

Diphtheria



Clinical Description:

Diphtheria is an acute bacterial disease of the oral cavity, nose, or skin caused by *Corynebacterium diphtheriae*. Symptoms of respiratory diphtheria may begin slowly and include headache and general discomfort, fever, sore throat, and a yellow-white or gray membrane-like covering in the back of the throat. Other symptoms can include swollen lymph nodes in the neck and clear or bloody nasal discharge. Respiratory diphtheria is a serious infection and 5-10% of cases die from the disease. Cutaneous diphtheria is not a reportable condition.

Incubation Period:

The incubation period is usually 2 - 7 days, occasionally longer.

Mode of Transmission:

Respiratory diphtheria is spread by contact with the nose or throat secretions. Fully immunized people may be asymptomatic carriers or have mild sore throat.

Period of Communicability:

An untreated case can spread diphtheria for 2-6 weeks; rarely, carriers may shed organisms for up to 6 months. Effective antibiotic therapy promptly terminates shedding.

Exclusion/Reporting:

Whenever diphtheria is strongly suspected or proven, the local health department should be notified immediately. Individuals infected with diphtheria will be considered contagious until two cultures taken 24 hours apart are negative and they have completed a recommended course of antibiotics. Close contacts should be observed for seven days for signs and symptoms of disease, cultured for *C. diphtheriae*, and treated with oral antibiotics for prophylaxis. Contacts of diphtheria cases who are food handlers, daycare workers, or health care workers are excluded from work until laboratory testing indicates they are not carriers. For information on laws and rules regarding diphtheria, see the ISDH Communicable Disease Reporting Rule 410 IAC 1-2.3-63) at: [http://www.in.gov/isdh/files/comm_dis_rule\(1\).pdf](http://www.in.gov/isdh/files/comm_dis_rule(1).pdf).

Prevention/Care:

Safe and effective vaccines are available to prevent diphtheria. Children and staff should receive the recommended doses of DTaP, DT, or Tdap vaccines in order to build and boost immunity against diphtheria infections. School immunization requirements for diphtheria can be found, <http://bit.ly/1rFzDxD>.

Outbreaks:

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3) the definition of an outbreak means cases of disease occurring in a community, region, or particular population at a rate in excess of that which is normally expected. For Diphtheria, one case would constitute an outbreak. Any case or suspected case is to be immediately reported to the local health department and/or the ISDH. For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

Other Resources:

Centers for Disease Control and Prevention (CDC):

<http://www.cdc.gov/diphtheria/clinicians.html>

<http://www.cdc.gov/vaccines/pubs/pinkbook/dip.html>

<http://www.cdc.gov/vaccines/vpd-vac/diphtheria/default.htm>

Indiana State Department of Health Quick Facts Page (found on disease/condition page):

<http://bit.ly/12JLfd>