

Diphtheria

An infection of the throat and nose caused by the bacterium *Corynebacterium diphtheriae*.

Occasionally these bacteria can cause skin infections, usually in people with poor health or poor hygiene.

Symptoms include sore throat, swollen neck glands and a discharge from the nose. The bacteria can also produce a toxin capable of damaging nerves or the heart.

Diphtheria is suspected when a white or grey membrane is seen on the back of the throat and is confirmed when the bacteria are seen under the microscope and grown in the laboratory.

The disease is spread directly from person-to-person, by contact with airborne droplets from the nose or throat, or indirectly by contact with sores, or articles soiled with discharges from the nose or throat.

Diphtheria has been rare in Australia since the introduction of an effective vaccine but a century ago was the most common infectious cause of death. Outbreaks still occur in countries where vaccination rates are not high.

Incubation period

(time between becoming infected and developing symptoms)

Usually 2 – 5 days.

Infectious period

(time during which an infected person can infect others)

Without antibiotic therapy, usually less than 2 weeks, occasionally as long as 6 months.

A person is no longer infectious after treatment with appropriate antibiotics.

Treatment

Specific treatment with antibiotics and an antidote to the toxin is available.

Control of spread

- > Widespread immunisation against diphtheria is the only effective control. Diphtheria vaccine is one of the components of vaccines routinely administered to children at two, four and six months of age, with booster doses at four years and 15 to 17 years (in South Australia this booster is offered to Year 9 school students). Adults should receive a further booster at age 50. For adolescents and adults, the combined diphtheria-tetanus-pertussis vaccine (dTpa) is preferred, if not given previously, as it provides additional protection against pertussis (see information on Immunise Australia website below).
- > 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 people with diphtheria need to be investigated for the disease, receive antibiotics and receive vaccination.
- > Family or household contacts should be excluded from school, preschool or child care until cleared to return by an appropriate health authority.
- > Contacts whose work involves food handling or caring for unimmunised children are excluded from work until they are proven to be free of infection.
- > People travelling to countries where diphtheria is common should receive a full immunisation course or a booster dose of vaccine (if a full course has already been completed). This is currently recommended for travellers to Southeast Asia, the Russian Federation, the Ukraine, Baltic countries and Eastern Europe.



Diphtheria is a notifiable disease

- > **Immunisation**

Useful website

- > **Immunise Australia**
<http://www.immunise.health.gov.au>