**REDUCING RISK OF POLIOMYELITIS OUTBREAKS IN EMERGENCIES**

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 statement is based on the “Vaccination in acute humanitarian emergencies: a framework for decision making” published by WHO in 2013. <http://apps.who.int/iris/bitstream/10665/92462/1/WHO_IVB_13.07_eng.pdf>

***Overview***

The goal of global eradication of poliomyelitis was adopted in 1988 and since then the number of paralyzed persons due to polioviruses has decreased by over 99.9%. As of 2014, the remaining endemic areas with wild poliovirus circulation are limited to Pakistan, Afghanistan, and Nigeria (for most current global polio status see www.polioeradication.org). However, exportations of wild polioviruses from these endemic areas into polio-free countries have occurred on multiple occasions, often leading to large outbreaks of poliomyelitis. Outbreaks in polio-free countries have also occurred due to circulating vaccine derived polioviruses (cVDPVs). As a result, wild polioviruses exported from the last endemic areas as well as circulating vaccine-derived polioviruses remain a constant threat to populations and 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. More recently, in 2014, two children from a Central Africa Republic refugee family that had moved to Cameroon developed poliomyelitis due to an outbreak that started in Cameroon in 2013. These events illustrate the importance of ensuring that vulnerable populations are protected from polio.

All children have the right to survival and good health; immunization helps fulfil these rights. (<http://www.ohchr.org/Documents/ProfessionalInterest/crc.pdf>). National authorities and humanitarian organizations have an obligation to protect children against polio.

In humanitarian emergencies, many children, and sometimes even the 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 disease transmission.

***Statement***

The Global Polio Eradication Initiative (GPEI) 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.

**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 2014, these areas include: Africa (countries in West Africa, Central Africa, and the Horn of Africa), the Middle East, Ukraine, Afghanistan, and Pakistan. For a more updated list of high risk areas/countries for poliovirus importation and outbreaks, please contact Polio\_info@who.int

**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 at least up to age 10 years. Immunization of adults can also be conducted as this can boost mucosal immunity and reduce the potential for transmission. The decision to expand the campaign to include adults should be taken in consultation with the Global Polio Eradication Initiative (www.polioeradication.org).

**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 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[[1]](#footnote-1) of OPV should be administered to all children under 5 years of age.

Inactivated poliovirus vaccine (IPV) may also be administered, particularly in countries where it is already included in their routine immunization schedule. IPV and OPV can be co-administered.

Note: Trivalent OPV (tOPV) should be the default vaccine of use. However, bivalent OPV (bOPV) may be recommended if the population is at increased risk of an outbreak of wild poliovirus type 1 (WPV1), circulating vaccine derived poliovirus type 1 or type 3 (cVDPV1, cVDPV3). As per the *Polio Eradication and Endgame Strategic Plan 2013-2018*, use of tOPV will be withdrawn globally, currently planned for the first half of 2016. After the date of global tOPV withdrawal, bOPV should be the default vaccine of use. GPEI partners may also be contacted to check the availability and deciding the type of vaccine.

**STRATEGIES OF POLIOVIRUS VACCINE ADMINISTRATION**

Polio vaccines can be delivered by multiple approaches to refugee/displaced populations. Provision of routine immunization services can be conducted during refugee/displaced person registration, community health worker visits, or food distribution. Vaccination posts established at key transit and entry points on a continuous basis are also effective at delivering polio vaccines to populations on the move and those who may be missed by other approaches.

Mass immunization campaigns (also known as supplementary immunization activities – SIAs) are a 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 suspect 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 3-7 days (Short Interval Additional Dose – 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 suspect polio cases (Acute Flaccid Paralysis 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.

**PERFORMANCE INDICATORS**

Routine immunization: Vaccination cards should be checked for and completed or supplied if needed. Coverage of at least 90% with three doses of polio vaccine should be achieved. Reports by area/camp should be compiled and made available to the appropriate authorities on a weekly basis.

Mass immunization campaigns: Using GPEI standard guidelines for independent monitoring, the campaigns should be independently monitored and aim to have no more than 5% missed children identified each campaign round 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.

1. Consult with the national immunization schedule for intervals between the doses. [↑](#footnote-ref-1)