



Epidemiological Update

Cholera

26 October 2013

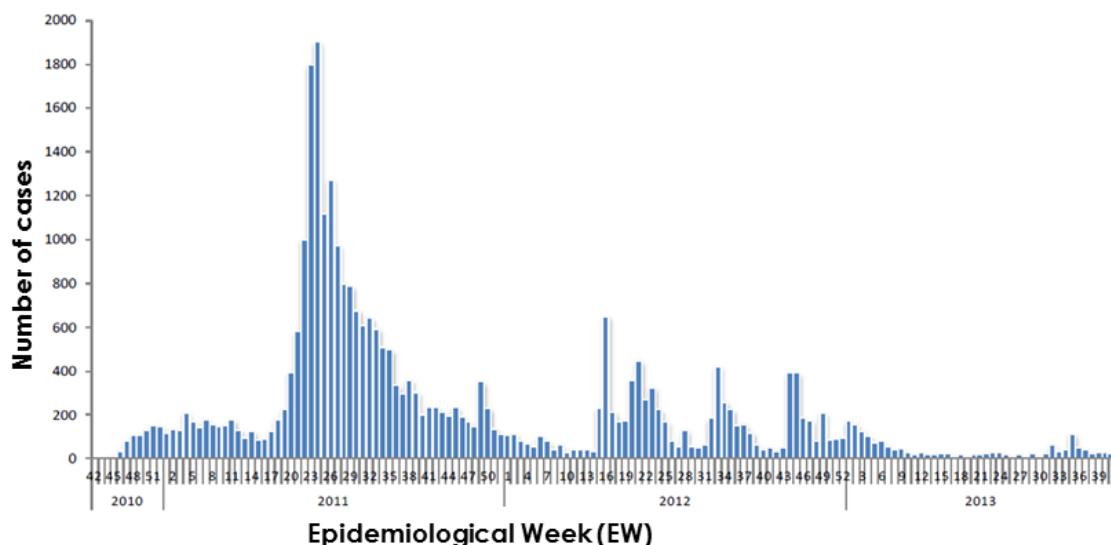
Current status of cholera in the Region

In **Cuba**, authorities continue to investigate suspected cases detected at the level of various provinces. Based on the information reported on 23 August 2013 from the International Health Regulations (IHR) National Focal Point, between epidemiological week (EW) 27 of 2012 to EW 34 of 2013, there have been 678 confirmed cholera cases, including three deaths.

In the **Dominican Republic**, since the beginning of the epidemic (November 2010) through EW 41 of 2013, a total of 31,090 suspected cholera cases have been registered, including 458 deaths. In EW 41, 20 suspected cholera cases were recorded with no deaths. In the last two weeks, there have been no suspected cholera cases in 17 of the country's provinces. The provinces of Puerto Plata, San Juan, Santiago and Santo Domingo account for 68% of the suspected cases registered in the last four epidemiological weeks.

As of EW 41 of 2013, there has been a decreasing trend in the number of suspected cholera cases registered; there had previously been an increase in cases and deaths recorded in two periods, first between EW 1 to EW 9 and subsequently between EW 32 and EW 40 (see Figure 1). The case-fatality rate in 2013, of 2.2%, remains higher than that of 2011, reaching 1.7%, and of 2012, with 0.8%. The health authorities are investigating and implementing corresponding response measures.

Figure 1. Cholera cases by epidemiological week (EW). Dominican Republic. EW 41 of 2010-EW 41 of 2013.



Source: Department of Epidemiology. Epidemiological Bulletin. DIGEPI. Ministry of Public Health and Social Assistance - Dominican Republic.

In **Haiti**, since the beginning of the epidemic (October 2010) to 17 October 2013, the total number of cholera cases reached 684,085, of which 380,846 were hospitalized (55.6%) and 8,361 died. The global case-fatality rate has been 1.2% since November 2011, however, with variations between 4.3%, in the department of Sud Est to 0.6%, in Port-au-Prince. Since the 19 October 2013 Epidemiological Update on cholera there have been 1,512 additional cases and 31 deaths reported; new cases are reported in all ten departments of Haiti.

In **Mexico**, from 9 September to 25 October 2013, the Mexico International Health Regulations (IHR) National Focal Point (NFP) has reported 176 confirmed cases, including one death, of infection with *Vibrio cholerae* O:1 Ogawa toxigenic. The cases were detected out of more than 7,000 samples tested.

The Mexico health authorities indicated that there have been five new cases this week, one in the state of San Luis Potosi and four in Veracruz. The five cases identified occurred in the geographic zone of la Huasteca, an area where urbanization, availability of drinking water and basic sanitation services are limited.

Of the confirmed cases, two (1.1%) are residents of the Federal District, 157 (89.2%) are from the state of Hidalgo, 9 (5.1%) are from the state of Mexico, 2 (1.1%) is from the state of San Luis Potosi and 6 (3.4%) are from the state of Veracruz. In total, 89 (50.9%) are female and 87 (49.1%) are male. Of the confirmed cases, 57 (32.5%) have been hospitalized.

The antimicrobial susceptibility testing of *V. cholerae* O:1 isolates conducted by the Institute of Epidemiological Diagnostics and Reference (InDRE) demonstrated a susceptibility to doxycycline and chloramphenicol, with reduced susceptibility to ciprofloxacin and resistance to trimethoprim/sulfamethoxazole.

