HOW to help protect your child

Practicing basic hygiene through hand washing, limiting close contacts, not sharing possibly infected drinking glasses, toothbrushes, eating utensils, toys and such can limit the spread of germs. Meningococcal vaccination is important to help protect your child against this fast-moving and sometimes life-threatening disease.

Local meningococcal disease outbreaks where 2 or more cases occur in a school or college have been reported in Canada for the past 10-12 years. In addition, people can be carriers of the disease without knowing that they have it and it could be passed on to anyone who is not immunized. Vaccination helps prevent meningococcal disease by preparing the body's immune system to respond to and fight off the bacteria.

Different meningococcal vaccines have been developed to help protect against the various kinds of this bacteria. There are effective vaccines available to protect your child against meningococcal serogroups A, C, Y and W-135. There is currently no vaccine for meningococcal serogroup B.

While these vaccines are generally well tolerated, allergic reactions and certain side effects may occur. Your child may have a slight fever, be fussy, sleepier or have less appetite than usual. You may notice for a short time redness, swelling or pain at the place where the needle was inserted. These are very common side effects that may happen 12 to 24 hours after the immunization and will usually disappear within a few days. About 10% of older children and adults might experience some discomfort and have a headache. This is not a complete list of possible side effects. If any unexpected reactions occur after vaccination, you should contact your healthcare professional.

Help protect your child against meningococcal disease. Talk to your doctor today about your vaccination options.

For more information, please visit www.meninfo.ca

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Learn more so you can do more to protect your child

Learn about meningococcal disease

- WHAT is it
- WHERE does it come from
- WHY is it hard to recognize
- WHO is at risk
- HOW can I help protect my child

WHAT it is

Meningococcal disease is a rare but potentially serious bacterial infection that more frequently affects infants, children and adolescents.

The most common illnesses caused by meningococcal bacteria are meningitis, an inflammation of the lining covering the brain and spinal cord, and septicemia, a bloodstream infection. Meningococcal bacteria may also cause infections of the lungs, joints, heart, eyes, or other parts of the body.

Although most people fully recover, up to 1 in 10 people who contract meningococcal disease die.

While early symptoms of meningococcal disease are often deceptively mild, this infection can cause death within 24 to 48 hours and up to 1 in 5 survivors may suffer from permanent and disabling effects such as:

- Brain damage
- Learning disabilities
- Hearing loss
- Loss of limbs

WHERE it comes from

Meningococcal bacteria can pass from person to person through secretions of the nose and throat as well as saliva.

The following everyday activities can spread the bacteria:

- Kissing
- Coughing
- Sneezing

Sharing anything contaminated that comes in contact with the mouth can also spread the bacteria. For example, drinking glasses, lipstick, eating utensils and toys.

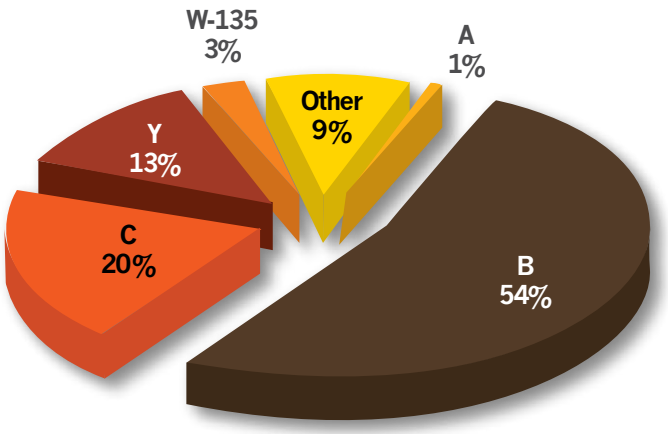
Some people who get infected do not get sick but can carry the bacteria and spread it to others. It is believed that 10% to 20% of the population carries the meningococcal germ at any given time and the carriage rate may be higher in epidemic situations. These carrier infections may last up to 6 months. Therefore, the meningococcal infection is usually the result of contact with a healthy carrier rather than someone who is sick with meningococcal disease.

The bacteria that cause meningococcal disease are called *Neisseria meningitidis*. **There are 5 major serogroups of meningococcal bacteria: A, B, C, W-135, and Y.**

Meningococcal disease can pass from person to person through certain everyday activities.

WHERE it comes from

Canadian serogroup distribution of meningococcal disease cases in 2006*



*In 2006, 210 Canadians contracted meningococcal disease. Of these cases, 113 were caused by serogroup B, 2 were caused by A, 43 were caused by C, 6 were caused by W-135 and 27 were caused by Y.

WHO is at risk

Meningococcal disease can strike at any age, but infants younger than 1 year of age, children under the age of 4 years and teenagers between 15 and 19 years of age have the highest incidence of infection.

It is thought that infants younger than 1 year of age have the highest incidence rates of meningococcal disease because they have not developed specific immunity and may also be in very close contact with healthy carriers, including parents.

Incidence of meningococcal disease in 1995-2006

Infants younger than 1 year
8.7 cases per 100,000

Children 1 to 4 years
2.3 cases per 100,000

Teens 15 to 19 years
1.9 cases per 100,000

Average Canadian Incidence (infants, children teens and adults)
0.77 cases per 100,000

Other groups at increased risk of meningococcal disease include:

- People exposed to situations of close living such as college dorms, bars and clubs, military recruits
- People who have complement, properdin or factor D deficiency
- People with an anatomic or functional disease of the spleen
- Children with primary antibody deficiency
- Laboratory personnel with exposure to meningococcal bacteria
- Travellers to areas where meningococcal disease is always present

WHY it's hard to recognize

Meningococcal disease may start with mild symptoms, but can very quickly become life-threatening.

More than 90% of meningococcal infections will lead to meningococcal meningitis and septicemia. Other conditions such as infections of the lungs, joints, and heart are less common.

Early symptoms can be similar to those seen with the flu. As a result, meningococcal disease may not be diagnosed until the more advanced symptoms appear, usually around 12 to 15 hours after the first symptoms.

Meningococcal meningitis and septicemia share some symptoms but there are also differences:

- Septicemia infections almost always result in a rash while meningitis infections may not cause a rash in all patients
- Meningococcal septicemia patients are not likely to present a stiff or painful neck

However, both forms of meningococcal disease are medical emergencies and require immediate medical attention.

WHY it's hard to recognize

Symptoms of of meningitis and septicemia	Meningitis	Septicemia
Fever, usually high	✔	✔
Cold hands and feet	✔	✔
Drowsiness, impaired consciousness	✔	✔
Irritability, fussiness, agitation	✔	✔
Severe headache	✔	✔
Vomiting	✔	✔
Stiff neck, pain on moving neck	✔	
Rash	not always	✔
Rapid breathing	rarely	✔
Pain in muscles, joints, abdomen	rarely	✔

To check for the meningococcal rash, press a clear colorless glass against the rash. If the redness does not fade with the pressure, the rash is likely meningococcal. Note that the redness may fade under pressure when the rash first appears, therefore it may be necessary to do the glass test more than once.

Please keep in mind that some of the symptoms may not be present.

Because the early symptoms of meningococcal disease are similar to the flu, it may go unrecognized until it is too late.

If you think your child may have meningitis or septicemia, it is critical to get him or her to the hospital as quickly as possible.