Meningococcal vaccine

Meningococcal diseases are caused by a germ (a kind of bacteria) called meningococcus. This germ can cause two serious diseases:

- meningitis, an infection of the fluid and lining that cover the brain and spinal cord, and
- septicemia, a serious blood infection.

You can protect your children from these diseases with a vaccine.

There are two kinds of meningococcal vaccine available in Canada and each provides different protection:

- One is more effective in babies and young children. It only protects against one type of the meningococcus germ (type C). In Canada, the vaccine is available under these brand names: Menjugate (Novartis), NeisVac-C (GlaxoSmithKline) and Meningitec (Wyeth).
- Another vaccine is called MCV4 and helps protect children 2 years and older against all 4 preventable types of the meningococcal germ called: Menactra (sanofi Pasteur). Your doctor may offer this vaccine to your child to reduce the chance of her getting meningococcal infection from the 3 groups not already covered. This vaccine is recommended for people at higher risk of getting meningococcal infection. It is not covered by all provincial or territorial health plans.

Your doctor will know which vaccine is best for your child.

The Canadian Paediatric Society and the National Advisory Committee on Immunization recommend that all babies and young children get the vaccine to protect them against type C meningococcus.

How common is meningococcal disease?

- In Canada, there are about 200 cases of meningococcal disease every year.
- The germs that cause the most infections are known as group B. Group C, W135 and Y cause the rest.
- Since 1989, there have been outbreaks of group C disease among teenagers in many parts of Canada. These outbreaks usually happen in one or two schools in an area and result in less than 5 cases.

How serious are these diseases?

- Without treatment, all children who get meningitis will die or suffer damage that lasts the rest of their lives. Even with treatment, about 1 in 20 children will die.
- About 1 in 20 children who survive meningitis will have brain damage.
- Septicemia can kill very quickly. Even with treatment, about 1 in 4 children with meningococcal septicemia will die or have permanent damage.

How do meningococcal diseases spread?

- The germs that cause meningococcal diseases are quite common. They live in the back of the nose and throat of about 1 in 5 teenagers and adults without causing any sickness. These people are called “healthy carriers.”
• The germs are not very strong. They die quickly outside the body.
• The germs are spread mostly by healthy carriers, and not by people who are clearly sick with the disease.
• For the disease to spread, people must have close, direct contact such family members living in the same house or others with similar close contact.
• The germs can also be spread through saliva when people share things such as cigarettes, lipstick, food or drinks, cups, water bottles, cans, drinking straws, toothbrushes, toys, mouth guards and musical instruments with mouthpieces.
• Smoking and overcrowding increase the risk that the germs will spread.
• If someone has meningococcal disease, doctors will often give antibiotics to their family members or people who come into close contact. This can stop the germs from spreading.

**How can you tell if your child has meningococcal meningitis?**

• Early signs are fever and a major change in behaviour such as drowsiness, reduced consciousness (your child doesn't seem awake), irritability, fussiness (crying) and/or agitation.
• Other symptoms include severe headache, vomiting (throwing up), stiff neck, pain when moving the head or neck, aches and pains, joint pain, and convulsions (seizures).
• Some of children with meningococcal meningitis have a skin rash made up of red spots that don't disappear when pressed. The spots may get quite large over a short period of time.

**How can you tell if your child has meningococcal septicemia?**

• Early signs are fever, aches and pains, joint pain and headache.
• Children with this disease get sick very quickly (in a few hours). They are drowsy, semi-conscious, irritable or agitated.
• Almost all children with septicemia have a skin rash that starts as red spots. The spots increase in size and number in just a few hours.
• The disease can move very quickly. Complications include low blood pressure (shock), coma, convulsions (seizures), and difficulty breathing.

**When should my child get the vaccine for babies and children?**

• The Canadian Paediatric Society recommends that infants receive 2 or 3 meningococcal shots before 12 months of age AND a booster shot between 12 to 23 months of age. The specific age that your child will be offered the vaccine depends on your provincial or territorial immunization program.
• Children at higher risk for meningococcal infection should receive a conjugate meningococcal C vaccine as a baby and MCV4 when they reach 2 years of age.
• All adolescents should receive a booster dose of MCV4 or conjugate meningococcal C vaccine at about 12 years of age.

**How safe is the vaccine?**

• All forms of the vaccine are very safe.
• They often cause redness, swelling or pain at the place where you get the needle.
• Ask your doctor what you can do to control pain or swelling.

**Who should not get the vaccine?**

• People who have had a bad allergic reaction to a previous dose of the vaccine should not get it again.

**Where can I get the vaccine?**

Talk to your doctor or local public health clinic to find out where it is available and when your child
should get it in in your province.

- The vaccine that prevents meningococcal type C can be started at any time from 2 months of age. However your provincial and territorial immunization program may vary on when it is provided it free.
- The MCV4 vaccine can be given any time after age 2. Some provinces and territories do not currently cover the cost of MCV4 vaccine.

For more information

- Meningococcal vaccine for children and adolescents, a statement of the Canadian Paediatric Society.

For complete information on vaccinations in Canada, read Your Child’s Best Shot: A Parent’s Guide to Vaccination.

Developed by the CPS Infectious Diseases and Immunization Committee

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This information should not be used as a substitute for the medical care and advice of your physician. There may be variations in treatment that your physician may recommend based on individual facts and circumstances.

Canadian Paediatric Society
2305 St. Laurent Blvd.,
Ottawa, Ont. K1G 4J8
Phone: 613-526-9397, fax: 613-526-3332

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