
Diphtheria in the Americas - Summary of the situation

Between epidemiological week (EW) 1 and EW 18 of 2018, three countries in the Region of the Americas —Colombia, Haiti, and the Bolivarian Republic of Venezuela—have reported confirmed diphtheria cases; while in 2017, four countries in the Region—Brazil, the Dominican Republic, Haiti, and Venezuela—had reported confirmed diphtheria cases.

The following is a summary of the situation in each country with reported confirmed cases in 2018.

In **Colombia**, 2 confirmed cases of diphtheria imported from Venezuelan citizens were reported in 2018. The cases are a 3-year-old and a 14-year-old, both without history of vaccination, with onset of symptoms on 2 January and 23 March, respectively. The 2 cases were reported by the La Guajira Department and were confirmed based on clinical, epidemiological, and laboratory criteria.

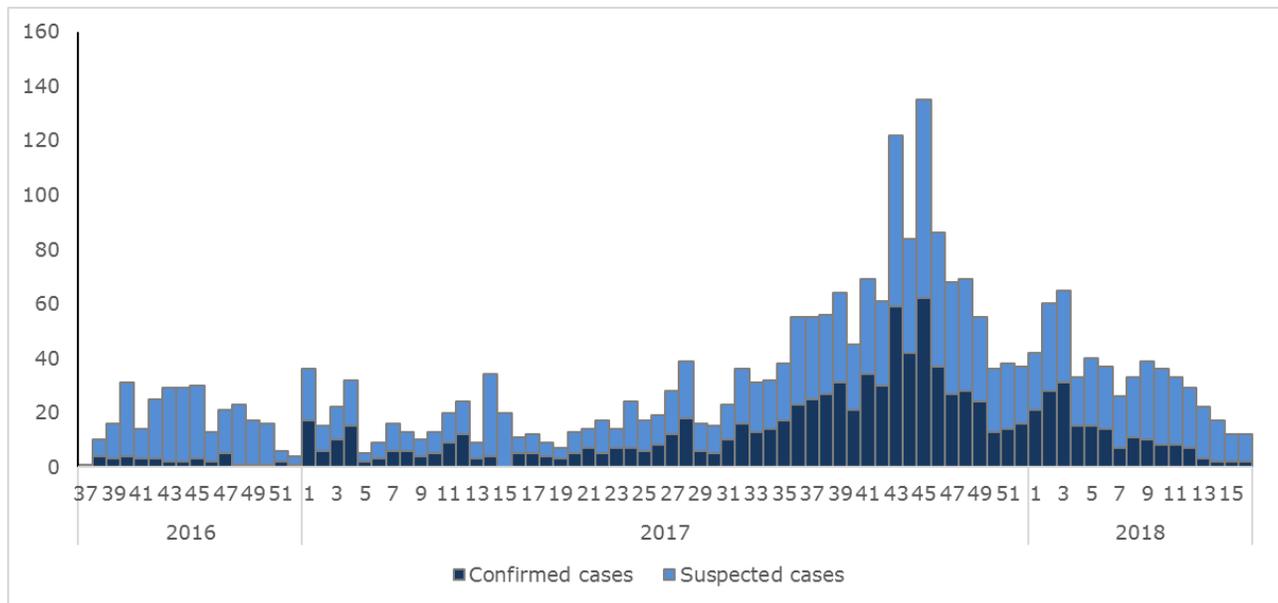
In **Haiti**, since the beginning of the outbreak at the end of 2014 up to EW 18 of 2018, 515 cumulative probable cases of diphtheria have been reported, including 81 deaths.¹ The case-fatality-rates by year were 22.6% in 2015, 39% in 2016, 6.7% in 2017, and 9.7% in 2018. In 2018, the approximate average of cases reported by EW has been 7.

Females accounted for 57% of the total probable cases in 2015, 50% in 2016, 60% in 2017, and 62% in 2018 (up to EW 18). In 2018, 52.6% of the probable cases reported up to EW 16 were children under 10 years of age and more than 50% were from the department of Ouest.

In **Venezuela**, the diphtheria outbreak that began in July 2016 remains active (**Figure 1**). Since the beginning of the outbreak until EW 16 of 2018, a total of 1,716 suspected diphtheria cases were reported (324 cases in 2016, 1,040 in 2017, and 352 in 2018), of which 1,086 were confirmed by laboratory (350) or epidemiological-link (736), and 160 died (17 in 2016, 103 in 2017, and 40 in 2018). The cumulative case fatality rate is 14.7%.

¹ Per the Haiti Ministry of Public Health and Population, a probable case is defined as any person, of any age, that presents laryngitis, pharyngitis or tonsillitis with false adherent membranes in the tonsils, pharynx and / or nasal pits, associated with edema of the neck.

Figure 1. Suspected and confirmed diphtheria cases by epidemiological week based on symptom onset. Venezuela, EW 36 of 2016 to EW 16 of 2018



Source: Data from the Venezuela Ministry of Popular Power for Health and reproduced by PAHO/WHO

In 2016, cases were reported in five states (Anzoátegui, Bolívar, Delta Amacuro, Monagas, and Sucre), while in 2017, 22 states and the Capital District reported confirmed cases. In 2018, 9 federal entities have reported confirmed cases. Cases have been reported among all age groups; however, most of the cases were reported among the 1-49 year age group while the highest incidence rate occurred among the 5-19 year age group.

Health authorities are intensifying epidemiological surveillance, investigations, medical care, and vaccinations. In addition, they are maintaining continuous training of healthcare workers (based on the updated manual of standards, guidelines, and procedures for the management of the disease) as well as health education.

Advice for Member States

The Pan American Health Organization / World Health Organization (PAHO/WHO) advises Member States to continue their efforts to ensure high vaccination coverage with the full 3-dose primary series and booster doses in all territorial entities.

PAHO/WHO stresses that the populations at greatest risk are unvaccinated children under 5 years of age, schoolchildren, healthcare workers, military service personnel, prisoner communities, and persons who, due to the nature of their occupation, are in contact with a large number of persons on a daily basis.

Although travelers do not have a special risk of diphtheria infection, it is recommended that national authorities remind travelers going to areas with diphtheria outbreaks to be properly vaccinated in accordance with the national vaccination scheme established in each country prior to travel. If more than five years have passed since their last dose, a booster dose is recommended.

PAHO/WHO recommends Member States strengthen their surveillance system for the early detection of suspected cases in order to initiate the timely treatment of cases and follow-up of contacts, and ensuring the supply of diphtheria antitoxin.

Vaccination is key to prevent cases and outbreaks, and adequate clinical management reduces complications and mortality.

References

1. Diphtheria vaccine: WHO position paper – August 2017. Available at: <http://bit.ly/2CCN7UW>
2. World Health Organization. Operational protocol for clinical management of Diphtheria Bangladesh, Cox's Bazar. 10th Ed., December 2017. Available at: <http://bit.ly/2CL4XE7>
3. Faulkner A, Acosta A, Tejpratap S.P, Tiwari. Manual for the Surveillance of Vaccine-Preventable Diseases, 5th Edition, 2011. Diphtheria: Chapter 1. Available at: <http://bit.ly/2oFCA5j>