What is diphtheria?

Diphtheria is a serious disease caused by a toxin (poison) produced by a bacterium called *Corynebacterium diphtheriae*. The disease can affect the nose, throat, or skin, and it can be deadly. Cases of diphtheria are very rare in the United States because of vaccination.

Who gets diphtheria?

Diphtheria is a rare disease. It most likely occurs in unvaccinated persons who live in crowded or unsanitary conditions, or who travel to countries where diphtheria is more common.

How is diphtheria spread?

Diphtheria bacteria can live in the mouth, nose, throat, or skin of infected individuals. Diphtheria is usually spread from person to person in airborne droplets after an infected person has coughed or sneezed. Occasionally, transmission occurs from skin sores or through articles soiled with discharge from the sores of infected persons.

What are the symptoms of diphtheria?

Symptoms of diphtheria depend on the site of infection. The more serious form of disease affects the nose and throat. Symptoms include sore throat, low-grade fever, chills, and sometimes enlarged lymph nodes in the neck. A thick coating may form in the back of the nose or throat making it hard to breathe or swallow. Diphtheria toxin can cause inflammation of the heart muscle and nerves. Sometimes diphtheria can cause skin sores that form ulcers. A person with diphtheria also may have no symptoms.

How soon after exposure do symptoms appear?

Symptoms usually appear 2-5 days after exposure, with a range of 1-10 days.

How long can an infected person carry diphtheria?

Untreated people who are infected with the diphtheria bacteria are usually contagious for up to two weeks and seldom longer than four weeks. After starting antibiotics, the infected person usually becomes non contagious in 48 hours. Some persons continue to carry the bacteria, so antibiotic therapy should be continued until the infected person tests negative for diphtheria.

What is the treatment for diphtheria?

Certain antibiotics, such as penicillin and erythromycin, can be prescribed for the treatment of diphtheria. Diphtheria antitoxin may be available to prevent the disease from getting worse.

How can diphtheria be prevented?

The single most effective control measure to prevent diphtheria is vaccination. Diphtheria toxoid usually is combined with tetanus toxoid and pertussis vaccine to form a triple vaccine known as DTaP. This vaccine is given starting at approximately two months of age. Multiple doses are needed
to ensure protection. Immunity wanes, and, therefore, adolescents and adults are recommended to receive a booster vaccination called Tdap. After receiving Tdap, persons should receive tetanus and diphtheria toxoid (Td) every 10 years.

**How can I learn more about diphtheria?**

- If you have concerns about diphtheria, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at https://www.vdh.virginia.gov/local-health-districts/.

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