

**Technical Instructions for Poliovirus  
Screening and Treatment among  
Refugees Resettling to the United States  
from Kenya**

**May 6, 2009**



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## Preface

The medical screening of persons overseas applying for U.S. immigration status and non-immigrants who are required to have an overseas medical examination, hereafter referred to as applicants, is an essential component of the immigration process. The current wild poliovirus (WPV) outbreak in Kenya represents an opportunity to introduce WPV into the United States, a country that has eradicated WPV.

The instructions in this document are to be followed for WPV screening, treatment, and prevention among refugees being resettled to the United States from Kenya. These Technical Instructions are effective from the date of issuance until resolution of the outbreak as determined by CDC. Discontinuation of these instructions will be communicated to the Department of State, International Organization for Migration, and other relevant agencies by CDC.

For inquiries about these Technical Instructions, please contact the Immigrant, Refugee, and Migrant Health Branch, DGMQ at [cdcqap@cdc.gov](mailto:cdcqap@cdc.gov). Further information and updates on these Poliovirus Technical Instructions are available at [www.cdc.gov/ncidod/dq/panel.htm](http://www.cdc.gov/ncidod/dq/panel.htm).

## Background

Poliomyelitis is caused by wild poliovirus (WPV) type 1, 2, or 3. WPV type 2 transmission was last reported in 1999. Poliovirus causes oropharyngeal and gastrointestinal infection and 95% of infections remain asymptomatic. Symptoms of infection may include fever, headache, vomiting, and muscle pain. Infection may spread to the nervous system and cause acute flaccid paralysis in <1% of cases. WPV is transmitted via oral contact with feces-contaminated objects or skin. WPV has an incubation period typically 7-14 days but can be up to 35 days. Persons infected with WPV may transmit the disease for up to 6 weeks after exposure. While much progress has been made to eradicate WPV, the virus is indigenous in Afghanistan, India, Nigeria, and Pakistan; persistent transmission has been reestablished in Angola, Chad, and Sudan following importation of WPV from these countries. Until the disease is eliminated in these countries, importations of WPV will occur into countries with interrupted transmission and if the populations are susceptible, there is a risk of sustaining transmission of WPV.

The United States is currently resettling a large group of refugees from camps situated in Kenya. During fiscal year 2009, the United States aims to resettle more than 4,000 refugees from the Dadaab refugee camps, Kakuma refugee camps and urban locations near those camps and in Nairobi, Kenya. The International Organization for Migration (IOM) is a member-state organization contracted by the Department of State to perform the required medical examination of these refugees and manage logistical aspects of their resettlement.

During the past few years, Kenya has been at risk of importation of wild poliovirus (WPV) from neighboring countries and has had intensive surveillance for cases of acute flaccid paralysis (AFP). Refugee populations in Kenya were affected by WPV in 2006 ([http://www.cdc.gov/ncidod/dq/refugee/response/polio\\_kenya.htm](http://www.cdc.gov/ncidod/dq/refugee/response/polio_kenya.htm)). Recently, 11 cases of WPV Type 1 have been identified in the Turkana region of Kenya, where Kakuma refugee camps are located. One case-patient visited Kakuma town close to the onset of illness; that child's father lives in the Kakuma camps. Because of the proximity of the cases to the Kakuma camps, interactions between Kakuma refugees and Kakuma townspeople are common and the risk of transmission within the Kakuma refugee camps is high. The risk to other refugee populations within Kenya is also high because of interactions of refugees with persons outside the refugee camps and in urban areas in Nairobi and elsewhere in Kenya. This risk was made apparent by the 2006 poliovirus outbreak that occurred in the Kenya camps of Dadaab. In response, the International Rescue Committee, a non-governmental organization providing medical care to refugees in Kakuma, has recently carried out three vaccination campaigns. A World Health Organization (WHO) team has traveled to the region and is investigating the cases and assessing control measures throughout the region.

Poliovirus is a Quarantinable Disease, per Executive Order. Refugees coming from an outbreak area who are infected do have the potential to transmit the disease to others, either on conveyances during a trip to the United States or after arrival to the United States. For this reason, these Technical Instructions are being issued to prevent importation of WPV into the United States. These Technical Instructions supersede all previous recommendations regarding poliovirus made to IOM for managing the resettlement of refugees from Kenya.

