

# REDUCING RISK OF POLIOMYELITIS OUTBREAKS IN EMERGENCIES

2021 interim update

*Protecting vulnerable populations from  
lifelong polio paralysis*



Immunization is an essential part of a child's right to the highest attainable standard of health. This concept note outlines optimal strategies to reduce risk of outbreaks caused by polioviruses during, and after, emergencies. The goal is to minimize risk of polio outbreak following importation of poliovirus into the populations in humanitarian

emergencies. Through encouraging and supporting national commitment and rapid action and coordination, all vulnerable people can be protected against polio.

This concept note is based on the "[Vaccination in acute humanitarian emergencies: a framework for decision making](#)" published by WHO in 2013.

## OVERVIEW

Poliomyelitis (more commonly known as polio) is caused by a virus, and causes lifelong paralysis and in extreme cases even death. Children under the age of five years are most affected, but any unimmunized individual can contract the disease. There is no cure for polio, however it can be prevented through administration of safe and effective polio vaccines.

The goal of global eradication of poliomyelitis was adopted in 1988 and since then the annual number of persons paralyzed by wild polioviruses has decreased by over 99.9%. The effort is led by the Global Polio Eradication Initiative, a public-private partnership spearheaded by national governments, WHO, Rotary International, the US Centers for Disease Control and Prevention (CDC), UNICEF and Bill and Melinda Gates Foundation (BMGF). As of 2021, the remaining endemic areas with wild poliovirus circulation are limited to Pakistan and Afghanistan. However, exportations of wild polioviruses from these endemic areas into polio-free countries have occurred in the past leading to outbreaks of poliomyelitis.

Outbreaks in polio-free countries have also occurred due to circulating vaccine-derived polioviruses (cVDPVs) which is a strain of poliovirus, genetically changed from its original strain contained in oral polio vaccine (OPV). Wild polioviruses exported from the last endemic areas as well as circulating vaccine-derived polioviruses remain a constant threat to populations and to achieving the goal of a polio-free world.

Outbreaks of poliomyelitis frequently affect the most vulnerable populations, including displaced persons and refugees. In 2013, after a period of more than 10 years, wild poliovirus was detected in the Middle East resulting in an outbreak in the conflict affected areas of Syria with

subsequent spread to Iraq. In response, countries of the Middle East conducted large scale immunization campaigns, with particular emphasis on ensuring immunization of refugee populations. In the same year, an importation of poliovirus from Somalia into refugee camps in Dadaab, Kenya, also resulted in a

polio outbreak. These events illustrate the importance of ensuring that vulnerable populations are protected from polio.

### Outbreaks of polio affect the most vulnerable populations

All children have the right to survival and good health; immunization helps fulfil these rights. National authorities and humanitarian organizations have an obligation to protect children against polio. In humanitarian emergencies, many children, and sometimes even adults, are not immunized against vaccine-preventable diseases, including polio. The populations especially vulnerable to polio outbreaks are those living in areas with poor hygiene, overcrowding and high rates of malnutrition. In addition, systems of disease surveillance and medical care may be adversely affected, leading to delays in detection of polio cases and the response to interrupt poliovirus transmission.



### **STATEMENT**

The Global Polio Eradication Initiative recommends that national authorities and other partners ensure that refugee and displaced children and populations are immunized against polio in areas where poliovirus importations are a threat and ensure that appropriate mechanisms for infectious disease surveillance are in place.

## Refugee and displaced children should be immunized against polio

### WHERE?

Polio immunization should be immediately implemented for refugee and displaced populations during humanitarian emergencies in areas with high risk of poliovirus importation or in areas with endemic poliovirus circulation. As of 2021, these areas include: Africa

(countries in West Africa, Central Africa, the East and Horn of Africa), and parts of Asia. For a more updated list of high risk areas/countries for poliovirus importation and outbreaks, please see: <https://polioeradication.org/where-we-work/polio-outbreak-countries/>

### WHO?

**All children under 5 years of age.**

Note: in the context of an active polio outbreak in the area, the age range could be expanded to include children up to age 15 years.

