

FREQUENTLY ASKED QUESTIONS

GUIDANCE TO MINIMIZE RISKS FOR FACILITIES COLLECTING, HANDLING OR STORING SAMPLES POTENTIALLY INFECTIOUS FOR POLIOVIRUSES (PIM GUIDANCE)

Who is this guidance for and what does it set out to achieve?

The guidance is intended for **ALL** facilities but specifically those that could be/don't know if they are collecting, handling or storing poliovirus. These include facilities that are not purposefully using and manipulating poliovirus for research, diagnostics and or/vaccine production, but rather, might inadvertently be working with the virus through poliovirus potentially infectious material (PV PIM).

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

What kind of material is potentially infectious for poliovirus and what types of facilities are likely to be handling/storing PV PIM?

Poliovirus is transmitted via the faecal-oral and/or respiratory routes. Materials potentially infectious for poliovirus include faecal, nasopharyngeal, or sewage samples collected in a time and place where:

- wild polioviruses (WPV) were circulating;
- oral polio vaccines (OPV/Sabin) were in use; or
- vaccine-derived polioviruses (VDPV) were circulating.

It is important to note that samples collected for purposes unrelated to polio can be infectious for polioviruses. Facilities with a high probability of possessing PV PIM include those storing samples collected for research on rotavirus or other enteric agents, hepatitis viruses, influenza/respiratory viruses, or measles virus. Other facilities could include those conducting nutrition research or environmental facilities.

What are the risks if poliovirus is released into communities?

Release of poliovirus into communities could have devastating consequences as the virus could again cause paralysis and death in susceptible populations. This is especially a risk in areas where polio vaccination coverage is low. However, even in countries with high levels of polio vaccination coverage, some people may not be vaccinated or fully protected against polio, putting them at risk of infection if exposed.

Why is there urgency to implement this guidance now?

One of three strains of poliovirus, type-2, was declared eradicated in September 2015 and work is ongoing to ensure the eradication of the remaining types 1 and 3. In order to secure a lasting polio-free world beyond eradication, it is now urgent that:

- i) **ALL** facilities determine whether they have PV PIM
- ii) Facilities that identify PV PIM in their holdings either:
 - a. destroy these materials; or
 - b. take all necessary measures for their safe and secure retention through following appropriate requirements, thereby minimizing risks to the global community.

How does the PIM guidance differ from existing guidance on poliovirus containment?

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), the reference document for poliovirus containment, states that all PV PIM must either be destroyed or appropriately contained.

The PIM guidance, developed more recently based on the assessment of risk posed by PV PIM, allows for some flexibility and provides additional options for the handling and retention of specific PV PIM outside of containment, given that certain conditions are met.

The PIM guidance supplements guidance contained in GAPIII.

Does the PIM guidance only relate to samples with type-2 poliovirus potential?

The PIM guidance is in effect for all type-2 PV PIM. However, countries and facilities are also encouraged to identify and report types 1 and 3 PV PIM in anticipation of the eradication of the remaining two strains and the cessation of oral polio vaccine use, at which time the guidance will apply to all polioviruses.

Which is preferable: destruction or retention?

Destruction of PV PIM is the best way to prevent the accidental or deliberate release of poliovirus into the community and should be the preferred option. However, when collections potentially infectious for poliovirus cannot be destroyed, the PIM guidance recommends action for safe and secure PV PIM retention.

Retention of WPV/VDPV PIM is subject to the approval of responsible national authorities and requires the certified implementation of containment measures described in GAPIII.

Retention of oral polio vaccine (OPV)/Sabin PIM is subject to declaration by facilities to responsible national authorities and specific conditions that limit their use.

What is the best way of destroying PV PIM?

Facilities should identify and follow a method that has been proven safe and effective for the destruction of poliovirus.

Can I transfer my WPV/VDPV PIM instead of destroying them?

Facilities that cannot destroy their WPV/VDPV PIM are encouraged to approach designated poliovirus-essential facilities (PEFs) to discuss the feasibility of, and develop material transfer agreements for, their safe and secure storage and handling.

Who is ultimately responsible for the implementation of the PV PIM guidance?

Responsibility for compliance with the guidance lies with the facility and its respective national authorities (e.g. Ministry of Health), in coordination with national certification committees, national polio containment coordinators, and other relevant stakeholders where applicable.

Where do I go for more information?

Facilities can seek advice from their respective national authorities, their national certification committees and/or national polio containment coordinators. Links to the PIM guidance and other relevant information tools are listed below.

- PIM guidance, to be read in conjunction with its Annex 2: Country and territory-specific poliovirus data:
<http://polioeradication.org/polio-today/preparing-for-a-polio-free-world/containment/containment-resources/>
- GAPIII
[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](http://www.who.int/publications/m/item/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)
- GPEI containment webpage
<http://polioeradication.org/polio-today/preparing-for-a-polio-free-world/containment/>
- Key points on poliovirus containment
<http://polioeradication.org/wp-content/uploads/2018/04/polio-poliovirus-containment-key-points-20180418.pdf>