

Meningococcal Disease

Meningococcal disease is a severe but uncommon infection that occurs when meningococcal bacteria invade the body from the throat or nose. At any given time, meningococcal bacteria are carried harmlessly at the back of the throat or in the nose in about 10% of the community. Although most people who have these bacteria in their throat or nose remain quite well, they are able to spread the bacteria to others, and a few of these people may subsequently become ill. Meningococcal disease occurs in two main forms (or a combination of these two forms):

- meningococcal meningitis - when the bacteria infect the lining around the brain and spinal cord
- meningococcal septicaemia - when the bacteria invade the bloodstream and cause blood poisoning.

Signs and Symptoms:

The symptoms of meningococcal disease don't appear in any particular order and may appear differently in different people. Typical symptoms of meningococcal disease are listed below:

Symptoms in babies

- fever, hands and feet may also feel cold
- refusing feeds or vomiting
- high pitched moaning cry or whimpering
- dislike of being handled, fretful
- rash of red-purple spots or bruises that do not fade under pressure
- blank and staring expression
- bulging fontanelle
- difficult to wake, lethargic
- pale blotchy complexion

Symptoms in older children and adults

- vomiting
- fever
- headache
- stiff neck
- dislike of bright lights
- drowsiness
- joint pain
- rash of red-purple spots or bruises that do not fade under pressure

If anyone has any of these symptoms, seek urgent medical attention. Early treatment can sometimes prevent serious complications.

Treatment:

A person with meningococcal disease usually needs to be admitted to hospital for appropriate care and treated with antibiotics.

Control

Close contacts of a person with meningococcal disease have an increased, although still quite low, risk of also developing the disease. As a precaution, public health authorities identify contacts to explain the nature of the disease, and if necessary, prescribe a short course of antibiotics to get rid of any meningococcal bacteria they may be carrying in their throat or nose. In general, only household contacts and other close household like contacts (such as sexual partners) require antibiotics.

Vaccination is also recommended for any recent household, household-like and sexual contacts of people infected with certain strains of meningococcal disease which are preventable through vaccination. When test results are available, public health authorities will inform all contacts and advise them if the strain is vaccine preventable and if so to be promptly vaccinated by a general practitioner. Because antibiotics and vaccination may not always prevent meningococcal disease, all contacts, whether or not they have been given antibiotics or vaccination, need to be alert for the symptoms of the disease for around 2 weeks after their last contact with the infected person (see the meningococcal disease symptom chart under Other Resources). If any symptoms of meningococcal disease develop in close contacts or people close to them, it is important to seek urgent medical advice.

Anyone who has been in contact with a person diagnosed with meningococcal disease is able to continue to attend child care, school or work, and all other activities should continue as normal, whether or not they have received antibiotics or vaccination.

Transmission:

It is not easy to catch meningococcal disease. While the bacteria can be spread via droplets from the nose or throat during coughing and sneezing, close and prolonged contact with a person who has the bacteria in their nose or throat is usually needed for the bacteria to spread. For example, the disease is not spread by sharing saliva through sharing cups, drinks or cigarettes. As meningococcal bacteria cannot live long outside of the body, the infection can also not be picked up from water supplies, swimming pools, bed linen or pillows.

After exposure to the bacteria, it usually takes from three to four days to become ill, although sometimes it can be as little as one day or as long as 10 days.

Prevention:

Immunisation

Some types of meningococcal disease can be prevented by vaccination. There are a number of different strains of meningococcal bacteria. The main strains that cause meningococcal disease worldwide are A, B, C, W and Y. Immunisation against the meningococcal A, C, W and Y strains is recommended as part of the National Immunisation Program Schedule at 12 months of age.

Meningococcal ACWY vaccination is also offered to students in Year 10 through the School Immunisation Program and for adolescents aged 15 - 19 years through their GP or regular immunisation provider.

From April 2019, the meningococcal ACWY vaccine will be funded on an ongoing basis through the National Immunisation Program (NIP). The Queensland Department of Health will continue to provide state-funded meningococcal ACWY vaccine until the end of March 2019 for adolescents aged 15 - 19 years to enable the state funded program to continue until the commencement of the NIP funded ACWY program for adolescents.

A vaccine is available for the meningococcal B strain; however, this vaccine is not currently on the National Immunisation Schedule; for more information visit your GP or immunisation provider.

Like all medications, vaccines may have side effects. Most side effects are minor, last a short time and do not lead to any long-term problems. Possible side effects of meningococcal vaccine may include soreness, redness and swelling at the injection site, fever, loss of appetite and headache. These side effects should last only for a short time. More serious side effects are extremely rare. Contact your immunisation provider if you or your child has a reaction following vaccination which you consider serious or unexpected.

Smoking

Smoking increases the chance of someone carrying the bacteria and spreading it to others. It is especially important not to smoke around young children who are particularly vulnerable to meningococcal disease.

Other resources:

[Queensland Health immunisation](https://www.health.qld.gov.au/public-health/topics/immunisation) (<https://www.health.qld.gov.au/public-health/topics/immunisation>)
[13 HEALTH](https://www.qld.gov.au/health/contacts/advice/13health/index.html) (<https://www.qld.gov.au/health/contacts/advice/13health/index.html>) (call 13 43 25 84)
[Immunise Australia](http://www.immunise.health.gov.au/) (<http://www.immunise.health.gov.au/>) (call 1800 671 811)

Help and assistance:

You or your child can be vaccinated at your local doctor or medical centre. Check with your local council, community child health and community health centre regarding free immunisation clinics. For further information, please contact your local doctor or nearest [public health unit](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units) (<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>).

References

Heymann, D., ed. 2015. Control of Communicable Diseases Manual, 20th edition. Washington, DC: American Public Health Association.

Australian Government, 2013. [The Australian Immunisation Handbook](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home) (<http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home>)(10th Ed.)