

## Pneumococcal Conjugate Vaccine (Prevnar)

### How are children protected against invasive pneumococcal disease (IPD)?

Vaccines are the best way to protect children against some very serious infections. The National Advisory Committee on Immunization (NACI) strongly recommends routine immunization.

The conjugate pneumococcal vaccine protects children against invasive pneumococcal infections such as pneumonia, bacteraemia (infection of the blood), and meningitis (infection of the brain).

### What is invasive pneumococcal disease (IPD)?

IPD is a bacterial infection caused by a type of bacteria called streptococcus pneumoniae (or pneumococcus). This type of bacteria can cause any of the following:

- pneumonia (lung infection),
- bacteraemia (infection of the blood), or
- meningitis (infection of the lining of the brain and spinal cord).

Pneumococcal infection is also a frequent cause of ear infections (otitis media).

Pneumonia, bacteraemia, and meningitis can sometimes cause death or long lasting complications such as deafness, especially in people with a high-risk medical condition.

Sometimes antibiotics do not work against the pneumococcal infection (this is called antibiotic resistance). When there is antibiotic resistance, it is more difficult to treat the infection.

### How do you get invasive pneumococcal disease?

The bacteria that cause IPD can live at the back of the nose and throat without causing symptoms. People of all ages can be healthy carriers of pneumococci bacteria, but young children are the most frequent carriers of the bacteria.

The bacteria are spread through droplets in the air from coughing or sneezing. Bacteria can also be spread through the saliva of an infected person when common items are shared, e.g., beverages (bottles, straws), eating utensils, or chewing on toys.

### Why is the pneumococcal vaccine important?

Streptococcus pneumoniae is the most common cause of bacterial infection in children under 2 years of age. Pneumococcal (conjugate) vaccine can prevent pneumonia, bacteraemia and meningitis caused by streptococcus pneumoniae bacteria in these young children.

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### **Who should get the vaccine?**

Since January 1, 2005, children born on or after January 1, 2004, who are under 2 years of age, are eligible to get the publicly funded pneumococcal (conjugate) vaccine as part of their routine immunization.

This vaccine is also available for high-risk children under the age of 5 years (as these children are at an increased risk for invasive pneumococcal disease).

### **High-risk children are those who have any of the following high-risk medical conditions:**

- sickle cell disease or other sickle cell disorders,
- non-functioning or missing spleen,
- HIV infection,
- conditions that suppress the immune system (e.g., cancer, organ transplant, nephrotic syndrome, long-term corticosteroid use),
- chronic medical conditions (e.g. chronic heart or lung disease, diabetes mellitus, cerebrospinal fluid leak, chronic kidney or liver disease), or
- before or after a cochlear implant.

About one in four children who become ill from IPD have an underlying medical condition.

### **When should the pneumococcal vaccine be given?**

The recommended conjugate vaccine series usually begins at the age of 2 months, but can be given as early as 6 weeks of age. However, the schedule used and the number of doses required (up to four doses) will depend on the child's age at the time of the first dose of pneumococcal vaccine.

For more detailed information please contact your doctor or your local public health unit.

### **Are there side effects from the vaccine?**

Mild reactions include short-lasting soreness and redness where the needle was given. A fever of 38° C or greater may occur.

Other uncommon side effects may include irritability, drowsiness, restless sleep, decreased appetite, vomiting, diarrhea, rash or hives. A small bump is sometimes felt at the site of the needle for several weeks. Severe reactions are rare. You should always discuss the benefits and risks of any vaccine with your doctor or KFL&A Public Health.

### **Who should not get the vaccine?**

Children should not receive the vaccine if they have allergies to any component of the vaccine or if they had an anaphylactic reaction to a prior dose of the vaccine.

### **When should I call my doctor?**

Call your doctor/nurse practitioner or go to the nearest hospital emergency department if your child has any of the following symptoms within three days of getting the needle:

- hives,
- swelling of the face or mouth,
- trouble breathing, hoarseness or wheezing,
- high fever (over 40° C or 104° F),
- convulsions or seizures, or
- other serious reactions to the vaccine.

**Who should I talk to if I have any questions?**

For more information, please contact your doctor/nurse practitioner or call KFL&A Public Health.

**Your record of protection**

After your child receives any immunization, make sure the doctor updates your personal immunization record, such as the “Yellow Card”. Keep it in a safe place! You may be asked to show this record of immunization when your child registers for school or daycare.

Adapted from: Government of Ontario Public Health division – last modified: December, 2004  
<http://www.gov.on.ca>