

Meningococcal Infections and Vaccination

What are meningococcal infections?

Bacteria cause meningococcal infections. The more serious infections caused by meningococcal bacteria are meningitis, an infection that affects the lining of the brain, and septicemia, an infection of the blood.

What are the signs and symptoms of meningococcal infection?

People can carry the bacteria without becoming ill, but can pass it to others who do become ill. The first signs of meningococcal infection are much like the flu. Symptoms include fever, headache, nausea, vomiting, and feeling unwell. These symptoms are usually worse than those for the flu, and progress quickly to a bad headache, stiff neck, and/or a reddish-purple, tiny, bruise-like skin rash.

In young children, the most obvious symptom may be a major change in behaviour, such as sleepiness, irritability or excessive crying.

People with sudden onset of these symptoms should see a doctor immediately.

How are meningococcal infections spread?

Meningococcal bacteria are spread from one person to another by close, direct contact with droplets from the nose or throat of the infected person. This can occur through activities such as kissing or sharing of food, drinks, baby bottles, soothers, cigarettes, lipsticks, water bottles, mouth guards used for sports, or mouthpieces of musical instruments.

There is no increased risk from handshaking or handholding, or attending the same school or sports event. It is not a risk to be with someone who was in contact with an infected person.

How can meningococcal infection be prevented?

Practice good personal hygiene, including frequent hand washing and do not share any item that may have saliva or spit on it to prevent meningococcal infection.

If you have been in close, direct contact with a person with meningococcal infection, an antibiotic and a vaccination are recommended and provided free. This helps to prevent the development of the disease. Although these measures are very effective, it is important that a doctor be consulted if symptoms of the disease develop.

There are vaccines to prevent meningococcal infection!

Vaccination can prevent most serious meningococcal infections. It is especially important that children and adults who are more likely to have serious problems from meningococcal infections receive the vaccine.

This includes those who:

- Do not have a spleen, or whose spleen is not working;
- Have particular immune system disorders;
- Have had a haematopoietic stem cell or solid organ transplant; or
- Will be having or have had a cochlear (inner ear) implant.

The meningococcal A, C, Y, W-135 vaccine protects against four types of meningococcal bacteria. The vaccine is effective in those two years of age and older. Protection starts from 10 to 14 days after the vaccine is given.

Meningococcal vaccine is also recommended, but not provided free, for persons living or traveling in an area at high risk of meningococcal infection.

A travel medicine clinic or public health unit can advise you on the areas of the world where the risk is high and the type of meningococcal vaccine you should receive.

Meningococcal vaccine is also recommended, but not provided free for students attending post-secondary institutions, particularly if they are first-year students living in dormitories. These students are at slightly higher risk for meningococcal infection because they live and study in closer proximity to each other. A travel medicine clinic or public health unit can advise you on the type of meningococcal vaccine you should have if you are attending a post-secondary institution.

The vaccine is sometimes used to control outbreaks of meningococcal infection in BC. The vaccine is then recommended for certain age groups that have been affected with the disease in a specific area.

Are booster shots needed?

This will depend on the type of vaccine you receive. Your health care provider will advise you.

Possible vaccine reactions

Vaccine side effects can include tenderness or pain with redness and/or swelling where the needle was given. Fever, chills, mild headache, and fatigue may also occur within the first 24 hours after vaccination. These reactions are mild and temporary.

As with any vaccine, there is the possibility of an allergic reaction that may include hives, wheezy breathing, or swelling of some part of the body. This reaction is called anaphylaxis. If this happens, particularly swelling around the throat or sudden and severe difficulty breathing, immediately call 911 or the emergency number listed in the local phone book. After getting any type of immunization, you will be asked to stay in the clinic for 15 minutes.

Any serious or unexpected reactions should be reported to your doctor or local public health nurse.

NOTE: Acetaminophen, for example Tylenol®, can be given if fever or soreness is present after getting the vaccine. Acetylsalicylic acid, also known as ASA or Aspirin®, should NOT be given to anyone under 20 years of age due to the risk of Reye's Syndrome.

Warning

People with the following condition must consult with a public health nurse or their family doctor before receiving the vaccine:

- History of shock-like allergic reaction (anaphylaxis) to a previous dose of any meningococcal vaccine, to any component of the vaccine, or to latex.

Mature minor consent

While every effort is made to seek parental or guardian informed consent prior to immunizations, children under the age of 19 who are able to fully understand the risks and benefits of specific immunizations may consent to, or refuse, immunizations, regardless of the parent's or guardian's wishes. Appropriate steps are taken to avoid peer influence in these decisions. It is recommended that parents/guardians and their minor children discuss immunizations, and ask the nurse or doctor questions before immunization.



BC Centre for Disease Control
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