



Fact Sheet

Pneumococcal Polysaccharide – 23 Vaccine (Pneumovax, Pneumo – 23)

1. *What is pneumococcal disease and what are the complications of this disease?*

Pneumococcal disease is caused by a bacteria called streptococcus pneumoniae which can cause the following diseases:

- 1) pneumonia,
- 2) meningitis,
- 3) bacteremia (blood infection), and
- 4) ear infections.

Pneumonia and ear infections are common, while blood infection and meningitis are less common, but they are serious. Pneumococcal disease occurs more frequently in children under five years of age, in the elderly and in persons whose spleens are not working normally or have been removed.

One in 300 children under five years of age will have a significant illness due to this bacteria. Meningitis accounts for about 20 per cent of these serious illnesses. About one-third of those who get meningitis will die. In PEI, pneumococcus has been one of the two major causes of meningitis in children since 1990. Pneumococcus is estimated to cause between 25 per cent to 50 per cent of all ear infections. About two-thirds of children have at least one ear infection by the time they are 12 months of age.

This Pneumococcal – 23 Polysaccharide vaccine provides immunity for different types of illnesses than those prevented by the Pneumococcal – 7 conjugate vaccine which is called Prevnar.

2. *What are the contents of the vaccine?*

This inactivated polysaccharide vaccine contains 23 of the most common types of streptococcus pneumoniae antigens. The vaccine antigen is dissolved in isotonic saline solution containing phenol 0.25 per cent as a preservative.

3. What are the possible reactions from the vaccine and how are they managed?

Usually, few side effects occur. The most common side effects are redness, tenderness and/or swelling at the site where the injection is given, low grade fever usually less than 38.3°C (100.9°F), general malaise and headache.

The most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life-threatening and occurs within 15 to 20 minutes of receiving the vaccine. Procedures are in place to quickly respond to anaphylaxis. Public health nurses are trained to treat the condition by giving adrenaline and closely monitoring the situation. There never has been a death reported after administration of this vaccine although death is possible after administration of any biological product.

It is not necessary to give/take acetaminophen (e.g., Tylenol or Temptra) with every immunization. If you experience discomfort or fever, acetaminophen can relieve these symptoms.

- 1. Please remain in the waiting room for 15 minutes after immunization.**
- 2. See a doctor or seek medical attention if there are any serious side effects.**
- 3. Report serious reactions to the public health nurse if they occur.**

4. What are the situations in which Pneumococcal Polysaccharide Vaccine should not be given?

The Pneumococcal – 23 Polysaccharide vaccine is not given to children under two years of age because it does not provide immunity to younger children. The vaccine should not be given if a person is ill with acute infection or a fever but can be given when a person has a cold or chest or ear infection if there is no fever. The vaccine should not be given to anyone who has had an allergic reaction to anything which is in this vaccine.

Patients with Hodgkin's Disease may not respond by obtaining adequate protection from the vaccine, and the product monogram should be reviewed before getting the vaccine.

5. What are the risks if the vaccine is not received?

Pneumococcal disease is most common in the very young, the elderly and those who have a condition which decreases their ability to fight infection.

According to Canadian Immunization Guide 2002, in Canada, there are an estimated 65 cases of meningitis, 700 cases of bacteremia, 2,200 cases of pneumonia requiring hospitalization, 9,000 cases of pneumonia not requiring hospitalization, and an average of 15 deaths per year due to streptococcus pneumoniae infection in children less than five years of age.