

Diphtheria

Description:

Diphtheria is an infection of the throat and nose caused by the Corynebacterium diphtheriae bacteria. Diphtheria can cause a membrane to grow around the inside of the throat which can lead to difficulty in swallowing and breathing. Occasionally these bacteria can also cause skin infections. Diphtheria has been rare in Australia since the introduction of an effective vaccine, but a century ago diphtheria was the commonest infectious cause of death. Outbreaks still occur in countries with low vaccination rates.

Symptoms:

Symptoms include sore throat, swollen neck glands, and a discharge from the nose. The diphtheria bacteria can also produce a toxin which may cause serious complications such as paralysis and heart failure. Diphtheria is suspected when a white or grey membrane is seen on the back of the throat.

The time from contact with the bacteria and the development of symptoms is usually about two to five days, but can be longer.

Even with treatment, five to ten percent of people with diphtheria will die from the disease.

Transmission:

The disease is usually spread by close contact with an infected person via droplets from the nose or throat, or contact with infected skin sores.

A person is considered non-infectious after receiving appropriate antibiotic treatment. Without antibiotic treatment, a person is usually infectious for two weeks, but sometimes as long as six months.

Treatment:

A person with diphtheria usually needs to be admitted to hospital for appropriate care and treated with antibiotics and the antidote to the toxin.

Control

- People with diphtheria need to be kept in isolation until they are proven to be free of the disease.
- Contacts (those having close physical association) of a person with diphtheria need to be investigated for the bacteria and to receive appropriate preventative antibiotics, regardless of their vaccination status.
- Vaccinated contacts should receive a booster dose of diphtheria vaccine if it has been more than five years since their last dose. Unvaccinated or incompletely vaccinated need to complete a full course of diphtheria vaccination.
- Contacts will need to be excluded from child care, school or work until cleared to return by a Queensland Health public health unit.
- Contacts whose work involves food handling or caring for children will need to be excluded from work until they are proven to be free of infection.

Prevention:

Widespread vaccination against diphtheria is the only effective method of preventing the disease.

Diphtheria vaccination is part of the National Immunisation Program and is recommended for:

- all children at 2, 4 and 6 months of age with a booster at 4 years of age;
- adolescents (provided to Year 10 students as part of the Queensland Health School Based Vaccination Program) and
- adults aged 50 years of age and over who haven't received a diphtheria-tetanus vaccine within the past 10 years.

Diphtheria

People travelling to countries where diphtheria is common should ensure their diphtheria vaccination is up to date.

Help and Assistance

For further information please contact your local doctor, community health centre, nearest public health unit or the 13HEALTH information line (13 43 25 84).

Other Resources

[Queensland Health website](#)

[Immunise Australia website](#)

References and related content

Heymann, D., ed. 2008. *Control of Communicable Diseases Manual*, 19th edition. Washington, DC: American Public Health Association.

National Health and Medical Research Council, 2008. *The Australian Immunisation Handbook (9th Ed.)* Canberra: National Capital Printing.