

Epidemiological Alert Resurgence of cholera in Haiti

2 October 2022

After more than 3 years with no cases of cholera reported in Haiti, on 2 October 2022, the national authorities reported two confirmed cases of *Vibrio cholerae* O1 in the greater Portau-Prince area. In addition, as of 2 October 2022, clusters of suspected cases and deaths are under investigation in various communes of Ouest Department, including the communes of Cité Soleil and Port-au-Prince. The Pan American Health Organization / World Health Organization (PAHO/WHO) recommends that Member States strengthen their surveillance systems for the timely detection of cholera cases and for outbreaks of acute diarrheal disease, and to update their preparedness and response plans. In addition, PAHO/WHO reiterates to Member States to continue their efforts and reinforce actions to improve water and sanitation quality and conditions.

Situation summary

Between October 2010 and February 2019, over 820,000 cases of cholera, including nearly 10,000 deaths, were reported in Haiti. Since then, the Haiti Ministry of Public Health and Population (MSPP, per its acronym in French) has ensured the monitoring of the epidemiological situation, including laboratory surveillance by the National Public health laboratory (LNSP, per its acronym in French). During this period, all suspected cases of cholera detected through the national epidemiological surveillance system were discarded following laboratory testing.

During epidemiological week (EW) 39 of 2022, healthcare facilities located in some sectors of the communes of Port-au-Prince and Cité Soleil reported an increase in cases of severe acute diarrhea among hospitalized patients, including both children and adults. As of 2 October 2022, more than 20 suspected cases of cholera, including 7 deaths, from these areas were detected by healthcare personnel. On 2 October 2022, two cases were confirmed as *Vibrio cholerae* O1 among the samples tested by the LNSP. Toxigenicity and genomics testing are pending.

As gang violence continues affecting Port-au-Prince and other cities, access to the affected areas is difficult; therefore, the timely assessment of the epidemiological situation is complex. Additionally, the shipment of biological samples from healthcare facilities to reference laboratories may be affected by fuel shortages.

In the context of the security crisis, the population of these areas may have very limited access to safe water and health services. These factors will impact the dynamics of the cholera resurgence and the severity of the disease in patients with acute diarrhea.

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The Pan American Health Organization / World Health Organization (PAHO / WHO) is working in coordination with the Haitian public health authorities to characterize this event and support the response.

Guidance for national authorities

Given the re-emergence of cholera in Haiti, PAHO/WHO recommends that Member States strengthen and maintain surveillance for cholera for the early detection of suspected cases and to provide adequate treatment to prevent its spread. Early and adequate treatment limits the case-fatality rate (CFR) of hospitalized patients to less than 1%.

PAHO/WHO encourages Member States to continue their efforts to ensure adequate basic sanitation conditions and access to drinking water, in addition to safe hygiene promotion and social mobilization, in order to reduce the impact of cholera and other waterborne diseases.

PAHO/WHO reiterates the following recommendations:

Surveillance

Under the International Health Regulations (IHR (2005)), public health events that involve the risk of cholera cases should be evaluated using the IHR Annex 2, and the WHO IHR Regional Contact Point should be notified accordingly.

Surveillance for cholera should be part of an integrated surveillance system within a country and should include timely feedback of information at local and global levels. It is recommended to use the WHO standardized case definition¹ to obtain a more precise estimation of the cholera burden at the global level in order to define more sustainable support strategies.

In countries where no cholera cases have been reported, the following is recommended:

- Monitor the trend of acute diarrhea diseases with an emphasis on adults.
- Immediate notification of all suspected cases from the local to the central and peripheral levels.
- Investigation of all suspected cases and clusters.
- Laboratory confirmation of all suspected cases.

In an outbreak situation the following measures are recommended:

- Intensified surveillance with the inclusion of active case finding.
- Laboratory confirmation to monitor the geographic spread and resistance patterns.
- Weekly analysis of the number of cases and deaths by age, sex, geographical location, and hospital admission.

¹ Suspected case in an **unaffected** health country/region: any patient aged 5 years or older who develops severe dehydration or death from acute watery diarrhea.

Suspected case in **affected** country/health region: any patient aged 5 years or older who develops acute watery diarrhea with or without vomiting.

