Diphtheria

What is diphtheria?
Diphtheria is a serious disease caused by a toxin (poison) made by bacteria that usually affects the tonsils, throat, nose or skin. It is extremely rare in the United States.

How is diphtheria spread?
Diphtheria is spread from person to person, usually from coughing or sneezing. Rarely, people can get sick from touching open sores or clothes that touched open sores of someone sick with diphtheria. You can also get diphtheria by coming in contact with an object, like a toy, that has the bacteria on it.

What are the signs and symptoms of diphtheria?
There are two types of diphtheria. One type involves the nose and throat, and the other involves the skin.

Diphtheria starts with a sore throat, mild fever (101°F or less), and chills. Next, the diphtheria toxin makes a thick coating in the back of the nose or throat. It may be white or grayish. The coating makes it hard to breathe or swallow. Skin lesions may be painful, swollen and reddened.

How long after infection do symptoms appear?
Symptoms usually start about 2-5 days after exposure to the bacteria with a range of 1-10 days. A person who does not receive treatment can spread the disease for about two weeks after becoming infected.

Who is most at risk?
Diphtheria is rarely seen in the United States due to high vaccination levels. However, periodic cases and outbreaks still occur, and usually among people who live in crowded and unclean conditions. Recent cases have been reported in adolescents and adults who have not been vaccinated. Anyone who travels to an area where diphtheria is common is also at risk.

What type of health problems are caused by diphtheria?
The coating in the back of the nose or throat can get so thick that it blocks the airway, so the person can’t breathe.

The diphtheria toxin can affect the heart, causing abnormal heart rhythms and even heart failure. It can also affect the nerves and lead to paralysis and lung infection.

For some people, diphtheria can lead to death. Even with treatment, about 1 out of 10 diphtheria patients die. Without treatment, as many as 1 out of 2 people can die from diphtheria.

How is diphtheria diagnosed?
Your healthcare provider will look for symptoms of diphtheria infection, especially in a person who has a sore throat with a gray membrane covering the tonsils and throat. A laboratory test (culture) may be necessary to confirm the infection. A tissue sample from an infected wound can also be tested to check for the type of diphtheria that affects the skin.
How is diphtheria treated?
Antibiotics or an antitoxin may be given to stop the toxin from circulating in the body. Children and adults who have diphtheria often need to be in the hospital for treatment.

How can diphtheria be prevented?
Diphtheria can be prevented by getting vaccinated. There are different types of vaccines used to prevent diphtheria in children and adults. Diphtheria vaccine is usually combined with tetanus vaccine and acellular pertussis vaccine to form a combination vaccine known as DTaP. Routine childhood vaccination includes five doses of the DTaP vaccine given at 2 months, 4 months, 6 months, 15 to 18 months, and 4 to 6 years of age. The Tdap vaccine is recommended for adolescents and adults. Adults should get the Td vaccine every 10 years.

Where can I get more information?
- Your personal healthcare provider
- Centers for Disease Control & Prevention
- Utah Department of Health