Government of Western Australia
Department of Health

Diphtheria factsheet

What is diphtheria?

Diphtheria is a serious infection caused by *Corynebacterium diphtheriae* (or sometimes *Corynebacterium ulcerans*) bacteria. Some strains of the bacteria produce a toxin (poison) that can cause severe illness.

Diphtheria was previously very rare in Australia due to high vaccination rates and improved living conditions. However, cases have recently re-emerged in parts of Australia, including Western Australia.

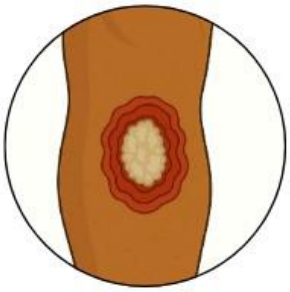
What are the signs and symptoms of diphtheria?

Symptoms usually appear 2 to 5 days after exposure (but can range from 1 to 10 days). Diphtheria can affect the throat or the skin.



Respiratory (throat) diphtheria

- Often starts like a cold with sore throat, fever and chills
- Can cause a thick greyish-white coating in the back of the nose or throat
- May cause swollen, painful glands in the neck
- Can worsen, making it difficult to breathe or swallow
- Can become life-threatening.



Cutaneous (skin) diphtheria

- Can start from a cut or wound that becomes infected
- Usually appears as sores or ulcers that are slow to heal, often on the legs
- May be covered with a grey, moist scab
- Is usually less severe but can still spread to others.

Complications are uncommon; they mainly occur in severe respiratory (throat) diphtheria and are caused by the toxin (poison) produced by the bacteria. They can include heart inflammation, nerve damage causing weakness or paralysis, or kidney damage.

In severe cases, paralysis can affect the diaphragm (breathing muscle), leading to pneumonia or severe breathing problems (respiratory failure). Around 5-10% of severe cases are fatal, even with treatment.

How is diphtheria spread?

Diphtheria spreads through close contact with an infected person:

- breathing in droplets from coughing or sneezing
- direct contact with saliva, respiratory secretions, or infected skin sores
- contact with contaminated items such as bandages, towels or utensils.

People can spread the infection from shortly before symptoms start until they are treated with antibiotics.

What should I do if I have symptoms?

- **See a doctor as soon as possible** if you have a sore throat, or skin sores that are not healing.
- **Seek urgent medical care** if you have any difficulty breathing or swallowing.
- **Call ahead** before going to a clinic or hospital so they can take appropriate precautions, wear a mask if you have throat symptoms, and cover any skin sores.

Diphtheria is confirmed by testing a swab from the throat or skin sore in a laboratory.

How can diphtheria be prevented?

Vaccination is the most effective protection against diphtheria. Make sure you and your family are up to date with vaccinations, including booster doses for teenagers and adults. Diphtheria vaccine is usually given in combination with tetanus and pertussis (whooping cough) as DTPa or dTpa, or with tetanus as dT.

You can also reduce the risk of infection and help prevent spread to others by:

- covering your mouth and nose when coughing or sneezing
- throwing away used tissues in the bin
- washing hands regularly with soap and water, especially before preparing food, after coughing or sneezing, and before and after touching skin sores or dressings
- keeping sores and wounds clean and covered, such as with dressings or large band-aids
- avoiding close contact with people who are unwell, and staying home if unwell.



If you have diphtheria

- Diphtheria is treated with antibiotics – complete the full course: _____
- Seek urgent medical care if you are not improving on antibiotics or have difficulty breathing or swallowing – severe cases may need antitoxin to stop the toxin (poison) from causing further damage
- Get a booster dose if your last diphtheria-containing vaccine was more than 12 months ago.

Respiratory (throat) diphtheria

- Stay in hospital or at home away from others while you complete your antibiotics:
  - avoid contact with babies, older people, and those who are sick or have weakened immune systems
  - limit contact with others at home – wear a mask in shared areas if needed
  - avoid sharing items like towels or utensils
  - do not go to work, school, childcare or group gatherings – you may need additional throat swabs after completing antibiotics to check you are no longer infectious before returning.

Cutaneous (skin) diphtheria

- You may have swabs taken to check for diphtheria bacteria in your throat
- Keep sores or ulcers covered, ideally with a waterproof dressing – you may need regular wound care
- Do not go to work, school, childcare or group gatherings until you have had at least 3 days of appropriate antibiotics, and your sores or ulcers are improving and can be covered
  - avoid contact with babies, older people, and those who are sick or have weakened immune systems
  - avoid sharing towels or personal items.

Notifiable disease

Diphtheria is a notifiable disease, which means information about cases is shared with the Department of Health. This information is confidential. Public health staff may contact people with diphtheria to:

- help identify how the infection occurred
- identify contacts who may be at risk
- provide advice on testing, vaccination, treatment, and whether they need to stay at home.

For more information, contact your local clinic _____, local Public Health Unit during office hours, or call Healthdirect Australia on **1800 022 222**

Kimberley: **9194 1630** Pilbara: **9174 1660** Goldfields: **9080 8200** Midwest: **9956 1985**

Wheatbelt: **9690 1720** Boorloo (Perth): **9222 8588** Southwest: **9781 2359** Great Southern: **9842 7500**