

Epidemiological Alert

Diphtheria16 December 2016

Diphtheria in the Americas - Summary of the situation

- In 2015, five countries reported cases of diphtheria: Brazil (12 cases), Canada (3 cases), Guatemala (1 case), Haiti (32 cases), and the Dominican Republic (1 case).
- Between epidemiological week (EW) 1 to EW 47 of 2016, three countries in the Americas had reported cases of diphtheria: the Dominican Republic, Haiti, and the Bolivarian Republic of Venezuela.

In the **Dominican Republic**, in EW 43, two children under three years of age, both residents of Santo Domingo,¹ presented the onset of symptoms of diphtheria. One of them died. In samples of both cases, Gram-positive bacilli compatible with *C. diptheriae* were isolated. There were no additional cases. The vaccination status for the deceased child is unknown and the second case only had a dose.

In **Haiti**, up to EW 48 of 2016, a total of 76 probable diphtheria cases were notified, including 16 deaths. Among the cases, 72 samples were obtained, 33 of which resulted positive to Corynebacterium diptheriae.

The cases were reported in all ten departments of Haiti; however, almost half of them were concentrated in the departments of Artibonite, Centre, and Ouest.

With respect to the characteristics of the cases, the majority (38%) was between 5 and 10 years of age and there were no differences by sex. For 66% of the cases, their vaccination status was unknown or they were not vaccinated.

In the **Bolivarian Republic of Venezuela**, suspected cases and/or probable diphtheria cases have been reported between September 2016 and 24 November 2016.

Out of a total of 183 samples processed by the "Rafael Rangel" National Hygiene Institute, 20 were positive (isolation of toxin-producing C. diphtheriae or by PCR).

The 20 positive cases were reported in six states, with the state of Bolivar reporting the largest number of cases (60 %), followed by the state of Monagas (20%).

Among the confirmed cases, 5 are deceased (3 of Bolivar state and 2 of Monagas).

¹ One of the children resided in Haiti two months prior the beginning of symptoms.

Guidelines for the Member States

The Pan American Health Organization / World Health Organization (PAHO/WHO) urges Member States to continue their efforts to ensure high rates of vaccination coverage, using strategies allowing them to reach the appropriate levels in all their territorial entities.

PAHO/WHO also recommends that Member States strengthen their surveillance systems for the early detection of suspected cases, in order to initiate timely treatment, including of contacts, and ensuring the provision of diphtheria antitoxin.

References:

- 1. PAHO/WHO. 2016. Number of Vaccine Preventable Disease (VPD) cases in the Americas. Available at:
 - http://ais.paho.org/phip/viz/im_vaccinepreventablediseases.asp