



Epidemiological Alert:

Weekly update on the Cholera situation

EW 52 (December 26 2010 to January 1st 2011)

(Published on 11 January 2011)

The objective of this alert is to present the current epidemiological situation of the cholera outbreak in Haiti and the Dominican Republic updated as of epidemiological week (EW) 52.

Haiti

The information that is presented in this epidemiological alert has been provided by the Ministère de la Santé Publique et de la Population (MSPP) which compiles the data obtained by the different partners of the Health Cluster.

Since the beginning of the cholera outbreak as of EW 52¹, the MSPP registered, a total of 171,304 cholera cases of which 55.5% (95,039) required hospitalization² and 2.4% die (global case-fatality rate).

New cases per week

During the EW 52, the last of 2010, there were 23,912 new registered cases, these represent an increase of 42% over those that were registered in the previous week (16,838 new cases).

At the departmental level, in the EW 52, the departments that presented the greatest number of cases were Grande Anse, (51.7 new cases per 10,000 inhabitants) and Nord Est (29.6 new cases per 10,000 inhabitants); similar to what was observed in the previous week. Meanwhile, the Ouest department, which includes Port-au-Prince, registered an incidence rate of 37.9 per 10,000 inhabitants. In the last epidemiological week of the 2010, the evolution of the epidemic presented different trends among departments. While in the northern departments, in which the first cases of cholera were registered, like in Arbonite, Centre

¹ On October 20, 2010 the first cases of cholera (*V. cholerae* O: 1 serotype Ogawa) are confirmed by via laboratory testing in patients hospitalized in the department of Artibone.

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 (a hospital or cholera treatment center) during at least one night. A death due to cholera is the death of a person with the cholera disease that satisfied the definition of cholera cases. Any death that occurs due to cholera that happens in a health establishment, even if this person is admitted at night or in the morning is considered a hospital death due to cholera.

Summary

Haiti

During this 52nd epidemiological week, there has been a decrease in the incidence rate in two departments in the north and a turn in the departments in the south.

Five departments report almost a 100% hospitalization rate and three departments have rates close to those registered in selvatic area during the epidemic of 1991 in Peru.

The national hospitalization case fatality rate remains at 2.5%.

Dominican Republic

Registered 154 cases of cholera distributed in 13 of the 31 provinces of the country; 66.9% of the cases were hospitalized.

and Nord, a decreased number in the incidence rate of new cases was observed; in the departments of Ouest, Grande Anse and Nippes, an increase was registered.

Port au Prince registered a notable turn in the reported cases for the epidemiological week 52 with 13,271 new cases in comparison to 3,846 that were registered in week 51. In general, the delay in updating the registered number of cases can explain, in part, these increases.

Hospitalizations trend

The trend of new hospitalized cases is not similar across the country. Meanwhile in Artibonite a continued decrease in the number of hospitalizations is being registered; in the departments located in the south (Nippes, Sud and Grande Anse) an increase in the number of hospitalizations was registered since the beginning of December. These departments have also registered the highest number of in hospital case-fatality rates, Nippes being the lowest with 3.4%, Sud with 3.9% and Grande Anse with 4.2%. In the later, the in hospital case-fatality rate is nearly double the national average (2.5%).

The hospitalization rate also is not uniform in the entire country. Five departments (Nord, Nord Est, Nippes, Sud, and Sud Est) registered a hospitalization rate of nearly 100%; meanwhile three other departments registered hospitalization rates that range from 54% to 76% (Grande Anse, Ouest, and Nord Ouest). Three departments reported hospitalization rates of around 38% (Artibonite, Port au Prince, Centre) which is similar to the calculated rate of 35% during the cholera epidemic in selvatic area in Peru in 1991³.

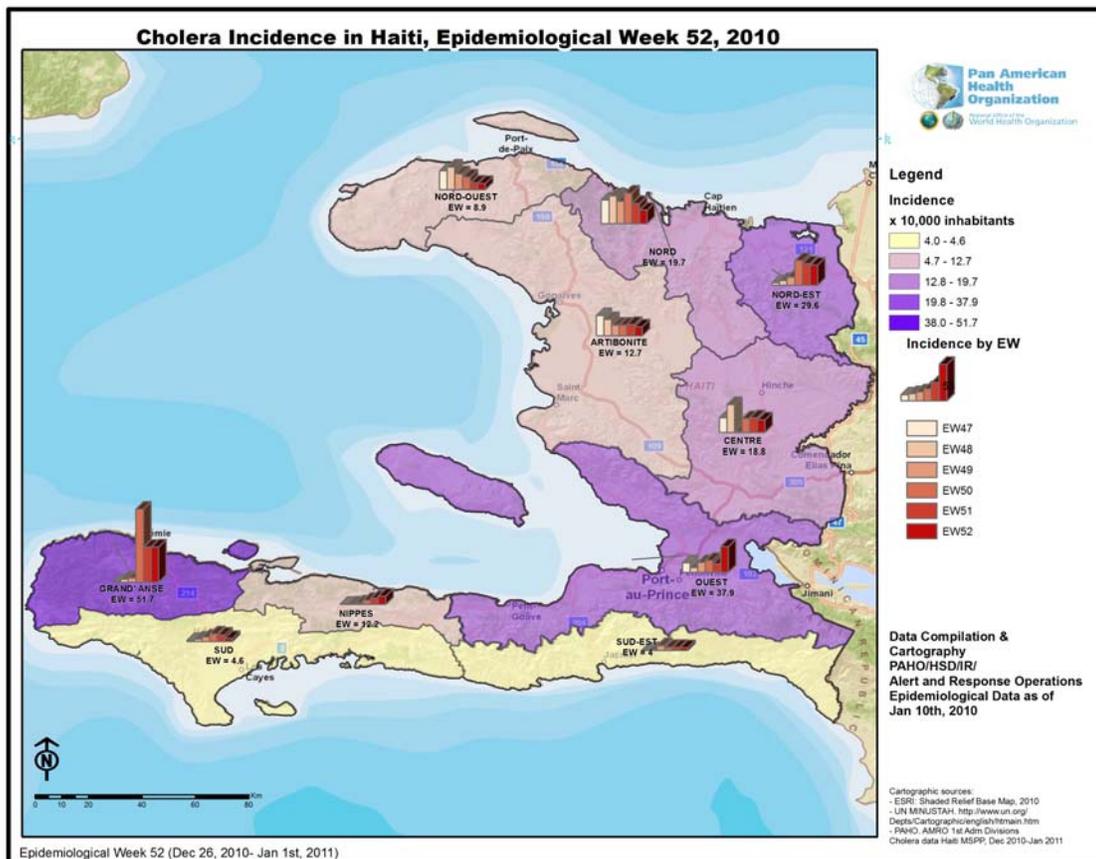
The difference in the registered hospitalization rates at the department level can be explained by the combination of various factors. Even though it is assumed that a standardized treatment protocol is being used, as well as a similar level of access to the health services in all the departments, the highest rates of hospitalization could be indicative of an initial level in the stage of the epidemic, of underreporting community cholera cases, or be considering as hospitalized cases all cases seen in a health care facility (even if they are not hospitalized for a period longer than 24 hours).