<http://www.polioeradication.org/Research/PolioPipeline/No9.aspx>

Immunization of adults can also be conducted as [this can boost mucosal immunity](#) and reduce the potential for virus transmission. The decision to expand the campaign to include adults should be taken in consultation with the Global Polio Eradication Initiative.

### WHAT VACCINE AND HOW MANY DOSES?

All refugee and displaced populations in the at-risk areas defined above should receive at least one dose of oral polio vaccine (OPV) regardless of previous immunization status at the earliest possible opportunity. Caregivers should also make efforts to verify the immunization status and ensure individuals are fully immunized against all vaccine-preventable diseases, including polio. In the case that documentation of immunization status is not available, at

least 3 doses <sup>1</sup> of OPV should be administered to all children under 5 years of age.

Inactivated polio vaccine (IPV) may also be administered. IPV and OPV can be co-administered.

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<sup>1</sup> Consult with the national immunization schedule for intervals between the doses.

Note: Bivalent OPV (bOPV) should be the default vaccine of use and the vaccine that should be used where there is a high risk of circulating vaccine-derived poliovirus types 1 or 3 (cVDPV1/cVDPV3) or if the population is at increased risk of an outbreak of wild poliovirus type 1 (WPV1).

As per the *Polio Eradication & Endgame Strategic Plan 2013-2018*, use of tOPV was withdrawn globally in the first half of 2016. After the date of global tOPV withdrawal, bOPV is the default vaccine of use. GPEI partners may also be contacted to check the availability and deciding the type of vaccine.



## **STRATEGIES OF POLIO VACCINE ADMINISTRATION**

Polio vaccines can be delivered by multiple approaches to refugee/displaced populations and every opportunity should be used to ensure their vaccination. Provision of polio immunization services upon arrival can be conducted alongside refugee/displaced person registration, or

if there is no registration, vaccination posts should be established at key transit and entry points. All of the above activities should be supplemented by active surveillance for acute flaccid paralysis (AFP) cases in the community, using local health workers.

**Mass immunization campaigns are a key strategy to deliver polio vaccine to vulnerable populations**

Mass immunization campaigns (also known as supplementary immunization activities – SIAs) are a key strategy to deliver OPV to a population over the span of 3-7 days with the goal of rapidly boosting population immunity. In the face of a suspected or confirmed polio outbreak or the sudden influx of vulnerable populations, campaigns should be prioritized as the most effective strategy for rapidly protecting a population. Successive campaigns, usually at 3-4 week intervals, are conducted to deliver multiple doses. In high risk settings, campaigns can be conducted at shorter intervals of 7-14 days (Short Interval Additional Dose campaigns – SIADs). Mass polio immunization campaigns are most easily conducted with

OPV, but can also be conducted with IPV when the situation warrants. Co-administration of other vaccines such as measles is also possible. The campaigns can also serve as an effective platform for enhanced disease surveillance including search for suspect polio cases (AFP). Transmission of health promotion messages, and delivery of other health interventions such as vitamin A, anti-helminthic medications (deworming), nutritional screening, and mosquito nets, are among the interventions successfully delivered during polio campaigns.

Provision of routine immunization should be established through the primary health care programmes.

## ***PERFORMANCE INDICATORS***

**Polio immunization upon arrival:** At registration centres, the daily number of children vaccinated should be checked against actual number of children registered to monitor the immunization coverage.

**Routine immunization:** Vaccination cards should be checked for and completed or supplied, if needed. Generally, coverage of at least 90% with three doses of polio vaccine should be achieved but in settings like refugees camps it is preferable to have at least 95% coverage. Reports by area/camp should be compiled and made

available to the appropriate authorities on a weekly basis.

**Mass immunization campaigns:** Using Global Polio Eradication Initiative standard guidelines for independent monitoring, the campaigns should be independently monitored and aim to have no more than 5% missed children identified in each campaign with results available within 14 days or less. A report of the campaign detailing the number of children immunized by area/camp and the number of vaccine doses used should also be compiled and made available to the appropriate authorities.



every  last  child

[www.polioeradication.org](http://www.polioeradication.org)