# Family Resource





## MENINGOCOCCAL B VACCINE: WHAT PARENTS NEED TO KNOW

#### WHAT IS MENINGOCOCCAL DISEASE?

 Meningococcal disease is a serious bacterial infection that is difficult to diagnose and treat.

Meningococcal disease starts like many other infections with headache, nausea, vomiting and fever. This infection can quickly spread into the protective membranes of the brain and spinal cord (meningococcal meningitis) and into the bloodstream (meningococcal septicemia) causing bleeding into the skin and organs. The infection causes death within 24-48 hours in 10-20% of cases. Lifelong disabilities like amputations, brain injury, deafness, and skin scarring occur in 20-30 % of cases.

#### **HOW COMMON IS MENINGOCOCCAL B DISEASE?**

 Meningococcal disease is a rare but life threatening illness. In Canada, meningococcal groups B, C, Y and W cause disease.<sup>1</sup>

Meningococcal group B causes most of the invasive meningococcal disease (IMD) in Canada<sup>2</sup>:

- 80% in infants under 1 year of age
- 67% in children 1-4 years of age
- 62% in 15-19 year olds

There have been recent outbreaks of group B meningococcal disease in U.S. Universities.<sup>3</sup>

On average there are 3 cases of group B infection every month in children under 2 years old in Canada. The risk of getting meningococcal B disease in childhood is 1 in 6200 and the lifetime risk is 1 in 3200.4

There is now a vaccine called Bexsero® that helps protect against meningococcal B disease.<sup>5</sup>

### WHO SHOULD GET THE VACCINE?

 The vaccine is approved for use in children from 2 months to 17 years old in Canada.<sup>5</sup>

The highest risk age group for meningococcal B disease is healthy infants under 1 year, followed by toddlers 1-4 years and teenagers 15-19 years old.<sup>2</sup>

Some immune system disorders can make people more susceptible to getting sick from meningococcal infection.

The meningococcal C vaccine that is part of the routine infant program and the meningococcal ACWY vaccine that is part of the grade 9 routine schedule do not protect against meningococcal B disease.

#### **HOW DOES THE VACCINE WORK?**

 It stimulates the immune system to produce antibodies against meningococcal B bacteria.

Meningococcal B vaccine (4CMenB) is a 4 component vaccine made from inactivated meningococcal B protein particles (antigens) that stimulate the immune system to make specific antibodies that recognize and kill meningococcal B bacteria that contain at least one of these components. The vaccine is made by using only inactivated parts of the bacteria and cannot cause infection.

One or more of these 4 components are estimated to be present in at least 2/3 of meningococcal B strains in Canada.<sup>6</sup>

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#### IS THE VACCINE SAFE?

· There have been no unusual patterns of serious reactions to date.

More than 7000 babies, children, and teenagers were safely vaccinated with meningococcal B vaccine7 before it was approved for use in Canada, Europe, and Australia. Over 20,000 vaccine doses have been given to babies under 1 and more than 25,000 doses have been given to teenagers and adults.

#### WHAT ARE THE VACCINE SIDE EFFECTS?

· Common side effects of the meningococcal B vaccine include soreness where the shot is given, muscle aches, as well as fever, sleepiness and fussiness in babies for a day or two.

Fever is very common about 6 hours after the shot is given and lasts a day or two in children under 2 years old. Fever is more frequent when other infant vaccines are given at the same time as meningococcal B vaccine.8

Acetaminophen (Tylenol®, Tempra®) reduces the fever and can safely be given at the same time as the vaccine and repeated every 4-6 hours as needed for the first 24 hours after vaccination.8 Give the acetaminophen dose according to the package instructions.

If you notice any unexpected or serious side effects, call your doctor, nurse or pharmacist.

#### **HOW IS THE VACCINE GIVEN?**

Reference list available on the BC Pediatric Society website:

· The vaccine is given by injection (a shot) in the leg or arm, depending on your child's age.

Your child will need 2-4 doses depending on their age when they get the vaccine.5

The meningococcal B vaccine can be given at the same time as other shots, or any time before or after.

It is not known how long this vaccine protects against disease. It is likely that if a child is vaccinated in infancy a booster dose will be needed to protect them in adolescence.

#### WHERE CAN I GET MENINGOCOCCAL B VACCINE?

· The meningococcal B vaccine is not paid for by the government in B.C.

Your doctor may have the vaccine in the office, or may give you a prescription to take to a pharmacy. Travel clinics also give the meningococcal B vaccine.

The meningococcal B vaccine is about \$100 a dose. Extended health care plans may cover the cost. Contact your health care plan and give them the Bexsero® Drug Identification Number 02417030 to find out about your child's coverage.

www.bcpeds.ca/uploadfiles/documents/2014/Meningococcal\_Parents\_Reference.pdf

Vaccines help protect your child from infections, just as car seats or bicycle helmets help protect your child from injuries.