Diphtheria Fact Sheet

Diphtheria is a rare but serious disease caused by a toxin (poison)

Diphtheria is a serious disease caused by a toxin produced by some strains of bacteria called *Corynebacterium diphtheriae*. Not all strains or types of *C. diphtheriae* make the toxin that causes diphtheria disease. Strains of *C. diphtheriae* that don't make diphtheria toxin can also cause infections, but they aren't generally as serious, and those infections aren't called diphtheria.

Toxin-producing *C. diphtheriae* usually infect either the nose and throat or the skin. When the infection is in the nose and throat, it is called respiratory diphtheria. When the infection is in the skin, it is called cutaneous diphtheria. Respiratory diphtheria is usually more severe than cutaneous diphtheria.

Diphtheria is rare in the United States, primarily due to widespread immunization. Diphtheria most often occurs in people who are unvaccinated or under-vaccinated.

Diphtheria is spread from person to person through direct contact

People most commonly spread *C. diphtheriae* by coughing or sneezing, which creates small respiratory droplets that contain the bacteria. You can get infected if you breathe in those droplets. You can also get infected from touching open sores or ulcers caused by *C. diphtheriae*.

A person with diphtheria is usually contagious for a week or two after symptoms first appear, but in rare situations, people can be contagious for several weeks or months.

Signs and symptoms of diphtheria

The signs and symptoms of diphtheria will depend on the type of infection you have. For both forms of the disease, symptoms usually appear 2 to 5 days after exposure, though it may take 10 days or longer in some situations.

Respiratory diphtheria symptoms include: mild fever, weakness, swollen glands in the neck, sore throat, and a pseudomembrane (thick, gray coating of dead tissue) in the nose or throat

Cutaneous diphtheria symptoms include: pain, redness, swelling, rash with scales or peeling skin, and open sores or ulcers with a clear edge

Talk to your healthcare provider if you think you have diphtheria

Diphtheria can be a severe illness. About 1 in 10 people with respiratory diphtheria will die. It is important to talk to your healthcare provider right away if you think you might have diphtheria. Your doctor can determine if you need a lab test for diphtheria. Your healthcare provider may also prescribe medications to treat diphtheria, even before the results of lab tests are available.

Talk to your healthcare provider if you think you were exposed to someone with diphtheria

Talk to your healthcare provider immediately if you think you were in close contact with someone with diphtheria. People who were exposed to diphtheria should avoid contact with others and monitor for symptoms. They should also receive antibiotics and diphtheria vaccine to lower their risk of infection.

Vaccination is the best way to protect yourself from diphtheria

Every child should get a diphtheria vaccine at 2, 4, 6, and 15 to 18 months of age, and another dose at 4 to 6 years of age before entering school. A booster dose of diphtheria vaccine is also recommended at 11 to 12 years of age if it has been 5 years since the last dose.

Adults should receive a booster dose every ten years.