

Fact Sheet:

Tetanus, Diphtheria, Pertussis (Whooping Cough) vaccine – (Tdap or dTap)

This vaccine protects against Tetanus, Diphtheria, and Pertussis (Whooping Cough) diseases. This vaccine is used as a booster dose to those vaccines received prior to age 7 years and it will boost immunity against these diseases. It may also be used as a primary series for those aged 7 years and older who have an uncertain, incomplete or no history of a primary series.

1. What are Tetanus, Diphtheria, and Pertussis (Whooping Cough) and what are the complications of having these diseases?

Tetanus, also called “lockjaw” is a bacteria that is everywhere, particularly in the soil. It enters the body when the skin is cut or punctured and produces a poison that can cause a tightening all over the body, including the muscles needed for breathing. The disease often resulted in death before there was a vaccine. Today, tetanus is very rare in Canada due to the use of the vaccine.

Diphtheria is caused by bacteria that infect the nose and throat. These bacteria release a poison that may cause breathing problems due to the throat closing over as a result of a grayish membrane developing. In addition, heart failure and paralysis may occur. The bacteria which causes diphtheria is found in the throat or on the skin and is spread by coughing and sneezing. Diphtheria illness is very rare in Canada because of the use of Diphtheria vaccine.

Pertussis is a very contagious disease which can cause infection of the lungs and throat and lead to a severe cough. It can cause pneumonia, convulsions, brain damage or death. The disease is most serious for infants, however whooping cough can cause serious illness at any age and adults who have the disease can spread it to others. It is expected that whooping cough will continue to circulate in Canada for many years and both children and adults need protection.

2. What are the contents of the Vaccine?

The vaccine contains antigens for the diseases for which it provides protection (Tetanus, Diphtheria and Pertussis). None of these vaccine components are infectious. Traces of non-medicinal ingredients are present to keep the vaccine stable, sterile, and help it to be more effective. The vaccine is licensed for use in Canada by the Biologics and Genetics Therapies Directorate within Health Canada. A complete listing of contents is included in the product insert available from the immunizing nurse.

3. What are the possible reactions from the 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 usually occurs within 15 to 20 minutes of receiving the vaccine. Procedures are in place for the nurse to quickly respond to anaphylaxis by administering adrenaline and closely monitoring the situation.

The most common side effects of the vaccine include:

- swelling, redness, induration and/or soreness at the injection site
- fever, irritability, headache, chills and tiredness have been reported.

These reactions are mild and generally last 1-2 days.

It is not necessary to give acetaminophen after immunization. However, if discomfort or fever occur, 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 serious reactions to the immunizing nurse.**

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

This vaccine should not be given to:

- a) Those who have had an anaphylactic (severe or life-threatening) reaction or who have a known hypersensitivity to any of the contents of this vaccine
- b) Those who are acutely ill, especially with fever should return later for the immunization.
- c) Those who have developed a severe neurological complication (encephalopathy) within seven days of receiving a previous dose of this vaccine require further assessment to determine if the vaccine is contraindicated.

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

- a) The chance of acquiring any of these diseases increases in non-immunized persons.
- b) These diseases can be more serious to persons with decreased immunity such as those with cancer (leukemia, lymphoma, etc.), on high doses of steroids or with an inherited disease of immunity.
- c) Whooping cough is a **very serious** disease particularly in young infants who are not adequately immunized.