

# Meningococcal Disease Fact Sheet

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This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a healthcare professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

## What is the ‘meningococcus’?

The meningococcus is the *Neisseria meningitidis* bacteria that can be commonly found in the nose and throat of approximately 5-10% of healthy people without ever causing disease. These healthy people who carry the bacteria in their nose and throat are called “carriers.”

## What is meningococcal disease?

Meningococcal disease is caused by bacteria known as *Neisseria meningitidis* (commonly known as meningococcus). Meningococcal disease is a very serious infection. It occurs in people who either have come into contact with a healthy person known as a “carrier” of meningococci bacteria or come in contact with a sick person with meningococcal disease.

Meningococcal disease occurs in two main forms. Meningococcal septicaemia, also called meningococemia, occurs when the bacteria infect the bloodstream and cause blood poisoning. Meningococcal meningitis occurs when the bacteria infect the outer lining around the brain and spinal cord.

## Is meningococcal disease the same as meningitis?

“Meningococcal disease” is not the same as “meningitis.” “Meningococcal disease” may result in meningococcal meningitis, or may result in meningococcal meningococemia (blood infection), or both types of infection at the same time.

“Meningitis” is an infection of the lining of the brain. Meningitis is the most common form

of meningococcal infection. Different viruses and bacteria can cause meningitis.

## How is the *Neisseria meningitidis* bacteria that causes meningococcal disease spread?

The *Neisseria meningitidis* meningococcus bacteria are spread by direct contact (coughing, sneezing and “swapping spit”) with respiratory and oral secretions (saliva, sputum or nasal mucus) of an infected person. While some people who carry this bacteria in their throat or nose remain healthy, they are able to spread it to others. The bacteria does not survive very long outside the body.

To prevent the spread of meningococci, persons should not share objects that have come in contact with another person’s mouth. Furthermore persons should ensure good hand hygiene and use their sleeve or shoulder to cover coughs or sneezes.

## What are the symptoms of meningococcal disease?

The signs and symptoms of meningococcal disease can vary widely, but include sudden onset of high fever, severe headache, vomiting, stiff neck and a rash. Sensitivity to light, sleepiness, confusion and, in severe cases, coma may also occur.

Adults and children may experience a red to purple, pin-point rash or bruises which may appear anywhere on the body and should be taken very seriously.

Symptoms may be difficult to detect in infants. Symptoms in infants may include: lethargy and drowsiness, a blank stare, difficulty waking, high fever, irritability and general dislike of being held, high pitched crying, pale to blotchy skin, rash, vomiting, or feeding poorly.

As the disease progresses, a person of any age may have a seizure. Meningococcal disease is fatal in 8-15% of cases.

### **How soon do the meningococcal disease symptoms appear?**

The symptoms may develop rapidly, sometimes in a matter of hours, but usually over the course of 1-2 days. In some cases, death may occur within hours of the onset of symptoms. The symptoms may appear any time between 1 to ten days after exposure, but usually within 3 to 4 days.

### **Who gets meningococcal disease?**

It is not well understood why only a few people develop meningococcal disease. It is most common in children under 5, adolescents and young adults. Studies show that, compared to other persons their age, university students, especially those who live in dormitories, are at a slightly increased risk for meningococcal disease. This may be due to a previous viral illness, immune compromised disease, societal factors that include overcrowding, smoking and second hand smoke.

The majority of cases of meningococcal disease are reported in the winter months; however meningococcal disease occurs year round.

### **When and for how long is an infected person able to spread the disease?**

A person with meningococcal disease may transmit the disease beginning 2 to 10 days before he/she becomes ill until the bacteria are no longer present in discharges from the nose and throat.

### **What are the complications of meningococcal disease?**

Early diagnosis and treatment usually result in a positive outcome.

More serious complications may occur at the time of the acute disease or during the recovery period. Some people who recover have brain injury, loss of limbs or other serious complications involving the heart, muscles and joints. Deafness is the most common complication in people who recover from meningococcal disease.

### **What is the treatment for meningococcal disease?**

Meningococcal disease can be treated with a number of effective antibiotics. Persons who have been in close or direct contact with a patient with meningococcal disease may need to take antibiotics as a preventive measure to eliminate the bacteria that they may be carrying. These bacteria in their nose or throat could be spread to others.

### **Should people who have been in contact with a person with a diagnosed case of meningococcal disease be protected?**

Only people who have been in close or direct contact need to be considered for preventive treatment. Direct contacts are usually advised to take preventive antibiotics. All contacts should be alerted to watch for early signs of illness, especially fever, and seek treatment promptly.

Casual contact that might occur in a classroom, office or work setting is not usually significant enough to warrant antibiotic treatment. It is still important for them to monitor for any symptoms and seek more information from a healthcare provider.

## **Is there a vaccine to prevent meningococcal disease?**

There are a number of vaccines that will protect against meningococcal disease. Contact your health care provider or local health unit to know which vaccine is best for you and your family.

For additional information on meningococcal disease speak with your health care practitioner, contact your local public health unit, or contact:

ServiceOntario, INFOline: 1-877-234-4343 toll free in Ontario (TTY: 1-800-387-5559)  
Telehealth Ontario: 1-866-797-0000 (TTY: 1-866-797-0007)

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