
Diphtheria

Description: Diphtheria is a disease caused by the bacteria *Corynebacterium diphtheriae*, which invades the throat, tonsils, nose or skin. It is the toxin (poison) produced by the bacteria that causes severe disease problems.

Symptoms: Fever, sore throat and tiredness. The infection in the throat may cause a membrane to develop on the tonsils that could make breathing difficult. The individual could develop severe complications such as inflammation of the heart or inflammation of the nerves.

How it is Spread: Diphtheria is spread to others through close contact with the discharges from an infected person's nose, throat, eyes and skin lesions. Rarely, transmission may occur after contact with articles soiled by the discharges from the nose, throat or skin lesions.

Incubation: Symptoms usually appear in 2 to 5 days after infection, with a range of 1 to 10 days.

How Long Can a Person Spread the Infection to Others? A person may be contagious for up to two weeks, but seldom more than four weeks. If the individual is treated with appropriate antibiotics, this can quickly stop the spread of the bacteria.

Responsibility of Parents and Caregivers:

- Review immunization records of all children upon admission and periodically thereafter. Any child whose immunizations are incomplete or not up-to-date should be referred to the local health department or the child's physician for proper immunization.
- Upon notification by a parent or health care worker that a child absent from the child care setting has contracted diphtheria, immediately contact the local health department for instructions on preventive measures to be taken.

Diphtheria is a reportable disease in Ohio. The local health department may advise caregivers to closely observe all children and adults in the child care setting for sore throats for five days (the incubation period), request that anyone developing a sore throat see a physician, to obtain nose and throat cultures or skin cultures if skin lesions present, prescribe antibiotics for close contacts and carefully observe group separation and good hygiene procedures.

- Staff and children may return after two cultures from both throat and nose (and skin lesions in cutaneous diphtheria) taken not less than 24 hours apart, and not less than 24 hours after cessation of antimicrobial therapy, fail to show Diphtheria bacilli. If culturing is unavailable or impractical, exclusion may be ended after 14 days of appropriate antimicrobial therapy.

Control Measures: The most effective control measure is maintaining the highest possible level of immunization in the community. Other methods include prompt treatment of cases and monitoring.

Treatment: Certain antibiotics can be prescribed for the treatment of diphtheria. A diphtheria antitoxin is also used for treatment.

Comment: Up-to-date vaccination with the DTaP (diphtheria is the “D”) vaccine can prevent this very serious, life-threatening disease.