
Immunization - Tetanus, Diphtheria and Pertussis (Tdap) Vaccine

This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

Vaccines (injections or shots) are the best way to protect against some very serious infections. The National Advisory Committee on Immunization and the Canadian Paediatric Society strongly recommend routine immunization.

Tdap is a three-in-one vaccine. It protects people against tetanus, diphtheria and pertussis. It can be used in people seven years or older.

Vaccination against tetanus and diphtheria is required by law for all children attending school in Ontario (unless exempted).

What is tetanus?

Tetanus or lockjaw is a serious disease that can happen if dirt with the tetanus germ gets into a cut in the skin. Tetanus germs are found everywhere, usually in soil, dust and manure. It does not spread from person to person. Tetanus causes cramping of the muscles in the neck, arms, leg and stomach, and painful convulsions which can be severe enough to break bones. Even with early treatment, tetanus kills two out of every 10 people who get it.

What is diphtheria?

Diphtheria is a serious disease of the nose, throat and skin. It causes sore throat, fever and chills. It can be complicated by breathing problems, heart failure and nerve damage. Diphtheria kills about one out of every 10 people who get the disease. It is most often passed to others through coughing and sneezing.

What is pertussis?

Pertussis or “whooping cough” is a serious disease especially in children. Children who get this disease have spells of violent coughing. This cough can cause them to vomit or stop breathing for a short period of time. The cough can last for weeks and make it hard for a child to eat, drink or even breathe. Pertussis can cause serious complications. Pneumonia can occur in more than two out of 10 children with pertussis. Pertussis can also cause brain damage, seizures and death. These problems happen most often in babies. Pertussis spreads very easily from an infected person to others through coughing or sneezing.

How well does Tdap vaccine protect against tetanus, diphtheria and pertussis?

When Tdap vaccine is given as a booster shot for adolescents immunized in childhood, it protects virtually 100 per cent of people against tetanus, over 95 per cent of people against diphtheria and 85 per cent of adolescents against pertussis. Vaccination also makes these diseases milder for those who may catch them.

At what age should Tdap vaccine be given?

Tdap vaccine is given to adolescents 14 to 16 years of age to protect against tetanus, diphtheria and pertussis. It is given around the 15th birthday as a booster shot 10 years after the 4 to 6 year old dose of DTaP-IPV. After this shot, booster doses against

tetanus and diphtheria are required every 10 years for continued protection.

Tdap plus IPV (separate shot) may also be given to children 7 years and older who missed their 4 to 6 year old booster dose of DTaP-IPV vaccine. Tdap plus IPV (separate shot) may be given as a primary series (3 doses) to unimmunized children 7 to 17 years of age.

Is the Tdap vaccine safe?

Yes. Side effects of the Tdap vaccine are mild and usually last for only a few days after getting the shot. Clinical trials found that pain at the injection site is the most common adverse event following immunization with Tdap. Redness and swelling may occur and a small number of people may have fever, vomiting, headache, diarrhea, nausea, chills, generalized body ache, decreased energy or sore and swollen joints after having a shot. Pain at the site may also occur 8 to 10 days after the injection. Allergic reactions and other severe reactions after the shot are very rare.

There is no risk of a pregnant woman or anyone else catching any disease from someone who has been recently vaccinated. You should always discuss the benefits and risks of any vaccine with your doctor/nurse practitioner.

When should I call my doctor/ nurse practitioner?

Call your doctor/ nurse practitioner or go to the nearest hospital emergency department if any of the following symptoms develop within three days of getting the shot:

- hives;
- swelling of the face or mouth;
- trouble breathing;
- very pale colour and serious drowsiness;
- high fever (over 40 C or 104 F);
- convulsions or seizures;
- other serious problems.

Who should not get the Tdap vaccine?

These would include persons with:

- a high fever or serious infection worse than a cold. Immunization should be delayed until after recovery.
- a serious allergic reaction to a previous dose of a vaccine containing diphtheria, tetanus and

pertussis, or the tetanus diphtheria (Td) vaccine.

- a history of an allergic reaction to any part of the vaccine, including aluminum phosphate (adjuvant), 2-phenoxyethanol (preservative).
- a history of development of severe redness, swelling and ulceration at an injection site following a previous dose of a tetanus toxoid and diphtheria toxoid containing vaccine.
- a history of encephalopathy (a disease of the brain) of undetermined cause within 7 days of administration of a vaccine with pertussis components (Td can be given instead).

Vaccination in pregnancy is not recommended unless there is a definite risk of getting pertussis (whooping cough).

The following conditions might increase the risk for a serious reaction following receipt of Tdap vaccine:

- history of Guillain-Barré syndrome less than 6 weeks after a previous dose of a tetanus toxoid containing vaccine.
- progressive neurologic disorder (e.g., encephalopathy or uncontrolled epilepsy) until the condition has stabilized.

Who should I talk to if I have any more questions about the Tdap vaccine?

Talk to your doctor/nurse practitioner or call your local public health unit for more information.

Your record of protection

After any immunization, make sure your personal immunization record (i.e., the "yellow card") is updated. If your child is attending child care or school, inform your local public health unit each time your child receives an immunization. An immunization record is required for child care and school attendance and for certain types of travel and work, so keep it in a safe place.