This is the first local transmission of cholera recorded since the 1991-2001 cholera epidemic in Mexico. The genetic profile of the strain isolated from patients in Mexico presents high similarity (>95%) with the strain that is currently circulating in the three other countries in this Region.

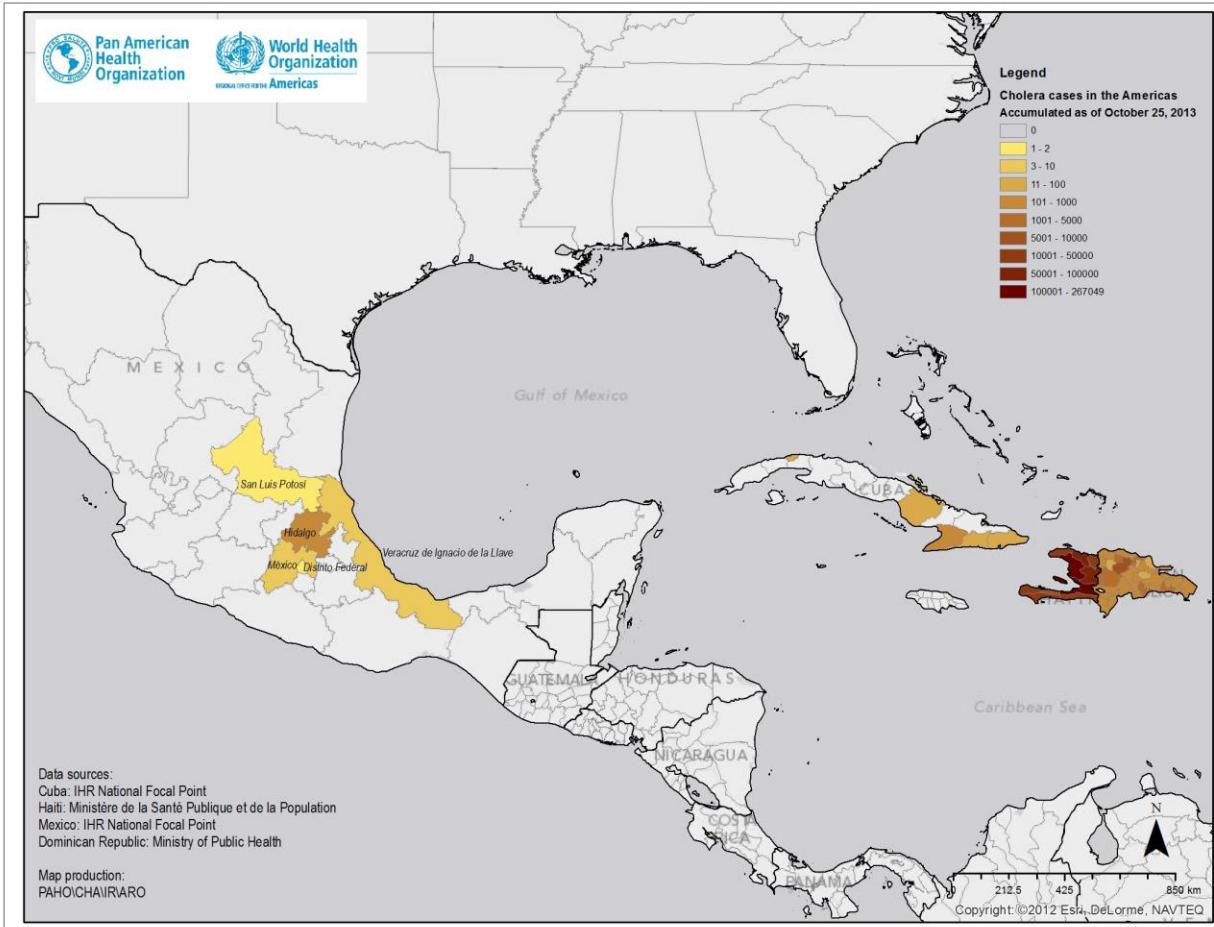
The health authorities of Mexico are continuing their epidemiological surveillance, training of human resources in the health systems and raising awareness as described in the previous updates.

Recommendations

The Pan American Health Organization (PAHO) / World Health Organization (WHO) does not recommend that any travel or trade restrictions be applied to Mexico with respect to this event.

PAHO/WHO reiterates that the recommendations of the [Epidemiological Alert](#) on cholera published on November 2, 2012 continue to be applicable.

Figure 2. Cumulative cholera cases recorded in the Region of the Americas up to 25 October 2013.



Map produced by: Pan American Health Organization. Data sources provide in the figure.

References

1. Ministry of Public Health and Population, Haiti: Rapports journaliers du MSPP sur l'évolution du cholera en Haïti. Port-au-Prince, Haïti: Ministry of Public Health and Population, Haïti; 2013. Available at: <http://mspp.gouv.ht/newsite/documentation.php>
2. The Dominican Republic Epidemiological Bulletin. Epidemiological Week 41 of 2013. Available at: http://digepisalud.gob.do/boletines/otras-publicaciones/cat_view/33-otras-publicaciones/63-boletines-semanales.html

Related links:

- Information on WHO's statement relating to international travel and trade to and from countries experiencing outbreaks of cholera:
<http://www.who.int/cholera/technical/prevention/choleratravelandtradeadvice231110.pdf>

- WHO cholera fact sheet:
<http://www.who.int/mediacentre/factsheets/fs107/en/index.html>
- PAHO cholera health topic:
<http://www.paho.org/cholera>