

Ministry of Health

Tdap (tetanus, diphtheria, pertussis) Vaccine Program

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.

Update

- Effective April 2022, Ontario has expanded its publicly funded Tdap immunization program to include a routine dose in every pregnancy, for protection against pertussis, regardless of previous Tdap immunization history.
- Canada's National Advisory Committee on Immunization recommends that all pregnant individuals get the pertussis (whooping cough) vaccine in every pregnancy to help protect the baby after birth.

What is pertussis (whooping cough)?

Pertussis is a common disease that causes prolonged cough illness. This cough may have a whooping sound and can cause a person to vomit or stop breathing for a short period of time. The cough can last for weeks and makes it hard to eat, drink or even breathe. It can affect people at any age, but pertussis is particularly serious in infants. Pertussis can cause serious complications, especially in babies, leading to hospitalizations such as pneumonia, brain damage, and seizures, and in some cases death. Pertussis spreads very easily from an infected person to others through coughing or sneezing. Parents and siblings have been increasingly recognized as a key source for pertussis infection in infants and young children.

Infected adults and adolescents can pass on the disease to infants who have not yet begun or completed their immunization series against pertussis. These infants will not be fully protected against pertussis and are at greater risk of serious complications. This is why it is important for pregnant people to be vaccinated during pregnancy, as this offers protection for both the pregnant person and the baby (through the passing of protective antibodies via the placenta before birth).

What is tetanus (lockjaw)?

Tetanus is a serious disease that is caused by bacteria. Tetanus bacteria are everywhere in the environment and can get into the body through a sore or wound. When the bacteria enter the body, they produce a powerful toxin (or poison) that attacks the nervous system; this can cause people's jaw muscles to tighten, so that they can't open their mouth or swallow ("lockjaw").

Tetanus does not spread from person to person. Tetanus causes cramping of the muscles in the jaw ("lockjaw") neck, arms, legs and stomach. It may also cause painful tightening of the muscles (convulsions) which may be severe enough to break bones. Unless treatment is provided, tetanus may lead to serious complications and death.

What is diphtheria?

Diphtheria is a serious bacterial disease of the nose, throat and skin. It causes sore throat, fever and chills. It may also cause more serious complications such as 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. As a result of high vaccination rates, there have been no cases of diphtheria in Ontario since 1995.

Who is eligible to receive the publicly funded vaccine?

There are a number of vaccines available in Canada which protect against pertussis, tetanus and diphtheria. For instance, in Ontario, combination vaccines protecting against diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type b is publicly funded in infancy (TDaP-IPV-Hib) and pre-school (Tdap-IPV).

Tdap vaccine (protecting against tetanus, diphtheria and pertussis) is publicly funded in adolescence, adulthood, and in each pregnancy. Multiple boosters are provided throughout the lifespan due to waning immunity over time.

Adolescents should receive the publicly funded Tdap vaccine, typically given 10 years after the pre-school dose, at 14 to 16 years of age. Students need to be immunized with Tdap in adolescence, or have a valid exemption, to attend school in Ontario as per the Immunization of School Pupils Act.

Adults should receive a dose of Tdap at 24-26 years of age (typically 10 years after the adolescent dose). If this dose is missed, it can be given at any time to replace a Td booster (given every 10 years in adulthood). It is especially important that parents, grandparents or other adult household contacts of newborns, infants and young children, as well as health care and childcare workers, receive a dose of Tdap vaccine instead of Td if they have not previously received Tdap during adulthood.

Pregnant individuals, regardless of any previous doses of Tdap, should receive a dose in every pregnancy. The preferred time to get a Tdap vaccine is between 27 and 32 weeks of pregnancy to allow optimal transfer of antibodies to the baby. This gives protection in the first months of life when the risk of severe illness and death is highest and before the baby can start their pertussis immunization series.

Who should not get the Tdap vaccine?

Individuals with a history of anaphylaxis after a previous dose of a vaccine containing diphtheria, tetanus or pertussis, and individuals with proven immediate or anaphylactic hypersensitivity to any component of the vaccine or its container, should not receive the Tdap vaccine.

Who should consult their health care provider when considering the vaccine?

Individuals who have a:

- history of an allergic reaction to any component and/or ingredient of the vaccine.
- history of a severe injection site reaction following a dose of tetanus toxoidcontaining vaccine.
- weakened immune system.
- bleeding disorder or are taking blood-thinning medication.
- severe acute illness with a fever higher than 40°C (administration of Tdap should be postponed; vaccination can occur if the individual has a minor infection).

Special consideration is also needed for persons who have a history of Guillian-Barré syndrome (GBS) within 6 weeks of a previous tetanus vaccine dose (those who develop GBS outside the 6-week interval may be immunized.

Is the Tdap vaccine safe and effective?

Yes, the Tdap vaccine is very safe and effective. In Canada, vaccines are highly regulated. They are thoroughly reviewed for efficacy and safety prior to being authorized for use and are continually monitored to ensure their safety. Local, provincial and federal health authorities work together to ensure vaccines approved for use in Canada remain safe and effective.

Most individuals will have no side effects from the Tdap vaccine; however, if they do occur, they tend to be mild and last for only a few days after getting the vaccine. The most common side effect is pain at the injection site. Other side effects may include pain, redness and swelling at the injection site, headache, fatigue, fever and/or chills. Allergic and other severe reactions are very rare.

For pregnant individuals: The safety of receiving Tdap vaccine in pregnancy has been well-established and is recommended for every pregnancy regardless of any previous doses of Tdap received.

Please report any side effects or severe vaccine reactions to your health care provider or <u>local public health unit</u>. You should always discuss the benefits and risks of any vaccine with your health care provider

When should I call my health care provider?

Call your health care provider or go to the nearest emergency department if any of the following symptoms develop within three days of receiving the vaccine:

- hives:
- swelling of the face or mouth;
- trouble breathing;
- very pale colour and serious drowsiness
- high fever (over 40°C)
- convulsions or seizures; or
- other serious symptoms (e.g., numbness or tingling).

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

Talk to your health care provider or call your local public health unit for more information.

Your record of protection

After receiving a vaccine, make sure your personal immunization record (i.e., the "Yellow Card") is updated. Keep it in a safe place!

For more information

Further information about vaccines is available at:

- Your <u>public health unit</u>
- The Government of Ontario