Key Points: Containment of Poliovirus Type 2 Materials

Please note: the symbol ► indicates a new talking point or an existing one that has been significantly changed from the previous version.

- Wild poliovirus type 2 (WPV2) is the first of three wild poliovirus types to be eradicated. The Global Commission for the Certification of Poliomyelitis Eradication (GCC) declared this in September 2015.
- It is important that all remaining poliovirus type 2[*] is destroyed or safely and securely contained so the virus is not released from facilities that retain it, to again cause paralysis or death.
- WHO is strongly encouraging Member States to destroy all poliovirus type 2 unless it is needed for critical functions, such as for vaccine production. The best way to prevent these viruses from being released is to destroy them.
- ► WHO asked Members States to report, by end-2015, on the identification of facilities that handle or store WPV2 or VDPV2 materials[†], the destruction of unneeded materials, and the designation of poliovirus-essential facilities to retain needed viruses.
  - ► A total of 101 Member States met the reporting deadline of end-2015. As of January 2016, 90 Member States no longer hold any WPV2 or VDPV2, and 11 have designated poliovirus-essential facilities to retain WPV2 or VDPV2, such as for vaccine production.
  - ► Of the remaining 93 Member States, 24 have submitted reports for which more information is still being collected, and 69 have not yet responded. All 93 remaining Member States are expected to report the missing data shortly.

  See map on the last page of this document.
- By end-July 2016, Member States must destroy or safely and securely contain OPV2 and Sabin2 materials[‡]. This deadline is set three months after the last trivalent OPV use, planned for April 2016. By end-July 2016, we expect that OPV2/Sabin2 shedding will have stopped, and a single detection of these viruses thereafter will require an emergency response.
- Designated poliovirus-essential facilities must engage in the containment certification process and begin demonstrating appropriate implementation of requirements described in the WHO Global Action Plan for poliovirus containment (GAPIII). Member States are responsible for certifying facilities against GAPIII, in collaboration with WHO.
- WHO is aware of concerns regarding specific requirements described in GAPIII. WHO is also aware that facilities performing research or other functions unrelated to polio but using potentially infectious materials that may contain type 2 polioviruses, including faecal and respiratory secretion samples, may be reluctant to destroy, transfer, or contain such materials. In 2016, WHO will convene a group of experts to review the concerns and consider additional guidance to ensure continued progress towards appropriate poliovirus containment.
- WHO's current activities to support containment efforts include:
  - engaging and sharing information with WHO Regions, Member States, and partners to increase awareness of the need for poliovirus containment and drive implementation of GAPIII requirements,
  - developing a containment certification scheme (CCS) to certify designated poliovirus-essential facilities against GAPIII,
  - developing guidance for designated poliovirus-essential facilities to apply for GAPIII certification,
  - training and qualifying experts to audit poliovirus-essential facilities according to the CCS, and
  - conducting workshops on GAPIII implementation and certification according to the CCS.
- Partners of the Global Poliovirus Eradication Initiative provide financial and technical support to WHO in poliovirus containment efforts

[*] Includes all materials containing or potentially containing WPV2, vaccine-derived poliovirus type 2 (VDPV2), oral polio vaccine type 2 (OPV2) or Sabin type 2 (Sabin2) viruses.

[†] Includes (but is not limited to) faecal or respiratory secretion samples collected for any purpose in a time and geographic area of reported circulation of these viruses.

[‡] Includes (but is not limited to) faecal or respiratory secretion samples collected for any purpose in a time and geographic area of reported circulation of these viruses. For Member States using tOPV until the global switch to bivalent OPV, samples collected as of August 2016 will not require containment.

Additional Points

Poliovirus types 1 and 3

- WPV1 is still circulating in Pakistan and Afghanistan. As of December 30, 2015, 70 cases of WPV1 have been reported compared with 359 cases for all of 2014. The last case of WPV3 occurred in Nigeria in 2012.

Containment of polioviruses

- Polio eradication efforts have required billions of U.S. dollars, the dedicated efforts at all levels of governments, countless hours of services, and the immunization of billions of children. Appropriate containment of polioviruses will be critical to sustain polio eradication.
- Poliovirus containment is a system for confining polioviruses within a defined space. Only poliovirus-essential facilities holding a valid certificate will be allowed to pursue work and storage of type 2 polioviruses in the poliovirus type 2 containment period according to GAPIII.
- Retaining polioviruses in designated poliovirus-essential facilities is expected to require significant financial investment to meet containment requirements and run facilities under containment conditions, and shared responsibilities of the facilities and their hosting Member States to ensure full compliance with GAPIII. As such, the decision to retain polioviruses should be carefully considered in consultation with all relevant authorities.
- A lesson regarding the need for appropriate containment is the 1978 release of smallpox virus from a laboratory in the United Kingdom, resulting in a person dying from the disease. This triggered countries to further reduce the number of facilities retaining smallpox virus to the two official repositories that remain today.