## Poliovirus Screening

IOM physicians should medically screen for poliovirus among refugees from Kenya.

Refugees suspected of having acute flaccid paralysis should undergo laboratory testing.

Refugees in the Kenya camps should be screened for poliovirus.

Description of each component of the examination (Figure 1):

### Medical History

- The medical history should focus on signs and symptoms suggestive of acute flaccid paralysis.
- Physicians should inquire about previous diagnostic evaluation and treatment, contact with person who has/had the disease or persons with newly acquired (acute) flaccid paralysis, and other relevant information (e.g., travel history).

### Physical Examination

- Pertinent elements of the physical examination should include temperature, pulse, respiratory rate, and weight.

### Laboratory Testing

Refugees suspected of having poliovirus infection based on report of symptoms or physical examination findings consistent with acute flaccid paralysis within the last 14 days should have two stool samples obtained,  $\geq 24$  hours apart, for laboratory confirmation of WPV at an accredited laboratory performing WPV testing per standards of care in Kenya. If the person is suspected of having poliovirus infection based on report of symptoms or physical examination findings or history consistent with acute flaccid paralysis with onset more than 14 days but less than 6 weeks previously, one stool sample should be obtained for laboratory testing.

IOM should notify Dr. Rachel Eidex ([REidex@ke.cdc.gov](mailto:REidex@ke.cdc.gov)) of any laboratory confirmed cases of WPV.

## Poliovirus Vaccination

**U.S.-bound refugees in the Kenya should be vaccinated against poliovirus.**

As part of the medical clearance, refugees in Kenya should be vaccinated against poliovirus using monovalent type 1 oral poliovirus vaccine (mOPV1) according to the following schedule:

- Administer the first dose of mOPV1 at the time of the medical exam.

All refugees should receive this vaccination schedule anytime after birth except:

- Refugees with documentation of having previously received four doses of oral polio virus vaccine (OPV) or IPV.
- Refugees with documentation of having received <4 doses of OPV or IPV will need to receive one dose of mOPV1.
- Pregnant women and refugees with HIV infection

Information regarding contraindications for vaccinations and general vaccination instructions for panel physicians for applicants for U.S. immigration can be found at [http://www.cdc.gov/ncidod/dq/panel\\_vaccine\\_2007.htm](http://www.cdc.gov/ncidod/dq/panel_vaccine_2007.htm).

Vaccinations should be documented on the DS 3025 (Vaccination Documentation Worksheet).

Refugees who have received one dose of mOPV1 will have fulfilled the poliovirus vaccine requirements of their medical examination.

## Poliovirus Screening Results and Travel Clearance

**Refugees with signs and symptoms suggestive of poliovirus  
cannot travel to the United States.**

Applicants warranting laboratory testing for WPV cannot travel until a negative test result returns and they have completed the poliovirus vaccination requirements in these Technical Instructions.

## Poliovirus Treatment

**Refugees diagnosed with poliovirus should be referred to a local medical facility for further evaluation.**

After referral to a local medical facility, those physicians will manage the refugee's poliovirus infection.



## Contacts of Poliovirus Cases

**Contacts of poliovirus cases should be evaluated for poliovirus.**

U.S.-bound refugees who had contact with someone diagnosed with laboratory confirmed WPV and whose contact was during the time at which the case was likely shedding WPV should be evaluated for poliovirus. The Kenyan Ministry of Public Health and Sanitation should be notified of contacts with signs and symptoms suggestive of poliovirus infection. Contacts should provide stool specimens for laboratory confirmation of WPV at an accredited laboratory performing WPV testing per standards of care in Kenya.

## Poliovirus Classification

Refugees diagnosed with poliovirus are Class A for poliovirus until 6 weeks after onset of symptoms.

### Definition of classifications

#### **Class A Poliovirus**

- Refugees diagnosed with WPV are Class A for poliovirus until 6 weeks after onset of symptoms.

#### **No Classification**

- Refugees not diagnosed with WPV.
- Refugees diagnosed with poliovirus and 6 weeks have elapsed since onset of symptoms.

