

**SAGE Polio Working Group**  
**Thursday, 13 March 2015**  
**Conference Call Notes**

**INTRODUCTION**

A SAGE Polio Working Group (WG) teleconference was held on 13 March 2015 to review and endorse the programme approach to detection and response to cVDPV2 after March 2015, and to review the preparations for OPV2 withdrawal in April 2016.

The following WG members were in attendance: Peter Figueroa (Chair), Hyam Bashour, Walter Dowdle, Nick Grassly, Antoine Kabore, Yagob Al-Mazrou, Elizabeth Miller, and Kimberly Thompson. Zulfiqar Bhutta, T Jacob John, Francis Nkrumah, and Walt Orenstein were unable to attend.

This note provides a summary of the presentations, key discussion points, decisions and recommendations from the call.

**OBJECTIVES**

The objectives of the meeting were to:

1. Review “what-if” scenarios of cVDPV2 detection, during the period from April 2015 to March 2016, and endorse the proposed response plans together with the updated calendar for planned tOPV campaigns prior to OPV2 withdrawal (**Decision**)
2. Recognizing the recent progress in Nigeria and Pakistan, consider whether the deadline of end March 2015 for elimination of persistent cVDPV should no longer be applied as a ‘trigger’ for the SAGE to confirm April 2016 as the date for withdrawal of type 2 oral poliovirus vaccine, and whether instead, the WG would thoroughly assess progress in September 2015 and then advise SAGE on confirming the appropriate date for OPV2 withdrawal (**Decision**)
3. Review progress toward IPV introduction and preparations for OPV2 withdrawal (**Information**)

**PRESENTATIONS, DISCUSSIONS AND RECOMMENDATIONS**

<b>TOPIC 1</b> <b>cVDPV2 detection and response scenarios after March 2015 and proposal to no longer apply the deadline of end March 2015 as a ‘trigger’ for OPV2 withdrawal</b>
<p><b>Context:</b> Following the 19 February 2015 SAGE Polio WG agreement to review the epidemiology of persistent cVDPV2 in June and September 2015 if persistent cVDPV2 is detected beyond March 2015, and further to program request to no longer apply the deadline of end March 2015 as a ‘trigger’ date for OPV2 withdrawal, the WG requested the development of scenarios for detection and response to cVDPV2 during the period of April 2015 to March 2016.</p> <p><u>Update: epidemiology of persistent cVDPV2 in Pakistan and Nigeria</u></p> <p>There has been no further detection of persistent cVDPV2 through AFP or environmental surveillance in Pakistan or Nigeria since the 19 February SAGE WG call. No persistent cVDPV2 strains have been detected in Nigeria since November 2014. The two persistent cVDPV2 strains that had emerged during 2012 in Pakistan have not been detected since June 2014 and the new cVDPV2 strain that emerged in July 2014 was last detected through environmental surveillance in January 2015.</p> <p><u>cVDPV2 detection and response scenarios in Pakistan and Nigeria</u></p> <p>Detection and response to persistent cVDPV2 scenarios were presented on Nigeria and Pakistan for the periods before (April-September 2015) and after (November 2015-March 2016) the October 2015 meeting at which SAGE is expected to confirm April 2016 as the date for all OPV-using countries to withdraw the type 2 oral poliovirus vaccine. If persistent cVDPV2 is detected during April-September 2015, in addition to full</p>

implementation of all planned tOPV campaigns, the response will include the addition of intensified mopping-up tOPV campaigns and addition of tOPV and IPV campaigns as appropriate.

#### Recent epidemiology of cVDPV2 and detection and response scenarios in countries other than Nigeria and Pakistan ("other countries")

To provide a broader context of the outcome of cVDPV2 outbreaks and the impact of GPEI response activities, the epidemiology of cVDPV2 outbreaks during 2010-2015 to date was presented for countries other than Nigeria and Pakistan ("other countries").

There were 15 cVDPV2 events<sup>1</sup> during 2010-2015, with 84 reported cases in 9 "other countries."<sup>2</sup> The median outbreak duration was 1.2 months (range: 0-32.2 months). The majority (13/15 or 87%) lasted <6 months, i.e., below the threshold used by the programme to define 'persistent transmission'. Regarding the origin of the outbreaks, 7/15 (47%) were new emergences and 8/15 (53%) were importations (4 from Nigeria, 1 from Chad, 1 from Somalia, and 2 from Pakistan). The size of the outbreaks involved primarily multiple-case events, 10/15 (66%) involving between 2-26 cases; however, there were 5/15 (33%) single-case events, 4 of which were importations from Nigeria.

Of the 15 cVDPV2 events, 73% were stopped by 2 or fewer campaigns and 87% were stopped by 4 or fewer campaigns: 7 (47%) stopped spontaneously; 2 (13%) after 1 SIA; 2 (13%) after 2 SIAs; 1 (7%) after 3 SIAs; and 2 (13%) after 4 SIAs. Only 1 (7%) outbreak (in Afghanistan) required 9 SIAs to stop the outbreak country-wide.

