

# Meningococcal disease

## What is Meningococcal disease?

Meningococcal disease is a rare but very serious bacterial infection caused by *Neisseria meningitides* which is also known as the *meningococcus*. It can cause meningococcal meningitis (inflammation of the lining of the brain and spinal cord) and meningococcal septicaemia (blood poisoning), which can be life threatening. About 1 in every 10 people carry this germ in the nose or throat. Although most carriers remain well, they are able to spread it to others who may become very unwell.

There are 5 different groups of the meningococcal bacteria that cause nearly all disease globally (A, B, C, W, and Y). The most common groups in the Northern Territory (NT) are currently B and W, and nationally the most common is group B. Meningococcal disease can develop very quickly and cause death in about 8-10% of those affected. When diagnosed early and treated with antibiotics promptly most people will make a full recovery.

## How is it spread?

Although the germ is spread in droplets from the nose or throat, it is not easy to catch the disease. The bacteria do not survive for long outside the body. Close and prolonged contact with a carrier is usually required for the germ to spread to other people. Living in the same household or intimate (deep) kissing are examples of 'close and prolonged contact'. The bacteria cannot be picked up from surfaces, water supplies or animals and are not easily spread by sharing drink bottles, food or cigarettes.

## Who is most at risk?

Meningococcal disease can affect anyone, but some groups are more at risk:

- children under 5 years of age
- young adults 15-24 years old
- household contacts of patients with meningococcal disease
- people who smoke or vape or are exposed to tobacco or vaping smoke
- people who practice intimate (deep mouth) kissing, especially with more than one partner
- people who have recently had a viral upper respiratory tract illness
- travellers to countries with high rates of meningococcal disease
- people with no working spleen or who have certain other rare medical conditions.

## Signs and symptoms

### Meningococcal septicaemia

Meningococcal septicaemia develops when the germ gets into the bloodstream and causes 'blood poisoning'.

Symptoms of meningococcal septicaemia may include:

- fever

- rash, starting anywhere on the body as tiny red or purple spots that can spread and enlarge to look like bruises. The rash does not fade when gentle pressure is applied
- joint or muscle pains.

**The rash must be taken seriously as the person requires urgent medical attention.**

## Meningococcal meningitis

Meningococcal meningitis occurs when the outer lining around the brain and spinal cord is infected.

Symptoms of meningococcal meningitis include:

- fever
- stiff neck
- headache
- dislike of bright lights
- vomiting
- rash of tiny red or purple spots or larger bruises
- joint or muscle pains
- drowsiness, confusion or even coma.

**Meningitis symptoms in young babies can include:**

- irritability and a dislike of being handled
- disinterest in feeding
- vomiting and/or diarrhoea
- a high pitched moaning cry
- a blank staring expression
- turning away from light
- extreme tiredness or floppiness,
- rash or a pale blotchy complexion
- convulsions or twitching.

## Other forms of meningococcal disease

Meningococcal disease can present atypically as gastroenteritis: vomiting and/or diarrhoea; pneumonia: chest pain, shortness of breath; painful swollen joint or joints; epiglottitis – inflammation and swelling at the top of the windpipe.

## What are the complications?

Meningococcal disease is serious and can be life threatening. Complications can include hearing loss, skin scarring, learning difficulties, limb damage or losing a limb, blindness or brain damage.

## Prevention

Meningococcal disease can be prevented by vaccination. The vaccines now used are meningococcal ACWY and meningococcal B.

All children in the NT receive the meningococcal ACWY (Men ACWY) vaccine at 12 months of age and 14-19 years old as part of the National Immunisation Program.

Men ACWY vaccine is also recommended for:

- travellers to certain countries in sub Saharan Africa and pilgrims to the Hajj
- people with high risk medical conditions.

The Meningococcal B (MenB) vaccine is also available for use in any individual over 6 weeks of age and can be purchased privately with a prescription from your doctor. This Men B vaccine is recommended for:

- children aged 6 weeks to 2 years
- adolescents aged 15-19 years
- people with high risk medical conditions.

In the NT the Meningococcal B (Bexsero) vaccine is available free for all Aboriginal children under 2 years.

## Treatment

Urgent treatment in hospital with antibiotics is used to treat meningococcal disease. Treatment is usually started before a diagnosis is confirmed. Other treatments are dependent on symptoms and condition of the patient.

## Treatment for close contacts

There is a small but real risk for very close contacts of the person with meningococcal disease to also develop disease. Sometimes cases of meningococcal disease can also occur in clusters of people when bacteria spread from a carrier to more than 1 person.

To stop further spread, antibiotics are used to treat potential carriers of the meningococcal bacteria. All of the 'household contacts' of a case are considered as potential carriers and recommended to have antibiotic treatment. The purpose of the antibiotic is to eliminate the germ from the nose or throat to prevent further spread to others.

Vaccination may also be offered to contacts.

Close contacts must be alert for the symptoms of the disease even if they have taken the antibiotic. Contacts of an infected person should share the information about the disease with their close contacts to alert them for signs and symptoms of meningococcal disease. Early presentation of possible cases to medical care is important. The treating doctor should be made aware if the person presenting is a possible meningococcal contact.

## Related information

- [Meningococcal | NT Health](#)
- [Ciprofloxacin for close contacts of meningococcal disease fact sheet for more information](#)

## Contact

For more information contact the Public Health Unit's Centre for Disease Control in your region.

The full list of contacts of contacts can be found at [NT Health](#).

Location	Phone	Fax	Email
Darwin	(08) 8922 8044	(08) 8922 8310	<a href="mailto:CDCSurveillance.DARWIN@nt.gov.au">CDCSurveillance.DARWIN@nt.gov.au</a>
Katherine	(08) 8973 9049	(08) 8973 9048	<a href="mailto:CDC.Katherine@nt.gov.au">CDC.Katherine@nt.gov.au</a>
Tennant Creek	(08) 8962 4259	(08) 8962 4420	<a href="mailto:CDC.Barkly@nt.gov.au">CDC.Barkly@nt.gov.au</a>
Alice Springs	(08) 8951 7540	(08) 8951 7900	<a href="mailto:CDC.alicesprings@nt.gov.au">CDC.alicesprings@nt.gov.au</a>
Nhulunbuy	(08) 8987 0357	(08) 8987 0500	<a href="mailto:CDCGove.DoH@nt.gov.au">CDCGove.DoH@nt.gov.au</a>