

Fact Sheet:

Pneumococcal Conjugate Vaccine – 13 valent

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

Invasive pneumococcal disease is caused by a 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.

The *S. pneumoniae* organism may be present in the nose and throat of many people and some are more likely to get a serious infection with pneumococcus bacteria. This includes children, adults who have or are around children, 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 conjugate vaccine provides protection against the 13 strains of *S. pneumoniae* bacteria which cause most of the pneumococcal illness in children under 5 years of age. The introduction of immunization programs for children over the past decade has contributed to a decrease of over 80% in the incidence of childhood invasive pneumococcal disease caused by the strains in the vaccine. A significant observation of this immunization program is the benefit of population “herd” immunity resulting from reduced presence of the bacteria in circulation.

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

This vaccine contains protein material from pneumococcal bacteria in a carrier protein of diphtheria toxin. 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. 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 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.

The most common side effects occur within 24-48 hours after the injection and include swelling, redness and tenderness at the site of injection. Decreased appetite, irritability, diarrhea, vomiting, change in sleep pattern, drowsiness and fever may also occur.

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 conjugate vaccine should not be given?

The vaccine should not be given to:

those who have had an anaphylactic (severe or life threatening) reaction or who 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.

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

The risk of acquiring an illness caused by the 13 strains of pneumococcal bacteria covered by this vaccine is significantly greater in children who have not been immunized. Disease from pneumococcal bacteria is most common in the very young, the elderly and those who have a condition which decreases their ability to fight infection.

Prior to the use of pneumococcal conjugate vaccine in the routine immunization schedule for children in Canada, it was estimated that 65 cases of meningitis, 700 cases of bacteremia, and an average of 15 deaths occurred per year due to *S. pneumonia* infection in children under age 5 years. In addition, over 11,000 cases of pneumonia occurred with one fifth requiring hospitalization.

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