To: Miami-Dade County Infection Control Professionals, Emergency Room Physicians and Nurses, and Healthcare Practitioners

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HEALTH ADVISORY: Suspect Case of Cholera in Miami-Dade County

Yesterday a traveler returning from Haiti was complaining of gastrointestinal symptoms, and due to this reason was referred to a local health facility where was diagnosed as a suspect case of cholera disease. As you know, an outbreak of cholera was recently confirmed in Haiti. Cholera had not been documented in Haiti for decades and therefore this disease was considered unlikely in Haiti following the earthquake which occurred in January 2010. Due to the proximity of South Florida to the Caribbean, Miami-Dade County has had a large volume of persons traveling to and from Haiti since the earthquake. This includes both local Haitian residents that have visited their families in Haiti and also relief workers that travel to and from Haiti via Miami.

Cholera is an acute enteric disease caused by infection with the toxigenic bacterium *Vibrio cholerae* O-group 1 or O-group 139. The incubation period ranges from a few hours to 5 days (usually 2-3 days). The infection is often mild or asymptomatic, but can sometimes be severe. With severe illness, rapid loss of body fluids can lead to dehydration and shock and without treatment, death can occur within hours.

**Symptoms of severe illness** may include:
- Sudden onset of profuse watery diarrhea (described as “rice-water stools”)
- Vomiting
- Leg cramps
- Tachycardia
- Loss of skin turgor
- Dry mucous membranes
- Hypotension
- Thirst

A person can get cholera by drinking water or eating food contaminated with the cholera bacterium. In an outbreak, the source of contamination is usually the feces of an infected person that contaminates water and/or food. The disease is not likely to spread directly from one
person to another; therefore, casual contact with an infected person is not a risk for becoming ill. Prevention measures include ensuring the safety of food and drinking water, practicing appropriate disposal of feces, and implementing proper hand washing procedures.

There are two oral vaccines available to prevent cholera; however, the Centers for Disease Control and Prevention (CDC) does not recommend cholera vaccines for most travelers, nor is the vaccine available in the United States. This is because the available vaccines offer incomplete protection for a relatively short period of time.

**Laboratory diagnosis**

Cholera is confirmed through culture from stool or rectal swabs transported in Cary Blair medium at ambient to cool temperatures (NOT frozen). Rapid tests are commercially available but do not yield an isolate for antimicrobial susceptibility testing or subtyping. Rapid tests should not be used for routine diagnosis.

Submission of isolates for confirmation of cholera must be approved by the Miami-Dade County Health Department, Epidemiology, Disease Control and Immunization Services (EDC-IS) before sending to the Florida Department of Health Bureau of Laboratories- Miami Branch.

**Treatment**

Administer Oral Rehydration Salts (ORS) and when necessary intravenous fluids and electrolytes, in a timely manner and in adequate volumes. This will reduce case–fatality rates to <1%. Antibiotic therapy will reduce fluid requirements and duration of illness and is indicated for severe cases. If possible, use antimicrobial susceptibility testing to inform treatment choices (special considerations for doxycycline and erythromycin testing, see: http://www.who.int/drugresistance/publications/WHO_CDS_CSR_RMD_2003_6/en/)

**Reporting**

Cholera must be reported immediately upon initial suspicion or laboratory test order, 24/7 by phone to the EDC-IS at 305-470-5660.

As an important partner in our surveillance and prevention efforts, we ask that you inquire about recent travel to Haiti in patients presenting with diarrheal symptoms

Please feel free to contact EDC-IS 24/7 if you have any questions.

**Additional resources**