

## Poliovirus containment

# STANDARD OPERATING PROCEDURE FOR THE IDENTIFICATION, DESTRUCTION OR PREPARATION FOR CONTAINMENT OF POLIOVIRUS INFECTIOUS OR POTENTIALLY INFECTIOUS MATERIALS (SOP FOR FORM 1)

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21 November 2018

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## BACKGROUND AND INTRODUCTION

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Poliovirus transmission levels are currently at the lowest point in history and the feasibility of the pathogen's eradication in the short-term is realistic. There has been an intensification of efforts globally to reduce risk of the virus being released from facilities into the environment, where it could again cause paralysis and death in susceptible populations. Countries have been asked to either destroy their poliovirus materials or, in places where they are still needed for critical national and international functions such as vaccine production and research, implement rigorous guidance to ensure their safe handling and storage. Facilities wishing to retain poliovirus for critical functions must formally engage in a global certification scheme after being registered by their national authorities for containment as designated poliovirus-essential facilities (PEFs). Provided that they implement the guidance specified in [WHO Global Action Plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use \(GAPIII\)](#), within given time frames, they can become certified PEFs allowed to retain poliovirus materials.

This is for facilities knowingly working with poliovirus. But what actions are required from facilities that could be/don't know if they are working with poliovirus?

In addition to GAPIII, WHO has released guidance for facilities working with samples potentially infectious for polioviruses. Poliovirus potentially infectious materials (PV PIM) include faecal, nasopharyngeal, or sewage samples collected in a time and place where wild polioviruses/vaccine-derived polioviruses, or OPV-derived viruses were circulating or oral polio vaccines were in use. Research facilities with a high probability of storing such materials include those working with rotavirus or other enteric agents, hepatitis viruses, influenza/respiratory viruses, and measles virus. Other facilities could include those conducting nutrition research or environmental facilities.

The guidance aims to help these facilities identify PV PIM and eliminate or minimize risks of handling and storing such materials, so that laboratory workers and their communities are protected against poliovirus infection, and so that poliovirus is not accidentally or deliberately released into the environment.

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**Identified focal persons at facilities are kindly requested to complete *FORM 1: Facility reporting form* and return it to the national focal point (e.g. NPCC, NTFC, or other focal person, as indicated in FORM 1) for associated data collection, as follows.**

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- (1) Access<sup>1</sup> and read the first 20 pages of GAPIII and the [Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses](#) (PIM Guidance).
- (2) Follow instructions and clarifications provided in GAPIII and the PIM Guidance, confirm whether your facility retains PV IM, then refer to the country/territory specific poliovirus data provided in Table 1 of the PIM Guidance's Annex 2 and determine whether your facility stores and/or handles materials infectious or potentially poliovirus for polioviruses (PV IM or PIM). Alternatively, use the electronic tools *Preparing to contain poliovirus type 2* or *Preparing to contain polioviruses*.

**NOTE:** PV PIMs pose risks to individuals and communities and are classified as follows:

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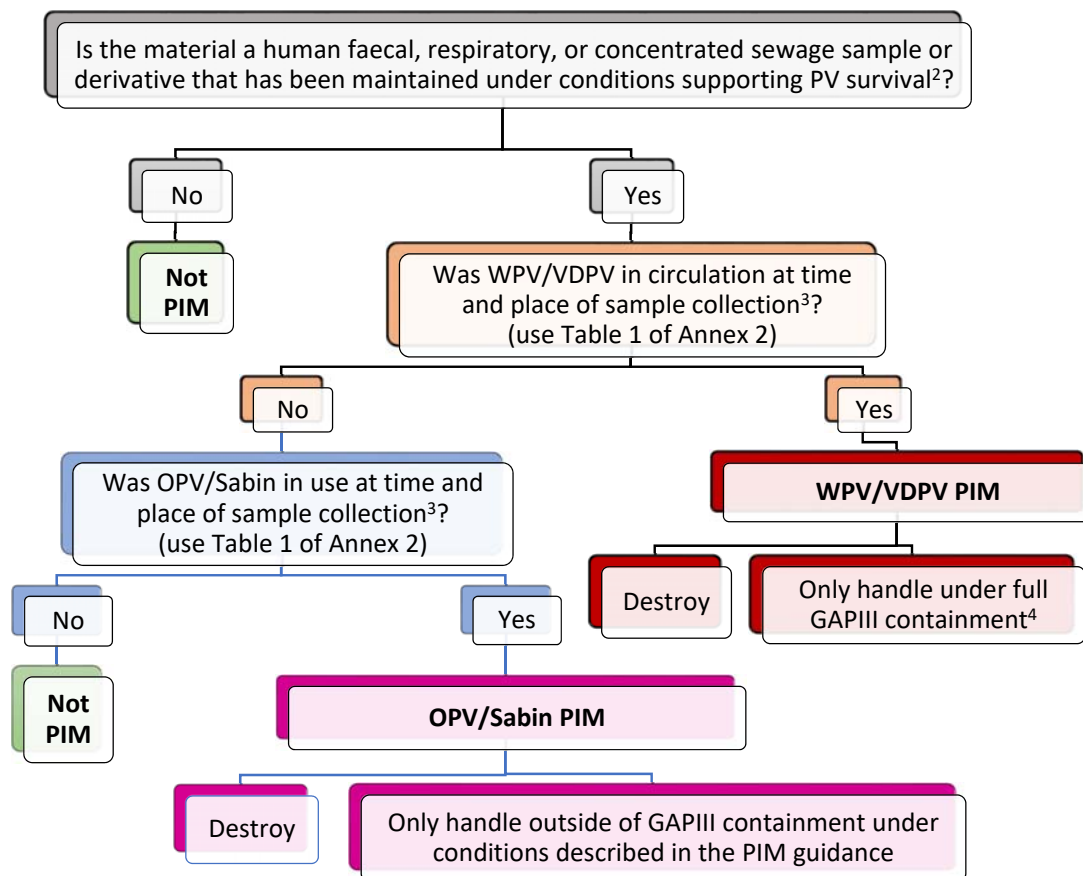
<sup>1</sup> Facilities that do not have access to internet should request a hard copy from the NPCC/NTFC/other focal person

1. **WPV/VPV** PIMs pose highest risks in case of inadvertent or deliberate release from facilities into communities and should be destroyed. Their retention requires certified containment measures as described in GAPIII. The retention of WPV/VPV PIM is subject to the approval of responsible national authorities.
  2. **OPV/Sabin** PIMs pose moderate to low risks in case of inadvertent or deliberate release from facilities into communities and may be retained under specific conditions that limit their use as described in the PIM Guidance. The retention of OPV/Sabin PIM is subject to declaration to the responsible national authorities.
- (3) Submit the completed FORM 1 to the NPCC/NTFC/other focal person within agreed channels and timeframes.

## COULD YOU BE HANDLING OR STORING POLIOVIRUS?

### Poliovirus potentially infectious material determination process

The PIM Guidance and the following algorithm will help you determine the presence of poliovirus potentially infectious materials in your facility and fill out FORM 1.



<sup>2</sup> Conditions supporting PV survival include storage at temperatures below -20 °C

<sup>3</sup> If a sample has a missing or damaged label or the type, country of origin, or the date of collection is unknown, the sample should be destroyed or inactivated using a method known to inactivate poliovirus.

<sup>4</sup> Refer to the PIM guidance for an overview of applicable requirements.