WHO Global Action Plan for poliovirus containment (GAPIII)

- The *Global Action Plan to minimize poliovirus facility-associated risk after the type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use (GAPIII)* describes global activities and timelines required to achieve appropriate containment of all polioviruses, beginning with poliovirus type 2.
- GAPIII, aligned to the Polio Eradication and Endgame Strategic Plan 2013–2018, was developed in consultation with international experts, and endorsed by the World Health Assembly in May 2015.

More information

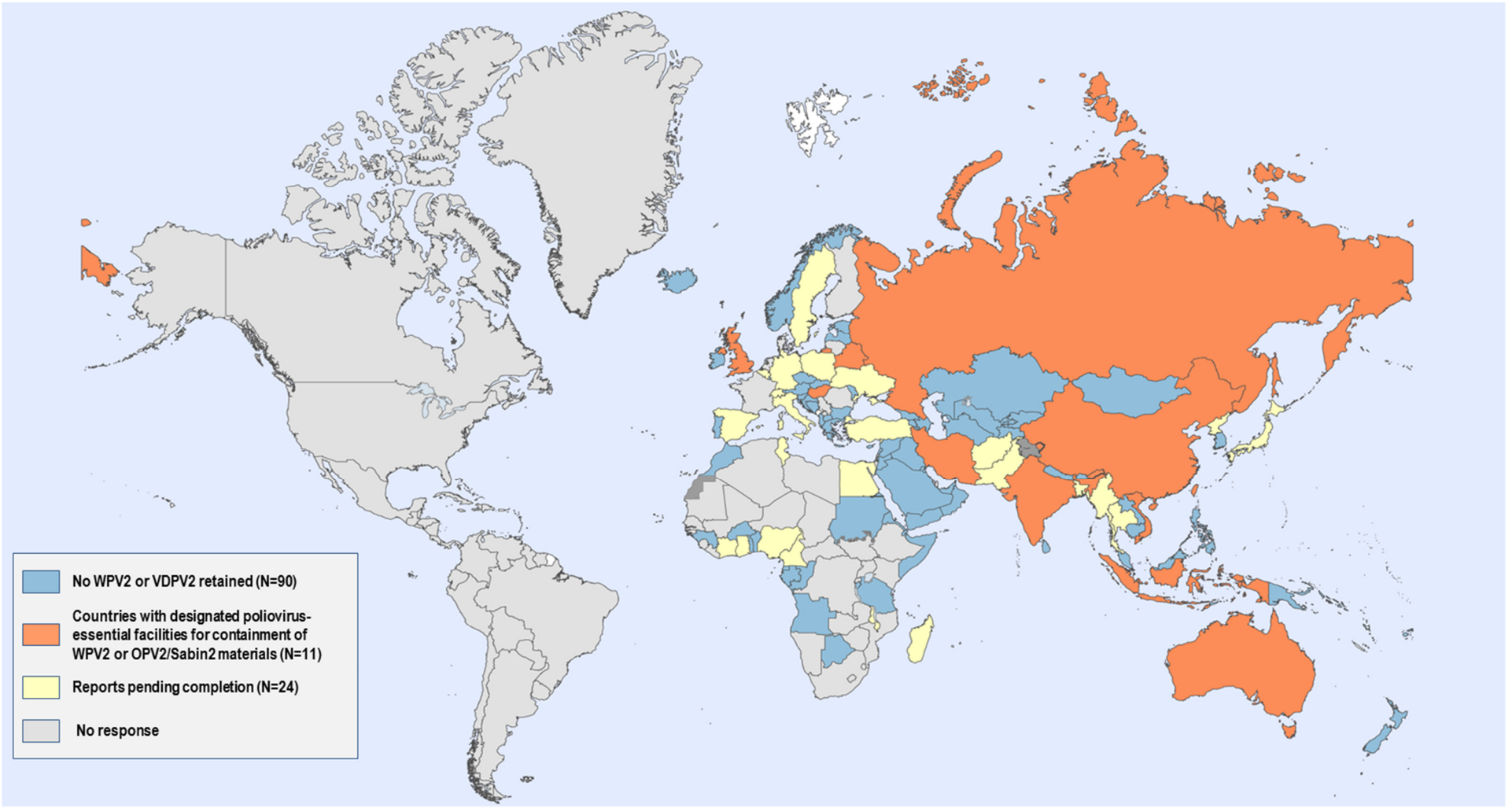
- WHO Global Action Plan (GAPIII) for poliovirus containment (http://www.polioeradication.org/Resourcelibrary/Posteradicationpolicydocuments.aspx)
- Containment of Polioviruses, Global Polio Eradication Initiative website (http://www.polioeradication.org/Posteradication/Containment.aspx)
- Plans for containment of poliovirus following type-specific polio eradication worldwide, 2015. *Weekly Epidemiological Record*, August 2015 (http://www.who.int/wer/2015/wer9032/en/)
- World Health Organization Guidelines for Containment of Poliovirus Following Type-Specific Polio Eradication—Worldwide, 2015. *Morbidity and Mortality Weekly Report*, August 2015 (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6433a5.htm)

Questions:

- Questions and comments can be sent to containment@who.int.

12 January 2016

Reported global progress on completion of GAPIII Phase I



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: WHO database
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