Laboratory diagnostics

The diagnosis of cholera is established by the isolation of V. *cholerae* or by serological evidence of recent infection. It is important that public health laboratories in the Region are prepared to identify the two serotypes, Ogawa and Inaba.

Treatment

Cholera is a disease that responds satisfactorily to medical treatment. The first treatment goal is to replace fluids that have been lost by diarrhea and vomiting. Up to 80% of cases can be treated through early administration of oral rehydration salts (WHO/UNICEF oral rehydration salts standard sachet).

It is recommended to administer liquids intravenously to patients that have lost more than 10-20 ml/kg/h or patients with severe dehydration. Following the replacement of the initial liquid lost, the best guide for fluid therapy is to record losses and gains in fluids and to adjust administration as appropriate.

The administration of appropriate antibiotics, especially in severe cases, shortens the duration of diarrhea, reduces the volume of hydration fluids necessary, and shortens the time V. cholerae is excreted.

The massive administration of antibiotics is not recommended because it has no effect on the spread of cholera and contributes to the production of bacterial resistance. With appropriate treatment the fatality rate is less than 1%.

In order to provide timely access to treatment, cholera treatment centers should be established in affected populations. These centers should be located at strategic points to maximize the number of affected individuals that can be treated outside of a hospital setting and based on management protocols defined by and agreed to by all parties.

Response plans must provide for coordination between treatment centers, healthcare centers, and levels of care in the communities in which they are located and should include the dissemination of proper hygiene practices and public health measures.

Prevention measures

Prevention in the healthcare environment

The following recommendations are aimed at reducing the transmission of fecal-oral cholera infection in the healthcare environment:

- Hand washing with soap and water or glycerine alcohol before and after contact with the patient.
- Use of gloves and gowns for close contact with the patient and for contact with excretions or secretions.
- Isolation of patients in a single or cohort room.
- Separation between beds of more than one meter.

- Cleaning of waste and organic matter with sodium hypochlorite (bleach or bleach) dilution (1:10).
- Cleaning the environment with sodium hypochlorite (bleach or bleach) dilution (1:100).
- People who care for children who use diapers and incontinent people should strictly follow the same precautions mentioned above, especially regarding hand hygiene (after changing the diaper and after contact with excreta). Frequent removal of dirty diapers is also recommended.

Preparedness and response

The implementation of prevention activities in the medium and long term is the key in the fight against cholera. Generally, the response to cholera outbreaks tends to be reactive and take the shape of an emergency response; this approach prevents many deaths, but not cholera cases themselves.

A coordinated multidisciplinary approach, supported by a timely and effective surveillance system is recommended for prevention, preparedness, and response.

Key sectors that should be involved are:

- Health care.
- Water supply and sanitation.
- Agriculture and Fisheries.
- Education.
- Professional associations, non-governmental organizations and international partners in the country.

Water supply and sanitation

The improvement of water supply and sanitation remains the most sustainable measure to protect people against cholera and other waterborne epidemic diarrheal diseases. However, this approach may be unrealistic for those poorest populations in our region.

Cholera is usually transmitted by food or water contaminated with feces. Sporadic outbreaks can occur anywhere in the world where water supply, sanitation, food safety, and hygiene are inadequate.

Travel and international trade

Experience has shown that measures such as quarantine to limit movement of people and the seizure of goods are unnecessary and ineffective in controlling the spread of cholera. Therefore, restricting the movement of people or imposing restrictions on imported food produced by good manufacturing practices, based solely on the fact that there is a cholera epidemic or endemic in a country, is not justified.

Routine monitoring or restrictions on the movement of people, including quarantine or cordon sanitaire measures, have not been shown to be effective in controlling cholera and are therefore considered unnecessary. WHO advises against the application of routine

checks or any other restrictions on movements, such as the quarantine of travelers coming from areas with a cholera outbreak. Any health measures on arrival or departure, or related to the entry of travelers, must be applied in accordance with the provisions of the IHR (2005).

The risk of infection for international travelers is very low for most travelers, even in countries where cholera outbreaks are active, as long as proper preventive measures are followed. Humanitarian workers may be at risk if they are likely to be directly exposed to cholera patients or to contaminated food or water, especially those staying in areas with poor access to healthcare facilities.

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