

# Tetanus, Diphtheria, Pertussis, and Polio: Diseases and Vaccines

# Tetanus, Diphtheria, Pertussis, and Polio: Diseases and Vaccines

Tetanus, diphtheria, pertussis, and polio are very serious diseases that can be prevented through immunization.

## What is tetanus?

- Tetanus is a disease caused by cuts or wounds that get infected with tetanus bacteria, often found in dirt. It is also called lockjaw.
- Tetanus bacteria make a poison that causes your muscles to spasm (contract or convulse on their own).
- Tetanus can be life-threatening.

## What is diphtheria?

- Diphtheria is a serious, highly contagious disease caused by bacteria. One in 10 people who get diphtheria will die of the disease.
- Symptoms:
  - › nose and throat infection that may affect breathing
  - › skin infection
  - › heart failure
  - › paralysis (not being able to move)

## What is pertussis?

- Pertussis is caused by bacteria. It is also called whooping cough.
- Babies less than one year old are most severely affected by pertussis.
- Symptoms may last from 6 to 12 weeks. They include:
  - › severe coughing that may affect breathing
  - › pneumonia (lung infection)
  - › seizures
- Pertussis can cause death.

## What is polio?

- Poliomyelitis (polio) is a disease caused by a virus called poliovirus.
- About one in 100 people who get polio will get the severe type that causes paralysis.
- Polio can be life-threatening. Most people who survive polio are paralyzed for the rest of their lives.
- Polio may cause:
  - › permanent crippling or paralysis
  - › death
  - › paralysis that may affect the muscles needed for breathing

## What is Tdap-IPV (tetanus, diphtheria, acellular pertussis, inactivated poliomyelitis vaccine) vaccine?

- Tdap-IPV vaccine is used to prevent tetanus, diphtheria, acellular pertussis, and polio.
- Getting immunized with the Tdap-IPV vaccine is the best way to prevent tetanus, diphtheria, pertussis, and polio. The Tdap-IPV vaccine includes vaccines for all 4 diseases in one shot.
- The vaccine is injected into the muscle with a needle.

## **Who should get the Tdap-IPV vaccine?**

The Nova Scotia Immunization Schedule recommends that this vaccine be given to:

- Children between 4 to 6 years old: 1 dose before starting school.

## **Caution**

Check with your child's health care provider before they get this vaccine if:

- › Your child's immune system is weak because of disease or certain medications.
- › Your child has a bleeding disorder or is taking blood-thinning medications.

## **Who should NOT get the Tdap-IPV vaccine?**

The following people should not get the Tdap-IPV vaccine:

- Children who may have immune system problems because of a medical condition or medications.
- Children who have had a serious allergic reaction (e.g., swelling of the face or lips, trouble breathing, drop in blood pressure) to any part of the Tdap-IPV vaccine. If your child has had a previous serious allergic reaction to a part of the vaccine, talk with your health care provider about getting your child immunized by a specialist in a clinic that can control severe reactions.
- Children who are sick or have a fever (temperature of 39.5° C/103° F or higher).

## **What happens after my child gets the Tdap-IPV vaccine?**

- You will stay in the clinic with your child for at least 15 minutes in case of any reactions. As with any vaccine, there is a slight chance that your child may have a more serious reaction.

## **What are the possible side effects of the Tdap-IPV vaccine?**

- Common side effects:
  - › Redness, soreness, or tenderness at the injection site. Your child may not want to use the arm in which the needle was given as much as usual. This will go away in a few days.
  - › Grumpiness and not feeling as hungry as usual.
  - › A small painless lump at the injection site. This may last for a few weeks.
  - › A fever about 6 to 24 hours after the injection, which should go away within 24 hours.
- Rarely, more serious side effects include high fever or seizures.

Make sure you have acetaminophen or ibuprofen at home in case your child has a fever. Follow the instructions on the container. Your child should not take these medications if they have certain medical conditions. Talk with your child's health care provider about their medical history before giving them either of these medications.

## **What are the possible risks of the Tdap-IPV vaccine?**

Some people faint before, during, or after immunization. If your child usually faints with immunizations, tell their health care provider before they are immunized. Sitting or lying down for 15 minutes after immunization can help prevent fainting, and injuries caused by a fall. Tell your child's health care provider right away if they feel dizzy, or have vision changes or ringing in their ears.

## Call your child's health care provider if:

- › Your child has a fever for more than 24 hours.
- › Your child has a temperature of 39.5° C/103° F or higher.
- › Your child's fever does not get better after taking acetaminophen or ibuprofen.
- › Your child has seizures.
- › Your child has other symptoms.

**If you think the child who got the vaccine is having a severe allergic reaction (anaphylaxis), call 911 right away.**

## What will happen if my child has a severe allergic reaction?

Severe allergic reactions to Tdap-IPV vaccine are rare. If needed, your child's health care provider can give them epinephrine ("epi pen") and will then call 911. Symptoms of a severe allergic reaction (anaphylaxis):

- › itchy skin or hives
- › sneezing
- › stuffy nose
- › watery eyes
- › coughing or wheezing
- › swelling of the face and throat
- › flushed skin
- › trouble breathing
- › cramps or vomiting (throwing up)
- › a fast heartbeat
- › dizziness or weakness

Symptoms usually start a few minutes after immunization, but may start up to a few hours after immunization.

## Questions?

If you have any questions about tetanus, diphtheria, pertussis, or polio, or Tdap-IPV vaccine, please call Public Health (see list of offices here: [www.nshealth.ca/public-health-offices](http://www.nshealth.ca/public-health-offices)), or your health care provider.

**For more info on immunization, including the benefits and risks, visit:**

- **Immunize Canada:** [www.immunize.ca/diseases-vaccines](http://www.immunize.ca/diseases-vaccines); [www.immunize.ca/parents](http://www.immunize.ca/parents)
- **Public Health Agency of Canada:** [www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)
- **Canadian Paediatric Society:** [www.cps.ca](http://www.cps.ca)
- **Immunization Action Coalition:** [www.immunize.org/handouts/discussing-vaccines-parents.asp](http://www.immunize.org/handouts/discussing-vaccines-parents.asp)
- **811:** <https://811.novascotia.ca>

*Prepared by:* Public Health

WA85-2048 © January 2020 Nova Scotia Health Authority

The information in this pamphlet is to be updated every 3 years or as needed.