



Meningococcal disease

What is meningococcal disease?

Meningococcal disease is an uncommon, but sometimes life-threatening illness. The disease is a result of a bacterial infection of the blood and/or the membranes that line the spinal cord and brain.

Although treatable with antibiotics, the infection can progress very rapidly, so it is important that anyone experiencing symptoms of meningococcal disease seeks medical attention promptly.

At any one time, approximately 10 per cent of healthy people carry meningococcal bacteria harmlessly in their nose or throat, and do not become ill.

There are 13 different types of meningococcal bacteria (called 'serogroups'), but worldwide most disease is caused by serogroups A, B, C, Y and W. Until recently, around 90 per cent of serious meningococcal infections in WA were caused by serogroup B organisms. However, there has been an increase in infections caused by serogroup W organism (MenW) in WA and other Australian states since 2015.

The disease rarely causes serious invasive infections.

How common is it?

On average there are between 10 and 20 cases of meningococcal disease in WA each year, mainly in winter and spring. Nearly all cases of meningococcal disease are unrelated to other cases. Some of the highest rates of meningococcal carriage and illness occur among 15-19 year olds. Once infected, they can transmit the

bacteria to people who are at increased risk of infection, including young children. Other groups at increased risk of meningococcal disease include new military recruits and university students living in residential colleges (particularly in their first year).

How do you get meningococcal disease?

Meningococcal bacteria are spread by respiratory secretions (coughing, sneezing or kissing), but not by saliva, so it cannot be picked up by drinking from the same cup or sharing food. The bacteria do not survive more than a few seconds in the environment, so cannot be picked up from surfaces or objects (for example, a table or pillow) that have been contaminated by the infected person's respiratory secretions.

The disease is most likely to be spread only to very close contacts, such as people who live in the same household, sexual contacts and children attending the same day care for more than four continuous hours.

Signs and symptoms

Unlike other meningococcal serogroups, invasive disease caused by MenW is more severe. People may also experience different symptoms. For example, some people may get septic arthritis, severe upper respiratory tract infection such as pneumonia or gastrointestinal symptoms. All meningococcal disease can be severe, but most people make a full recovery. However, about 10 per cent of cases suffer a long term disability (e.g. loss of a limb, neurologic damage).



In very rare cases, if left untreated, Meningococcal infection can result in death and, while low, MenW has twice the rate of death of other strains.

Meningococcal disease usually takes three to four days to develop but can take as long as 10 days. It is important that people with the symptoms seek medical advice early. The disease is serious and can be life-threatening, but most people recover completely with early antibiotic treatment.

Symptoms in babies include:

- fever
- rapid breathing or panting
- vomiting or difficulty feeding
- irritability
- lethargy (extreme tiredness) or difficult to wake
- unusual crying or moaning
- rash

Symptoms in older children and adults include:

- fever
- headache
- vomiting, diarrhoea
- neck stiffness
- muscle or joint pains
- drowsiness or confusion

Sometimes, these symptoms may be accompanied by the appearance of a spotty red-purple rash that looks like small bleeding points beneath the skin, or bruises. It is important to get this type of rash checked by your doctor promptly.

How do I know I have meningococcal disease?

Diagnosis can be difficult at the start of the illness. If you are sent home by the doctor or hospital, it is important to monitor symptoms

and return promptly for further checks if symptoms get worse or do not improve.

Treatment of meningococcal disease

Antibiotic treatment in hospital is essential for anyone with meningococcal disease. The earlier treatment is started the more likely you are to make a full recovery.

How can meningococcal disease be prevented?

Close contacts

Close contacts are defined as those who have had close (within arm's length) and prolonged contact with a person who is carrying the bacteria within seven days before the start of symptoms. Contacts can include:

- household members
- sexual contacts
- children in the same child care group for more than four continuous hours.
- Party, pub or nightclub goers

Public Health Unit staff conduct contact tracing once informed of a meningococcal case by the hospital.

Contacts are individually assessed. Depending on their level of risk they will be offered antibiotics or given further information on signs and symptoms to look out for to try and prevent the illness.



People who have been exposed to a confirmed case should monitor themselves for signs and symptoms of the illness for around two weeks after their last contact with the infected person. They should seek medical advice if they develop any of the

symptoms mentioned above or if they are concerned.

Is there a vaccine against meningococcal disease?

Vaccines are available against meningococcal serogroups A, B, C, W, and Y.

Meningococcal C vaccine is now combined with the Haemophilus influenzae type B vaccine known as Menitorix and is offered free to all children when they are one year old. Only one dose is required for long-term protection in people 12 months of age or older.

A combined meningococcal vaccine that protects against serogroups A,C,W and Y is now offered for free to persons 15 to 19 years old as part of the WA Meningococcal ACWY program. Vaccination will take place at schools for students in years 10, 11 and 12 and in some university clinics. This vaccine is also recommended (but not funded) for people travelling to high risk areas such as sub-Saharan Africa, the Middle East or Nepal. People considering vaccination should seek advice from their local doctor or travel clinic.

Meningococcal B vaccine is not currently funded by the national immunisation program but is available privately; you will need a prescription from your doctor to purchase this vaccine.

More information

For vaccination information you can contact your local immunisation provider or public health unit.

Metropolitan Perth

Central Immunisation Clinic

- centimm@health.wa.gov.au
- [9321 1312](tel:93211312) (8:30am - 4:30pm Monday to Friday)

Residents of the City of Bayswater

<http://www.bayswater.wa.gov.au/cproot/6953/2/Immunisation-ttable-28112016.pdf>

Residents of the City of Joondalup

<http://www.joondalup.wa.gov.au/Live/Immunisation.aspx>

Residents of the City of Wanneroo

http://www.wanneroo.wa.gov.au/info/20035/community_health_and_safety/205/immunisation

WA Country Health Service

http://healthywa.wa.gov.au/Articles/A_E/Contact-details-for-population-public-health-units