Based on the experience with cVDPV2 events in the past five years and anticipating the withdrawal of type 2 OPV in April 2016, scenarios in other countries on detection and response to VDPV2 were presented for the periods before (April-September 2015) and after (November 2015-March 2016) the October 2015 SAGE meeting. A risk-based approach was proposed that incorporated risk tiers for VDPV2 emergence and spread (Tier 1 vs. Tier 2-4 countries) and type of VDPV2 detected (cVDPV2 or aVDPV2) and proximity to the date of OPV2 withdrawal. The most intensive mopping up response would be implemented in the highest risk category scenario which would be the detection of cVDPV2 in a Tier 1 country during the October 2015-March 2016 timeframe. Based on the updated tOPV SIA calendar for preventative campaigns (which is described below) and this risk-based strategy, as we approach the OPV2 withdrawal date, a progressively intensified response would be undertaken following detection of any VDPV2.

#### Updated tOPV SIA calendar to mitigate the risk of new cVDPV2 emergence after OPV2 withdrawal

A tOPV SIA calendar for the period July 2015 through March 2016 was updated. The three main objectives of the SIA strategy were to: 1) to interrupt WPV1 transmission in endemic and outbreak countries; stop transmission of persistent cVDPV2; and increase population immunity to type 2 poliovirus in high-risk areas prior to the global withdrawal of OPV2.

The tOPV schedule to reduce the risk of cVDPV2 emergence was developed based on the cVDPV2 risk modelling approach that was endorsed by SAGE in October 2014. Additional SIA activities amounting to delivery of an additional 52 million tOPV doses have been added to the calendar reviewed by SAGE in October 2014.

#### **Decisions:**

1. *The WG endorsed the cVDPV2 detection and response strategies in Nigeria and Pakistan and the risk-based VDPV2 response strategy in other countries.*
2. *The WG also endorsed the tOPV SIA schedule to reduce the risk of cVDPV2 emergence. The WG made the following recommendations:*
  - a. *The WG should be updated on the tOPV supply situation in June 2015;*
  - b. *The program should ensure high coverage (e.g. ≥80%) is achieved, especially in areas with low levels of immunity to type 2 poliovirus and where only a single tOPV SIA round is planned within 6*

<sup>1</sup> NB: data was updated following the call – the updated data has been included here to align with the background document on cVDPV2 epidemiology that has been developed for the SAGE meeting.

<sup>2</sup> Afghanistan, Cameroon, Chad, China, DRC, Kenya, Niger, South Sudan and Yemen

*months of OPV2 withdrawal.*

3. *The WG agreed to review the epidemiology of persistent cVDPV2 in June and in greater detail during its meeting in September 2015 with the objective to ensure that the elimination of persistent cVDPV2 is on track before OPV2 withdrawal in April 2016. The WG made the following recommendations :*
- a. The previous deadline of March 2015 for elimination of persistent cVDPV2 as a “trigger” for OPV2 withdrawal will no longer be applied. Instead, the final recommendations by the WG to SAGE will be given after the WG meeting in September 2015 and will be based upon whether or not there is clear evidence of progress in the two countries with persistent cVDPVs that would provide a high degree of confidence in October 2015 that by the time of the switch the criteria for elimination of persistent cVDPV2 circulation will be met.*
  - b. Given the serious implications of delay for all countries involved in OPV2 withdrawal, the WG agreed that once SAGE confirms April 2016 as the date for withdrawal of type 2 OPV, the switch should proceed as planned. Contingency strategies to respond to detection of any persistent cVDPV2 subsequent to the October decision will be submitted by GPEI to the WG for review at its June meeting, including the scenario of new cVDPV detection just prior to the scheduled switch.*

The Chair also requested WG members to share with the WG and secretariat any other "what if" scenarios that we have not considered so that the June conference call can be thoroughly prepared well in advance.

## TOPIC 2

### Update on preparation for OPV2 withdrawal (Information)

The WG reviewed the update on the plans and preparations for OPV2 withdrawal, especially global IPV supply and bOPV licensure, and commended the progress made in the preparations.

#### Update on global IPV supply

There are currently 126 tOPV-only using countries that plan to introduce at least one dose of IPV by the end of 2015.

The current global supply of IPV is limited mainly to 2 manufacturers (Sanofi and BBio), both of whom have indicated that they will not be able to meet their initial supply commitments. This will result in a deficit of 8 million IPV doses by BBio alone. Furthermore, an additional 1.5 million doses of IPV has been requested for SIAs in Pakistan and Nigeria. The constraints on supply due to the additional doses requested will result in the delay of IPV introduction in Tier 3 and 4 countries to Q4 2015. Despite the delay in these countries, more than 80% of the global birth cohort (in 104 countries) will be covered with IPV by the end of 2015, including all Tier 1 and Tier 2 countries.

#### Update on bOPV licensure

There are 156 tOPV-using countries and territories that need to switch from tOPV to bOPV. The current label for bOPV restricts its use to SIAs. The modification of indication (label change) for bOPV by manufacturers, for its use in routine immunization schedules, is forecast for completion by mid-2015, with anticipated licensure by the end of 2015. Work is currently underway to facilitate the process by which, as an interim measure, WHO member states accept bOPV for routine immunization based on WHO prequalification.

#### **Recommendations:** *The WG made the following recommendation:*

- The WG should be updated in June 2015 on the contingency plan for tOPV supply during 2016 in case of postponement of OPV2 withdrawal to 2017.