



Epidemiological Alert: Update on the Cholera situation in Haiti and the Dominican Republic

(Published on 22 June 2011)

The objective of this alert is to provide an update of the epidemiological situation of cholera in Haiti and the Dominican Republic, including the actions implemented by both countries in response to the situation. Also included are the Pan American Health Organization (PAHO) recommendations to Member States related to this theme.

The information presented was provided by the Haitian Ministry of Public Health and Population (MSPP) and by the Dominican Republic's Ministry of Health, respectively.

Haiti

Since the beginning of the cholera outbreak, starting epidemiological week (EW) 42¹ in 2010, until 12 June 2011 (EW 23), the MSPP registered a total of 344,623 cholera cases of which 53.1% (182,947) required hospitalization² and 5,397 died (1.6% global case-fatality rate).

According to the MSPP's surveillance system, since EW 19 an increase in the number of new cases and new hospitalizations has been observed in Port-au-Prince and in the Centre and Sud Est departments.

In EW 22 and 23, five other departments (Arbonite, Grand Anse, Nippes, Nord and Nord Ouest) experienced an increase in the number of new cholera cases and new hospitalizations. This current increase coincides with the start of the rainy season in Haiti.

Summary

Haiti

The Haitian Ministry of Public Health and Population (MSPP) case surveillance system reported that as of EW 19 there was an increase in the number of new cholera cases and new hospitalizations in Port-au-Prince and in the Centre and Sud Est departments. For EW 22 and 23, five other departments (Arbonite, Grand Anse, Nippes, Nord and Nord Ouest) experienced an increase in the number of new cases and new hospitalizations. This increase coincides with the start of the rainy season in Haiti.

Dominican Republic

The Ministry of Public Health reported that since the beginning of the outbreak up to EW 23 of 2011 there were 1,727 confirmed cases (191 in 2010 and 1,536 in 2011), including 46 deaths.

The municipalities of Santa Domingo Este and Oeste, Distrito Nacional, San Pedro de Macoris, Santiago and San Cristóbal registered the highest rates of cholera transmission in the past two weeks.

¹ On October 20, 2010 laboratory results confirmed the first cases of cholera (*V. cholerae* O: 1 serotype Ogawa) in patients hospitalized in the Arbitone department.

² A case of cholera is defined as a patient with profuse, acute, watery diarrhea, in a resident of a department in which at least one laboratory confirmed case of cholera exists. Hospitalized cases are when a patient is admitted to a health establishment (either a hospital or cholera treatment site) for at least one night. A death attributed to cholera is the death of a person which satisfies the definition of a cholera case. Any death due to cholera which occurs in a health establishment, regardless of the whether the patient was admitted during the night or in the morning, is considered a hospital death due to cholera.

Dominican Republic

Since the beginning of the outbreak up to EW 23 of 2011, the Dominican Republic's Ministry of Health reported laboratory confirmation of 1,727 cholera cases, including 46 deaths, out of a total of 5,367 suspected cholera cases registered by the national epidemiological surveillance system. In EW 23, 11 deaths were reported, three of which were laboratory confirmed. To date, the attack rate is less than 0.01%, which means that this is considered a low intensity epidemic, despite the observed increase in the past weeks, in marginal urban areas.

In the last two weeks the transmission was confirmed in 21 provinces and 41 municipalities. The municipalities of Santo Domingo Este and Oeste, Distrito Nacional, San Pedro de Macoris, Santiago and San Cristóbal registered the highest rates of cholera transmission. The provinces of Hermanas Mirabal and San José de Ocoa did not report cases up to EW 23.

The Dominican Republic's surveillance system registered an increase in the number of suspected cholera cases beginning in EW 16-17, which coincides with the increase in temperature and the increase of rain. Because of the intense continued rainfall throughout the territory the occurrence of a national outbreak is expected.

To date, most of the outbreaks detected have been controlled through actions implemented at the regional and local levels, without exceeding their respective response capacities, and under the leadership of the central level.

Actions implemented by the health authorities

The Dominican Republic's Ministry of Health continues epidemiological research and response which includes improving the quality of water and sanitation services, in addition to activities of community education on cholera.

In addition, fast and appropriate care of patients was enhanced in health services and precautions and sanitary measures for the prevention of cholera outbreaks in vulnerable populations were maximized, especially those which are located in the area of the rivers.

Laboratory Surveillance Results

In view of the increase in the cases, the National Bureau of Epidemiology issued a national directive making a recommendation on the number of suspect case samples which should be taken in community outbreaks, so as not to overwhelm the national laboratory. This way the confirmation of cases by laboratory has the aim of surveillance and monitoring of the epidemic. Furthermore, all suspected cholera cases continue to be reported to the surveillance system and are treated under the Ministry of Health's guideline and standards of care.

The National Laboratory of Public Health of the Dominican Republic continues to analyze the water samples obtained through environmental sampling. One of the samples analyzed was positive for *Vibrio cholerae* serotype Inaba, non-toxigenic. In order to confirm this result, the strain will be sent to the Center for Disease Control and Prevention (CDC) of the United States.

Recommendations

The Pan American Health Organization (PAHO/WHO) reminds Member States of the need to strengthen methods of cholera prevention and control. In this respect, PAHO/WHO recalls that the improvement of water supply and sanitation remains the most sustainable measure to protect people against cholera and other epidemic waterborne diarrheal diseases.

Similarly, the recommendations related to the travel and the international trade are reiterated below.

Travel and international trade recommendations

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

References

1. Rapport de cas. Ministère de la Santé Publique et de la Population (MSPP). 12 juin 2011.
2. Informe del Sistema Nacional de Vigilancia Epidemiológica. Vice Ministerio de Salud Colectiva. República Dominicana.
3. Prevention and control of cholera outbreaks, WHO policy and recommendations, September 2001. Available at http://www.emro.who.int/CSR/Media/PDF/cholera_whopolicy.pdf