

Meningococcal Disease

Fact Sheet

What is Meningococcal Disease?

Meningococcal disease is a serious life-threatening illness with severe complications that causes inflammation of the lining of the spinal cord and brain (meningitis) and blood poisoning (septicaemia). In NSW approximately 250 people are affected by meningococcal disease each year. 5% to 10% of these people will die despite rapid treatment. Meningococcal disease is caused by infection with the meningococcus bacteria called *Neisseria meningitidis*. Meningococcal bacteria have several different strains, which cause infection; the most common strains of meningococcal bacteria in Australia are group B and group C. A vaccine is available to prevent infection from the group C strain but not from the group B strain.

Symptoms of meningococcal disease may develop within a few hours or over a period of several days and include; a high fever, headache, tiredness, neck stiffness, joint pain, a dislike of bright lights (photophobia), nausea and vomiting and a rash of reddish/purple spots or bruises. Not all these symptoms are displayed at the one time and in young children and babies the symptoms of fever, headache, neck stiffness and rash may not be present at all. Their symptoms are more non-specific and are likely to include irritability, difficulty in waking up, high-pitched crying, vomiting and a refusal to eat. Meningococcal disease is very difficult to diagnose in the early stages. If you have previously sought medical advice for these symptoms and they suddenly worsen you should seek urgent medical attention. Complications of meningococcal disease can also be severe and include hearing loss, the loss of limbs and mental retardation.

Meningococcal disease is diagnosed based on the patient's symptoms and is confirmed by growing the meningococcal bacteria from spinal fluid and blood. Treatment for meningococcal disease is with intravenous antibiotics. Patients with meningococcal disease are frequently treated

in an intensive care unit.

Because of the life-threatening nature of meningococcal disease and the risk of long-term complications meningococcal disease is a notifiable disease. This means that when a diagnosis of meningococcal disease is made the Public Health Unit is contacted so that they can to trace family members, friends and any other people who may have been exposed to the meningococcal bacteria. Following these investigations, the Public Health Unit may recommend prophylactic antibiotics to reduce the risk of these people acquiring meningococcal disease.

Who is at risk from Meningococcal infections?

Meningococcal disease can affect anyone but those most at risk include:

- Children under the age of 5 years old and people between the ages of 15 to 19 years old.
- Household contacts of patients with meningococcal disease.
- People who have a poor immune system.
- Travellers to countries with high rates of meningococcal disease.
- People exposed to cigarette smoke.

How can Meningococcal Disease be spread?

The meningococcal bacteria are transferred from one person to another via the respiratory secretions from the nose or throat of an affected person. This is called Droplet transmission. Because meningococcal bacteria do not live very long outside the human body it is unlikely that you would catch meningococcal disease from the environment.

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How will my care change whilst in hospital?

- Regular and thorough hand hygiene is one of the most successful ways to prevent the spread of ALL infections.
- A sign is placed outside your door to alert hospital staff for the need to use special protective infection control precautions. This sign also alerts visitors of the need to speak with nursing staff prior to entering your room.
- During the infectious period hospital staff will wear protective apparel such as gloves, a mask, goggles and an apron or gown when they enter your room. Your visitors will also be asked to wear these items.

You will be allocated a private room with your own en-suite facilities. Your movement throughout the hospital will be limited to essential movement only and you will be required to put on a mask prior to leaving the room.

Good Hand Hygiene Practices

Hand Hygiene is the most effective way to prevent **ALL** infections, including the flu and the common cold. Encourage your family and friends to learn and maintain good hand hygiene practices every day

Please refer to the hand hygiene information in the patient information booklet or hand hygiene leaflet available from the Infection prevention and control team.

Alternative - Alcohol based hand rub / gel

During your stay in hospital, you may have seen the staff using an alcohol-based hand rub, as an alternative to soap and water. Alcohol-based hand rubs or gels can be used for hand hygiene as long as your hands are not visibly soiled / dirty. There are a variety of brands on the market and are available for purchase at most pharmacies. You may choose to use this type of product at home.

Can I still have visitors?

During your infectious period we recommend that you restrict the number of visitors you have to as few as possible. People who should not visit you include children, pregnant women, and immune-compromised people. To prevent the spread of meningococcal disease, the nursing staff will provide education to your visitors about the need to wear protective equipment such as gloves, mask, goggles and an apron or gown as well as instruct your visitors on the importance of strict hand hygiene before and after they enter your room. We ask that you also encourage your visitors to do this. They can use either; soap and water at the wall sink in the ward, or the alcohol hand rub provided outside your room.

What happens when I go home?

Because of the serious nature of meningococcal disease and the need for intensive care and antibiotic therapy, it is unlikely that you will be discharged from hospital until you are well past the infectious stage. However, the following infection control information is still important to prevent the spread of ANY type of infectious disease.

- When you return home, it is important for you, your family, and your friends to continue the good hand hygiene practices that you have been taught in hospital every day.
- It is important that anyone assisting you with close personal care wears gloves if they are going to be in contact with any wounds, blood, urine, or faeces. They must wash their hands well, after removing their gloves and disposing of the gloves immediately in the rubbish bin.

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Where can I get further information?

You can talk to your doctor or the nursing staff. If you wish to speak with the Infection Control Department, ask your nurse to contact us. Our office hours are 8am to 4pm Monday to Friday. Our contact numbers are (02) 9480 9032 or (02) 9480 9433.

Alternatively, contact your Local Public Health Unit 1300 066 055

References

NSW Dept of Health; Communicable Diseases Factsheets – Meningococcal Disease (31 July 2020)

Centers for Disease Control and Prevention (CDC); Infectious Disease Factsheets – Meningococcal Disease (January 21, 2020)

NSW Dept of Health; Infection Prevention and Control Policy 2017_013

National Health and Medical Research Council; Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)

Australian Technical Advisory Group on Immunisation (ATAGI). Australian Immunisation Handbook, Australian Government Department of Health, Canberra, 2018, www.immunisationhandbook.health.gov.au

