

Meningococcal Infection

The meningococcus (plural meningococci) is a bacterium named *Neisseria meningitidis*. There are 13 different types of meningococcus, but most infections in Australia are caused by types B and C.

Meningococcal disease is a severe infection caused by the meningococcus which may result in meningitis (infection of the outer lining of the brain and spinal cord), septicaemia (infection of the blood), joint infection, eye infection, pneumonia and rash.

Septicaemic meningococcal disease can cause shock and death within hours of the onset of symptoms. In Australia, 5-10% of people with meningococcal disease die, despite rapid treatment.

Meningococcal disease can affect all age groups, but is most common in children under five years of age and in young adults (15 to 24 years). Meningococcal disease can occur throughout the year but is most common in winter and spring. Outbreaks can occur, but are rare.

Disease transmission

The meningococcus is carried, usually harmlessly, in the nose and throat of around 10% of the population, with higher carriage in some specific groups. The bacteria are passed from person to person by close prolonged contact with fine droplets spread by coughing, sneezing and spluttering. However, only a very small number of people in close contact with carriers develop meningococcal disease, when the bacteria 'invades' the body from the throat or nose.

Contact with saliva from the front of the mouth (e.g. from sharing drinks or cigarettes) has not been shown to cause meningococcal disease.

Even though it is hard to catch and uncommon, meningococcal disease is a feared infection that is often featured in the media.

In infants and young children the symptoms of meningococcal disease include:

- > fever
- > refusing to take feeds
- > fretfulness
- > child difficult to wake
- > high-pitched or moaning cry
- > tiny red or purple spots that soon spread and enlarge to look like fresh bruises (colour plate no. 12)
- > pale or blotchy skin
- > abnormal skin colour
- > leg pain
- > cold hands and feet.

In older children and adults the symptoms of meningococcal disease include:

- > headache
- > fever
- > vomiting
- > neck stiffness
- > photophobia (discomfort when looking at bright lights)
- > drowsiness or confusion
- > tiny red or purple spots that soon spread and enlarge to look like fresh bruises (colour plate no.12)
- > collapse
- > joint pains.

Diagnosis is made in a laboratory from a sample of blood or cerebrospinal fluid (fluid around the brain and spinal cord), by examination, growing meningococcal bacteria or PCR testing.

Incubation period

(time between becoming infected and developing symptoms)

Usually 3 – 4 days, but can vary from 1 – 10 days.