2 million children
- Use IPV in combination with tOPV no later than the 3rd round of mop-up – this will boost seroconversion and the mucosal immune response to tOPV
  - If IPV has been used in an SIA in a geographic area, it is not necessary to use it again.
- Continue to implement tOPV SIAs until three (3) campaigns have been implemented following the most recent virus isolation, whether from an AFP case or an environmental sample

The main message

From August 2015 until the tOPV-bOPV switch date, be prepared to respond rapidly to any detection of a VDPV2 isolate from clinical or environmental sources, without waiting for VDPV2 classification. Adapt and expand the response further if it is confirmed as a cVDPV, to rapidly stop circulation.

www.polioeradication.org