

# Meningococcal disease

## What is meningococcal disease?

Meningococcal disease is a rare but very serious bacterial infection caused by *Neisseria meningitidis* which is also known as the *meningococcus*. 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, if infected may become very unwell.

There are 6 different groups of the meningococcal bacteria that cause nearly all disease globally (A, B, C, W, X and Y). The most common in Australia and the Northern Territory has been group B but since 2014 groups W and Y have been increasing. Group C disease is now rarely seen because children are vaccinated against group C at the age of 12 months. In the Northern Territory over the last 5 years there have been 2-4 cases per year of meningococcal disease.

Meningococcal disease occurs in 2 main forms:

- meningococcal septicaemia or 'blood poisoning'
- meningococcal meningitis.

Sometimes both septicaemia and meningitis can occur at the same time.

Meningococcal disease can develop very quickly and cause death in around 5-10% of those affected. However, if diagnosed early and treated with antibiotics promptly most people will make a full recovery.

## Meningococcal septicaemia

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

Symptoms of meningococcal septicaemia may include:

- fever
- rash, this may start anywhere on the body as tiny red or purple spots which can spread and

- enlarge to look like fresh bruises. The rash does not fade when pressure is applied to it
- joint or muscle pains.

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

## Meningococcal meningitis

Meningococcal meningitis occurs when the germ infects the outer lining around the brain and spinal cord.

Symptoms of meningococcal meningitis include:

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

The symptoms of meningococcal meningitis in young babies may be more subtle.

They can include:

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

## How easy is it to catch meningococcal disease?

Although the germ is spread in droplets from the nose or throat it is fortunately 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. The bacteria cannot be picked up from surfaces, water supplies or animals and are not easily spread by sharing drink bottles, food or cigarettes.

Meningococcal disease can affect all ages, but babies and young children under 5 years of age and young adults (15-24 years of age) are most at risk. People of any age regularly exposed to tobacco smoking are also at increased risk.

### How can meningococcal disease be prevented?

Meningococcal disease can be prevented by vaccination. The vaccines available provide protection against:

- meningococcal C
- meningococcal ACWY
- meningococcal B.

Meningococcal C vaccine is given routinely to 12 month-olds in a combination vaccine which also provides protection against another bacteria *Haemophilus influenzae B*.

Meningococcal ACWY vaccine is recommended for:

- travelers to countries such as Africa and Asia and pilgrims to the Hajj
- people with high risk medical conditions.

As disease caused by group W and Y is on the increase ACWY vaccine is being considered for additional age groups known to be most at risk of transmitting the meningococcal bacteria.

Meningococcal B vaccine is available for use in individuals over 2 months of age. This is recommended for:

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

ACWY and group B meningococcal vaccines can be purchased privately with a prescription from your doctor. Please see The Australian Immunisation Handbook online version for dose

information

<http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-10>.

### What happens when a case occurs?

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.

Treatment of a carrier of meningococcal bacteria with antibiotics has been shown to stop further spread. However, because there is no quick and accurate test to identify carriers, 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 of the carrier in an effort to prevent further spread to others.

Vaccination may also be offered to contacts.

Contacts must be told to 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 meningococcal disease with their close contacts to raise awareness about 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.

#### For more information contact the Centre for Disease Control in your region

Alice Springs	8951 7540
Darwin	8922 8044
Katherine	8973 9049
Nhulunbuy	8987 0357
Tennant Creek	8962 4259

Or <https://health.nt.gov.au/professionals/centre-for-disease-control/resources-and-publications>