Diphtheria

What is diphtheria?

Diphtheria is an infection caused by *Corynebacterium diphtheriae* bacteria. The bacteria produces a toxin (poison) which causes a thick coating to form in the back of the nose or throat that makes it hard to breathe or swallow.   It primary affects children.

How is it spread?

Diphtheria is spread (transmitted) from person to person, usually through respiratory droplets, from coughing or sneezing and also from touching infected open sores or ulcers. The bacteria can also infect the skin causing open sores or ulcers which rarely result in severe disease.

A person also can get infected with diphtheria by coming in contact with an object, like a toy, that has been contaminated with the bacteria that cause diphtheria.

What is the incubation period?

It normally takes 2 to 5 days for symptoms appear after exposure.

What are the signs and symptoms?

When the bacteria that cause diphtheria invade the respiratory system, they produce a poison (toxin) that can cause:

- Weakness
- Sore throat
- Fever
- Swollen glands in the neck

Within two to three days, a thick grey coating can build up in the throat or nose, making it very hard to breathe and swallow.

Without appropriate, timely treatment, the toxin may be absorbed into the blood stream and may cause damage to the heart, kidneys, nerves and even lead to death.

Should a person with diphtheria be isolated?

Exclusion from work/ school is essential until cleared by a physician. Family contacts must also be excluded from work/ school until cleared to return by a physician.

What type of treatment and care should be given?

A swab specimen is taken from the throat to test for the bacteria. A doctor can also take a sample from a skin lesion (like a sore) and try and grow the bacteria to confirm the diagnosis of diphtheria.

It is important to start treatment right away if diphtheria is suspected and not to wait for laboratory confirmation.

Diphtheria treatment today involves:

- Using diphtheria antitoxin to neutralize (counteract) the toxin produced by the bacteria.

- Using antibiotics to kill and eliminate diphtheria bacteria

Where can a child receive vaccination against this disease?

The best way to prevent diphtheria is to get vaccinated. The DTaP vaccine is a shot given to children younger than seven years of age that combines the vaccines for diphtheria and two other serious diseases: tetanus and whooping cough (pertussis). The vaccine helps the body to build up protection against the diphtheria toxin.

Children should get five doses of the DTaP vaccine at the following ages for best protection:
- One dose each at 2 months, 4 months, and 6 months;
- A fourth dose at 15 through 18 months; and
- A fifth dose at 4 through 6 years of age.

If your child has not been vaccinated against diphtheria, contact your physician or visit the Child Health Immunization Clinic located at the Hamilton Health Centre, 67 Victoria Street, Hamilton, to have be immunized as soon as possible.

Adapted from:
"Diphtheria." Center for Disease Control and Prevention 2022 https://www.cdc.gov/diphtheria/about/index.html
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