

Diphtheria in the Americas - Summary of the situation

- In 2017, from epidemiological week (EW) 1 to EW 45, five countries in the Americas have reported suspected and/or confirmed diphtheria cases: Brazil, Colombia, the Dominican Republic, Haiti, and the Bolivarian Republic of Venezuela. The information reported is presented by country below.
- In 2016, there were three countries in the Americas that had reported a total of 78 confirmed diphtheria cases: the Dominican Republic (2 cases), Haiti (56 cases), and Venezuela (20 cases).

In **Brazil**, in 2017 up to EW 44, there were 39 suspected diphtheria cases reported, distributed in 13 states, 5 of which were confirmed (1 by laboratory confirmation, 1 by clinical-epidemiological criteria and 3 by clinical criteria). The vaccination status of the five confirmed cases is as follows: the laboratory confirmed case was not vaccinated; of the remaining four cases, two had a completed vaccination schedule and two were not vaccinated.

The confirmed cases range between 4 and 51 years of age, and include 3 males and two females. There was one fatal confirmed case; this is the previously reported laboratory confirmed case imported from Venezuela. There were no secondary cases related to this case nor have there been additional imported cases reported.

In **Colombia**, between EW 1 and EW 43 of 2017, there were 14 suspected diphtheria cases reported, all of which were later discarded by laboratory testing.

In the **Dominican Republic**, between EW 1 and EW 43 of 2017, there were 3 confirmed diphtheria cases reported, occurring in EW 12, EW 32, and EW 43, respectively. No deaths occurred due to diphtheria.

In **Haiti**, between EW 1 and EW 43 of 2017, a total of 120 probable diphtheria cases¹ were reported, of which 51 were laboratory confirmed, including 7 deaths (case fatality rate of 14%). Of the confirmed cases, most (82%) were five years of age or older and 53% were female. Of the confirmed cases, 26% were vaccinated, 33% were not vaccinated, and vaccination status is unknown for 41%.

¹ According to the Haiti Ministry of Public Health and Population, a probable case is defined as a person, regardless of age, with laryngitis, pharyngitis, or tonsillitis with adherent pseudomembranes on tonsils, pharynx, and/or nostrils in conjunction with neck edema.

The number of communes reporting confirmed cases in 2017 (22 communes) is lower than the number of communes reporting cases in 2016 (31 communes). The majority of communes reporting confirmed cases are in the departments of Ouest and Artibonite (39% and 33% respectively).

In **Venezuela**, in 2017 up to EW 42, a total of 511 probable diphtheria cases were reported. Samples were taken from 452 of the cases (88.5%), of which 146 (32.3%) were laboratory confirmed (69 by isolation and determination of toxin production by Elek test and 38 by Polymerase Chain Reaction). The confirmed cases were reported in 17 federal entities.

The most affected age group is 5 to 39 year olds, with the greatest number of cases being reported among those aged 5 to 19 years (54.3%). Females accounted for the majority of the cases (51%).

According to the report provided by national authorities, from January to September 2017, vaccination coverage with Pentavalent in children under 1 year of age reached 67.8%; and 41.9% of children aged five had the booster. The vaccination coverage with tetanus toxoid was 49.2% in pregnant women and 68.3% in schoolchildren.

The Venezuela Ministry of Popular Power for Health has intensified vaccination against diphtheria as part of the national plan; a total of 9 million doses of the vaccine are available for this activity. In addition, national and local authorities are strengthening epidemiological surveillance, active search and investigation of cases, and contact tracing.

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, at national and local levels.

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

References

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2. Colombia National Health Institute. Weekly Epidemiological Bulletin; EW 43 of 2017. Available at: <http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiologico/2017%20Bolet%C3%ADn%20epidemiol%C3%B3gico%20semana%2043.pdf>
3. Dominican Republic Ministry of Public Health. General Department of Epidemiology. Weekly Epidemiological Bulletin, EW 12, 32 and 43 of 2017. Available at: http://digepisalud.gob.do/documentos/?drawer=Boletines%20epidemiologicos*Boletines%20semanales*2017