Global case fatality rate and in-hospital case fatality rate

The global case fatality rate of the cholera epidemic as of EW 52 is of 2.1% (with a range that goes from 0.9% in Port-au-Prince, to 13.1% in the department of Sud Est).

The trend of hospitalization case fatality rate has decreased from 4.4% in EW 42 to 2.1% in EW 52.

³ Data reported by the Epidemiological Department of the Ministry of Health of Peru, in March 1992.



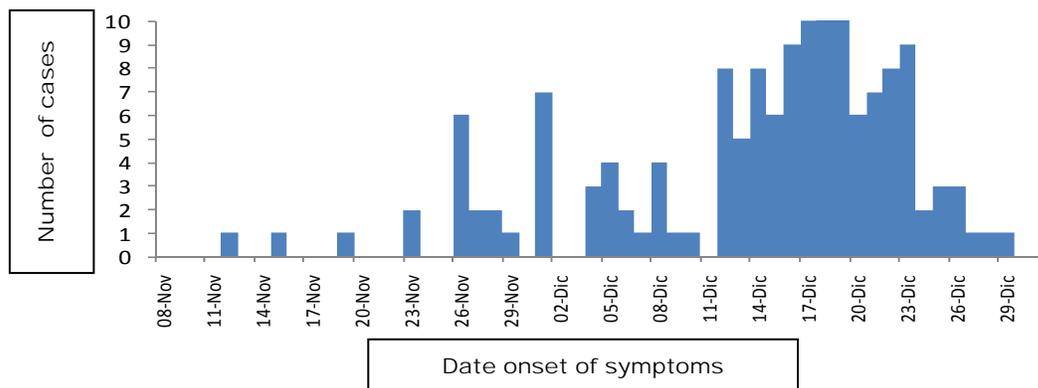
Dominican Republic

The Ministry of Public Health reported that as of EW 52, the total number of laboratory confirmed cholera cases raised to 154 of which 103 (66.9%) have been hospitalized. Of the cases, 70% are men and 78% are of 15 years or older.

The cases were detected through the active search of cases nationwide. During the following weeks, there are plans to intensify the surveillance activities in the provinces that still have not registered any cases.

Republic Dominic is divided into 31 provinces and the National distric, cases of cholera and hospitalizations are registered in 13 provinces, with most of the cases in four of them located in the western part of the country. The provinces that notified of cases are Elías Piña, San Juan, Santiago, Santo Domingo, Azua, Dajabón, Independencia, Valverde, Baoruco, La Altagracia, María Trinidad Sánchez, San Cristóbal and Monte Cristi. The province of Elías Piña has notified up to this moment the highest incidence rate with an accumulated 37 cases per 100,000 inhabitants. So far, there is no death due to cholera registered in the country.

Confirmed cholera cases by date and the onset of symptoms. Dominican Republic. November – December 2010.



Source: Ministry of Health of the Dominican Republic

In December, two sources of water have been identified as being contaminated, the Artibonito river of Guaroa of the Banica municipality and Noria of Pinzon of the Comendador municipality. The competent authorities have taken the necessary actions to deal with this issue.

Epidemiological studies continue the active search for cases among contacts and relatives. This activity will be extending to surrounding areas or municipalities with suspected cases were reported. Environmental intervention efforts and sanitation activities are enhanced in transmission areas by forming advocacy community forums to search joint solutions between local authorities and communities.

Note:

The daily updates with respect to the number of cases, hospitalizations and fatalities due to cholera are published through the Interactive Cholera Map which can be found through the following link:

http://new.paho.org/hq/images/Atlas_IHR/CholeraHispaniola/atlas.html

The report concerning the actions taken by the Health Assistance Group, at the national and department level can be found through the following link:

http://new.paho.org/hq/index.php?option=com_content&task=view&id=4404&Itemid=3487