

Diphtheria

What you need to know



Diphtheria is a contagious bacterial infection caused by toxin-producing strains of *Corynebacterium* species most commonly *Corynebacterium diphtheriae*.

The classic presentation of diphtheria is in its respiratory form. This is characterized by severe inflammation of the upper respiratory tract with membrane formation, and widespread damage in other organs, particularly the myocardium (heart muscle) and peripheral nerves.

Diphtheria can also affect the skin, known as cutaneous diphtheria, and rarely, the mucous membranes of the genitalia and eyes.

Diphtheria in its respiratory form can lead to severe complications including death.



How does diphtheria spread?

Diphtheria spreads from person to person by physical contact via respiratory secretions from a patient or a carrier. Rarely, people can get sick from touching open sores or clothes soiled with discharges from such sores of someone sick with diphtheria. The incubation period is usually two to five days, occasionally longer.

Symptoms of respiratory diphtheria

Characteristically, a thick greyish white coating or membrane forms at the back of the throat and upper airways. This is accompanied by fever, sore throat, swollen lymph nodes in the neck and in severe cases difficulty in breathing. Respiratory diphtheria can mimic throat infections caused by other bacteria such as streptococcal pharyngitis.

Symptoms of cutaneous diphtheria

Cutaneous diphtheria may present as a scaling rash or ulcers with clearly demarcated edges and membrane.

How can diphtheria be prevented?

Getting vaccinated is the best way to protect against diphtheria and prevent outbreaks. Immunization against diphtheria is initiated in early infancy with a vaccine that protects against diphtheria, tetanus and pertussis (whooping cough), known as DTP, or with a vaccine against these diseases and one or more of the following: *Haemophilus influenzae* type B, poliomyelitis (polio) or hepatitis B.

Following the three primary doses routinely given during infancy, it is essential to receive booster shots of the diphtheria vaccine to sustain immunity, as this fades over time.

Vaccination is safe and effective. There may be some mild side effects, including a slight fever, drowsiness, or tenderness at the injection site.



What is the treatment for diphtheria?

Respiratory diphtheria is treated with diphtheria antitoxin and antibiotics. Respiratory support and airway maintenance may be needed. This form of diphtheria carries a 5-10% fatality rate even with treatment. Treatment of cutaneous diphtheria with antibiotics is usually sufficient, and antitoxin is typically not needed.
