

Fact Sheet:

Pneumococcal Polysaccharide Vaccine – 23 valent

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

Invasive pneumococcal disease is caused by common bacteria called *Streptococcus pneumoniae* which can cause several illnesses including meningitis, pneumonia, bacteremia or blood infection, and ear infections. Pneumonia and ear infections are common in children; blood infection and meningitis are less common but they are serious. This bacteria is transmitted by direct oral contact, respiratory droplets (coughing or sneezing), or indirect contact with respiratory secretions of infected persons.

Streptococcus pneumoniae bacteria may be present in the nose and throat of well people and spread to those more likely to get serious infection. This includes children, the elderly and those who have a condition which decreases their ability to fight infection (examples include those whose spleen has been removed due to injury or disease, and those who have received therapy such as bone marrow transplant).

The pneumococcal polysaccharide vaccine provides protection against 23 strains of *S. pneumoniae* bacteria. It can be used in those aged 2 years of age and older. You may also be eligible for another vaccine that will protect against other strains of *S. pneumoniae*.

2. What are the contents of the pneumococcal polysaccharide vaccine?

This vaccine consists of a mixture of protein material from the 23 most prevalent or invasive types of the *S. pneumoniae* bacteria. It is an inactivated vaccine and does not contain any living bacteria. Traces of non-medicinal ingredients are present to keep the vaccine stable, sterile, and to help it be more effective. There is no mercury present in this vaccine. The vaccine is licensed for use in Canada by the Biologic and Genetics Therapies Directorate within Health Canada. A complete listing of contents is included in the product insert which is available from the immunizing nurse. There is no latex in the prefilled syringe used to administer this vaccine.

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

The most common side effects occur within 2-3 days after the injection and are generally mild. They include swelling, redness and tenderness at the site of injection. Fever, fatigue and headache may also occur.

The most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life threatening and which usually occurs within 15-20 minutes of receiving the vaccine. Procedures are in place for the nurse to quickly respond to anaphylaxis by administering adrenaline.

It is not necessary to give acetaminophen with every immunization. If a person experiences discomfort or fever after receiving the vaccine, acetaminophen can relieve these symptoms.

**Please remain in the waiting room for 15 minutes after immunization.
See a doctor or seek medical attention if any serious side effect occurs.
Report any serious reaction to the Public Health Nurse.**

4. What are the situations in which pneumococcal polysaccharide vaccine should not be given?

The vaccine should not be given to:

- Those who have had an anaphylactic (severe or life threatening) reaction or have a known hypersensitivity to any of the contents of the vaccine.
- Those who are acutely ill, especially with a fever, should return later for the immunization.
- Children under the age of 2 years.

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

In addition to the very young and persons age 65 years or older, patients with certain chronic conditions are at increased risk of developing pneumococcal infection and severe illness.

Concern of the increase in drug resistant *S. pneumonia* types has emphasized the importance of prevention such as immunization against the most common types of this organism. The efficacy of pneumococcal vaccine against the strains of invasive pneumococcal disease (IPD) covered in the vaccine is estimated to be 50-80%.

6. Who should receive this vaccine?

- Individuals over 65 years of age
- Individuals residing in a Long Term care or Community care Facility
- Individuals 2-64 years of age with 1 or more of the following conditions;
 - Asthma that required treatment in the preceding 12 months
 - Chronic cerebral spinal fluid (CSF) leak
 - Neurological conditions that may impair clearance of oral secretions
 - Cochlear implants (including children who receive implants)
 - Chronic heart disease
 - Chronic kidney disease/dialysis
 - Chronic liver disease
 - Chronic pulmonary disease (COPD)
 - Diabetes mellitus
 - Homeless
 - Illicit drug use
 - Alcoholism
 - Smoking
 - Asplenia, dysfunction of the spleen or sickle cell disease
 - Solid organ transplant
 - Bone marrow transplant
 - Hematopoietic stem cell transplant (HSCT), candidate or recipient
 - Immunosuppressive therapy (long term corticosteroids, chemotherapy, radiation, certain rheumatic drugs)
 - HIV
 - Congenital or acquired immunodeficiency
 - Malignant neoplasms including leukemia and lymphoma

Individuals should discuss their eligibility for this vaccine with their physician or local Public Health Nursing unit. Some individuals may require a second re-vaccination 5 years following the first immunization with this vaccine.