DIPHTHERIA

What is diphtheria?

Diphtheria is a very contagious, potentially life-threatening disease. It is caused by the bacterium *Corynebacterium diphtheriae* which produces a toxin (poison) that travels through the blood stream and attacks the nerves, and heart in more serious cases. Diphtheria is common in many parts of the world but is very rare in North America because of widespread immunization.

Diphtheria can be a fatal infection. One out of every ten people who get the disease die, with the highest death rates occurring in the very young and the elderly.

What are the symptoms of diphtheria?

Symptoms of diphtheria can develop anywhere between one and 10 days after infection but are typically seen within two to five days. Symptoms include a sore throat, mild fever, difficulty swallowing and swollen neck glands. In the throat, a gray to black, covering will develop, which can block the airways.

How does diphtheria spread?

The diphtheria bacteria lives in the mouth, nose, throat or skin of infected people. In rare instances, the bacteria can also be found in the eye membrane, vagina or ear. It is most often spread person-to-person through respiratory droplets such as those produced when an infected person coughs or sneezes. Rarely, diphtheria can also be spread by contact with contaminated objects, such as tissues that have been used by an infected person. Once infected, the person usually carries the bacteria for about two weeks and can pass it on to others during that time. Effective antibiotic therapy will stop the spread.

How is diphtheria treated?

Diphtheria is a medical emergency and treatment should be provided immediately. Both an antitoxin and antibiotic should be given. Antitoxins are most effective when given as soon as possible and the appropriate antibiotic treatment should be provided to eliminate the organism and to prevent transmission.

Most people with diphtheria stop spreading the bacteria to others 48 hours after beginning antibiotic treatment. However, it is important to finish taking all the antibiotics that are prescribed to make sure all the bacteria get completely removed. An infected person should remain in isolation until 24 hours after antibiotics are stopped and two lab tests taken 24 hours apart are negative. Unless immunized, children and adults may be infected with the disease more than once.

How can diphtheria be prevented?

Immunization is the best method of prevention against diphtheria. All children should receive a vaccine at two months, four months, six months, 18 months and again between four and six years old as part of Ontario's Routine Immunization Schedule. A booster dose is also recommended 10 years after the four to six-year-old dose and every 10 years after.

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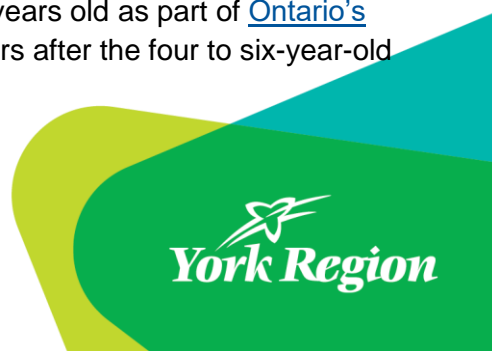
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