

Diphtheria

The Disease

Diphtheria used to be a major cause of childhood illness and death. Through the 1920's about 150,000 people got diphtheria each year in the United States and about 15,000 of them died. The word diphtheria struck fear into the hearts of parents in those days, but today there are only a few cases a year. This change is due largely to our parents and grandparents, who got their children immunized.

Diphtheria is a disease caused by bacteria called *Corynebacterium diphtheriae*. These bacteria live in the mouth, throat and nose of an infected person, and are easily spread to others through coughing or sneezing. Some people with diphtheria might not even seem ill, but they can still spread the disease.

Two to four days after a child is exposed to diphtheria, he or she might get a sore throat, a slight fever, and chills. If diphtheria is not properly diagnosed and treated, it can then produce a powerful toxin (poison), which spreads throughout the body causing serious complications such as heart failure or paralysis. Sometimes a thick membrane forms in a child's throat, making it hard to swallow or even breathe. About 1 person out of every 10 who get diphtheria dies from it. A child with diphtheria is contagious (can spread the disease to others) for about 2 to 4 weeks.

Diphtheria Fact: George Washington died from diphtheria.

Diphtheria Immunization

Diphtheria vaccine protects children by creating immunity to the toxin that causes symptoms of illness, rather than immunity to the bacteria itself. Because it acts on the toxin, it is called a *toxoid*.

Diphtheria toxoid was developed around 1921, but wasn't widely used until the 1930's. The number of cases of diphtheria in the United States dropped rapidly as more people began getting the vaccine. In 1921 there were 206,939 cases reported; in 1931 there were 70,839 cases; in 1941 there were 17,987; in 1951 there were 3,983; and in 1961 there were 617 cases. Today there are only a few cases a year.

Diphtheria toxoid is almost always given to children together with tetanus toxoid and pertussis vaccine in a shot called DTaP. [Click here to jump to the chapter about DTaP vaccine.](#)