

**What is diphtheria?**

Diphtheria is caused by *Corynebacterium diphtheriae*, a type of bacteria. Diphtheria bacteria may produce a toxin. It is a vaccine-preventable disease. All children attending day cares and entering schools are required to be immunized against diphtheria.

**Who is at risk for diphtheria?**

Everyone is at risk for diphtheria, but people who are appropriately immunized may have a milder case.

**What are the symptoms of diphtheria?**

Symptoms of diphtheria are usually a low-grade fever, sore throat and a sticky grayish/white film on the tonsils, throat or nose. Complications can include severe neck swelling (called bull neck) and upper airway blockage which make breathing and swallowing more difficult.

Diphtheria also can cause infections of the skin, vagina, eye or ear, but this is less common. Skin infections caused by diphtheria may appear as a scaling rash or sores with distinct edges and a membrane.

**How soon do symptoms appear?**

Symptoms usually appear between two and seven days after exposure to the disease. Sometimes it may take longer for symptoms to appear.

**How is diphtheria spread?**

Diphtheria is spread by direct contact with respiratory droplets of an infected person, such as those produced during coughing and sneezing, or contact with the discharge from sores on the skin of an infected person.

**When and for how long is a person able to spread the disease?**

In an untreated person, the disease can be spread for two to six weeks. In a person treated with antibiotics, it can be spread for fewer than four days.

**How is a person diagnosed?**

A lab test is needed to diagnose diphtheria.

**What is the treatment?**

The toxin that may be produced by diphtheria bacteria must be inactivated. A single dose of antitoxin should be administered by IV. An antibiotic also should also be given.

**Does past infection make a person immune?**

No. People who have had diphtheria may still get it again.

## Should children or others be excluded from day care, school, work or other activities if they have diphtheria?

Yes

## What can be done to prevent the spread of diphtheria?

There are vaccines to prevent diphtheria. The childhood vaccine is given along with tetanus and pertussis in the same shot (called DTaP). Five doses of vaccine, given in a series starting at 2 months of age, are needed to protect a child from diphtheria. The childhood DTaP vaccine is not given to people age 7 or older. North Dakota state law requires all children attending day cares or schools to be vaccinated against diphtheria. The adolescent and adult diphtheria vaccine also is given along with tetanus and pertussis (Tdap). It is recommended that adolescents receive one dose of Tdap at ages 11 or 12 to protect themselves against pertussis. Adults should also receive Tdap. This is to ensure that immunity to diphtheria is maintained.

### **Additional Information:**

For additional information, call the North Dakota Department of Health at 800.472.2180.

**This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.**

Resource: American Academy of Pediatrics. [Diphtheria]. In: Pickering LK, ed. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26<sup>th</sup> ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:[277-281]

