Tetanus, Diphtheria, Pertussis, Polio Vaccine

Keep your child and yourself safe. By getting all vaccines on time, you and your child can be protected from many preventable diseases over your lifetimes. Immunization has saved more lives in Canada in the last 50 years than any other health measure.

What are Tetanus, Diphtheria, Pertussis and Polio?

**Tetanus**, also called “lockjaw”, is caused by bacteria mostly found in the soil. When the germs enter the skin through a cut or scrape, they produce a poison that can cause painful tightening of muscles all over the body. It is very serious because the breathing muscles are affected. Up to 2 in 10 people who get tetanus could die.

**Diphtheria** is a serious bacterial infection of the nose and throat. About 1 in 10 people who get diphtheria could die. The bacteria are spread through the air by persons sneezing or coughing and direct skin-to-skin contact. The disease can result in very severe breathing problems. It can also cause heart failure and paralysis.

**Pertussis**, or “whooping cough”, is a serious bacterial infection of the lungs and throat. About 1 in 200 infants who get pertussis could die. Pertussis can cause pneumonia, convulsions, brain damage or death. These complications are seen most often in infants. The bacteria are easily spread by coughing, sneezing or close face-to-face contact. Pertussis can cause severe coughing that often ends with a whooping sound before the next breath. This cough can last several months and occurs more often at night.

**Polio** (poliomyelitis) is a disease caused by one of 3 types of poliovirus. Polio virus is contained in the bowel movements (stool) of infected people. If stool contaminates the hands, water or food, others can become infected with poliovirus. While some polio infections show no symptoms, others can result in paralysis of arms or legs and even death. Due to immunization, polio has been eliminated in many parts of the world. In 1994, Canada was certified as a “polio free” country.

How can tetanus, diphtheria, pertussis and polio be prevented?

- Be immunized.
- When you get your child vaccinated, you help protect others as well.
- Practice good hygiene (e.g. hand washing).

Who can get the vaccine free of charge in Saskatchewan?

- This vaccine is intended for persons 4 years of age and older who require protection against tetanus, diphtheria, pertussis and polio diseases.
- In children less than 4 years old, immunization for tetanus, diphtheria, pertussis and polio is combined with other vaccines, such *Haemophilus influenzae* type b. These are given as a series of injections.

Who should not get the vaccine?

*A mild illness, with or without a fever, is not a reason to avoid immunization.*

- Persons younger than 4 years of age
- Persons who have a serious illness, with or without a fever, should delay immunizations.
- Persons who have had a life-threatening reaction to a previous dose of tetanus, diphtheria, pertussis or polio-containing vaccine, or any components of the vaccine.
- Persons who received a tetanus, diphtheria and pertussis booster within the last five years.
- People who developed Guillain-Barré Syndrome (GBS) within 8 weeks of getting a tetanus-containing vaccine should not get the vaccine. GBS is a rare condition that can result in weakness and paralysis of the body’s muscles.
What are possible reactions to the vaccine?

Vaccines are very safe. It is much safer to get the vaccine than to get tetanus, diphtheria, pertussis or polio.

Common reactions to the vaccine may include:
- Soreness, swelling and redness at the injection site.
- Tiredness, headache, mild fever, body aches, or nausea.
- These reactions are mild and generally last 1 to 2 days.

Acetaminophen (Tylenol®, Tempra®) can be given for fever or soreness. ASA (Aspirin®) should NOT be given to anyone under 20 years of age due to the risk of Reye’s syndrome.

- It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips. If this happens after you leave the clinic, call 9-1-1 or the local emergency number. This reaction can be treated, and occurs in less than one in one million people who get the vaccine.

Who should you report reactions to?
- Report any adverse or unexpected reactions to your local public health nurse, your doctor or nurse practitioner as soon as possible.

Talk to your public health nurse if:
- You have questions or concerns about your or your child’s reaction to an immunization, or
- Your child had to go to a doctor, hospital or health centre with an illness that might be related to an immunization.

What does the vaccine contain?

ADACEL®-POLIO contains tetanus toxoid, diphtheria toxoid, acellular pertussis (pertussis toxoid, filamentous haemagglutinin, pertactin, fimbriae types 2 and 3) and inactivated polio (types 1, 2 and 3) vaccines, aluminum phosphate, 2-phenoxyethanol, polysorbate 80, water for injection. Trace amounts of bovine serum albumin, formaldehyde, glutaraldehyde, streptomycin, neomycin and polymyxin B may be present. The vaccine is thimerosal and latex free.

BOOSTRIX®-POLIO contains diphtheria toxoid, tetanus toxoid, three purified pertussis antigens (pertussis toxoid, filamentous haemagglutinin and pertactin) adsorbed onto aluminum salts and inactivated polio virus (types 1, 2 and 3), sodium chloride, water for injection and medium 199. Formaldehyde, neomycin and polymyxin are present as trace amounts. The vaccine is thimerosal free. The vial stopper contains natural rubber.

Your immunization information will be recorded in a computerized system known as the Saskatchewan Immunization Management System (SIMS). Information collected in SIMS may be used to:
- Manage immunization records;
- Notify you if you or your child needs an immunization; and
- Monitor how well vaccines work in preventing vaccine preventable diseases.

Your immunization records may also be shared with health care professionals in order to provide public health services; assist with diagnosis and treatment; and to control the spread of vaccine preventable diseases.

For more information, contact:
Your local public health office,
OR your physician or nurse practitioner,
OR HealthLine at 1-877-800-0002.