## Documentation

**Refugees who are Class A for poliovirus must have that classification documented on the Department of State forms (DS-2053).**

**Refugees diagnosed with WPV should have pertinent laboratory test results and treatment information documented on the remarks section of the DS-2053 form.**

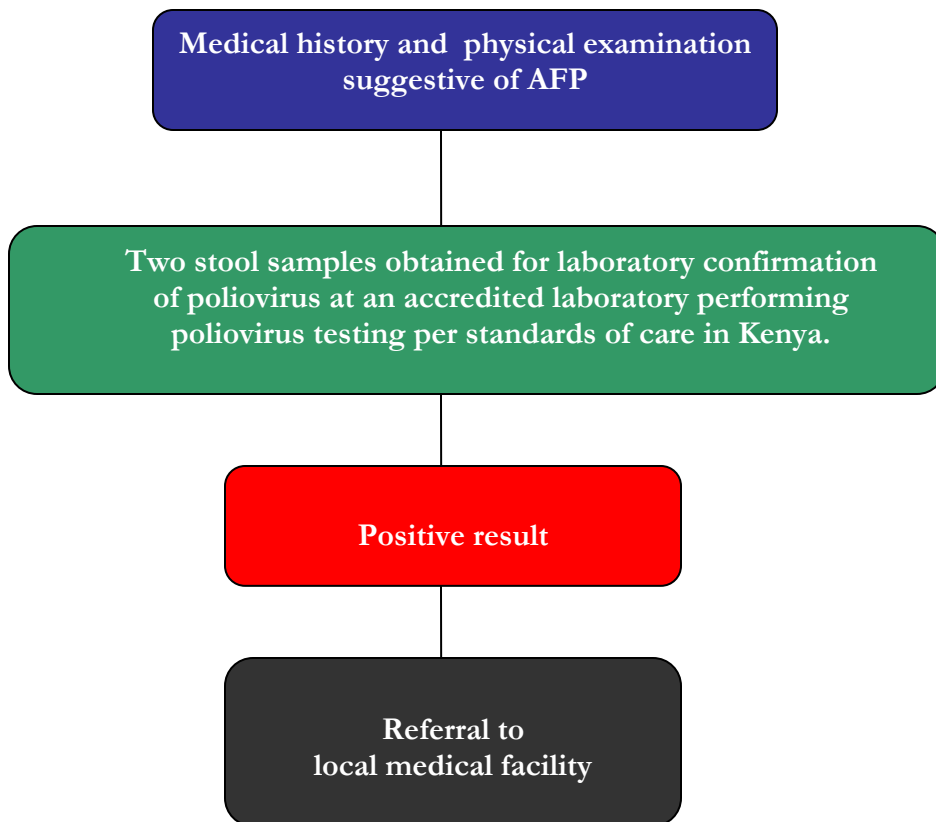
Refugees who are Class A for poliovirus must have that classification documented on the Department of State forms (DS-2053). Poliovirus can be written in anywhere in the remarks field under Class B Other (but do not mark Class B Other). Once 6 weeks have elapsed since the onset of symptoms (and the refugee is No Classification for poliovirus), results of the stool tests and treatment, if given, must be documented on the same remarks section of the DS-2053 and include the following information:

- Name of test
- Date(s) of test(s): month, day, and year, as numbers corresponding to mm/dd/yyyy
- Result(s) of test(s)
- If treated, therapy given and doses, date(s) of therapy

The medical history and findings of the physical examination must be recorded on the DS-3026 form (Medical History and Physical Examination Worksheet).

Incomplete documentation may result in refusal to grant a visa or result in a medical hold status upon arrival at the U.S. port of entry. Therefore, it is essential that IOM thoroughly complete the DS forms.

**Figure 1: Poliovirus screening medical examination**



## **APPENDIX A: GLOSSARY OF ABBREVIATIONS**

CDC	Centers for Disease Control and Prevention
DGMQ	Division of Global Migration and Quarantine
DS	Department of State
mOPV1	Monovalent oral poliovirus vaccine to type 1
HHS	Department of Health and Human Services
IOM	International Organization for Migration
IPV	Inactivated poliovirus vaccine
OPV	Oral poliovirus vaccine
WPV	Wild poliovirus

## APPENDIX B: PRE-DEPARTURE EVALUATION

Additional screening immediately prior to departure (pre-departure evaluation) may be required in order to further detect persons with poliovirus infection and prevent importation of WPV into the United States.

When applied, pre-departure evaluations serve as an additional measure to prevent importation of WPV into the United States.

If the need arises, CDC will inform the Department of State and IOM to implement pre-departure evaluations.

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