

# Diphtheria, Tetanus, Acellular Pertussis, Polio and Haemophilus Influenzae Type B Vaccine

## What is pertussis?

Pertussis or whooping cough is a serious disease especially in children. Children who get this disease have spells of violent coughing that 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 child to eat, drink or even breathe. Pneumonia can occur in more than 2 out of 10 children with pertussis. It can also cause brain damage and death. These problems happen most often in babies. Pertussis spreads very easily from an infected person to others through coughing or sneezing.

## What is diphtheria?

Diphtheria is a serious disease of the nose, throat and skin. It is passed to others through coughing and sneezing. It causes sore throat, fever and chills. It can lead to breathing problems, heart failure and nerve damage. Treatment for diphtheria includes an antitoxin, followed by antibiotics. However, it is becoming more difficult to treat the diphtheria bacteria due to antibiotic resistance. Diphtheria kills 1 out of every 10 people who get the disease.

## What is tetanus?

Tetanus or lockjaw is a serious disease that 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 10–20% of those who get it. You can get tetanus when the germs that can be found everywhere, usually in soil, dust, manure get into an open wound. It does not spread from person to person.

## What is polio?

Polio is a highly infectious disease caused by a virus. It invades the nervous system and can cause total paralysis in a matter of hours.

You get it from drinking water or eating food with the polio germ in it. It is also spread from person to person. Polio mainly affects children under five years of age.

Initial symptoms are fever, fatigue, headache, vomiting, stiffness in the neck and pain in the limbs. One in 200 infections leads to irreversible paralysis (usually in the legs). Among those paralysed, 5–10% die when their breathing muscles become immobilized.

## What is Haemophilus influenzae type B (Hib)?

Even though “influenzae” is a part of its name, the Hib germ does not cause influenza. Hib infections are much more serious. Before the Hib vaccine was used, the Hib germ was a common cause of serious infections in children. More than half of all children with Hib infection developed meningitis. Meningitis is serious infection of the fluid and lining that cover the brain and spinal cord. Meningitis can cause brain damage, learning and developmental problems, deafness, blindness. One out of 20 children with meningitis can die.

Hib germ also causes a serious infection of the throat near the voice box. This infection is called epiglottitis. This can make it difficult for the child to breathe. Hib germ can also cause infection of the lungs (pneumonia) and bone and joint infections.

Children under five years are more likely to get Hib disease. Children who attend child care centres are even more likely to catch it. Hib germ spreads to others through coughing and sneezing. Many people carry the Hib germ without any signs or symptoms of disease, but they can pass it on to others.

## Who should get the vaccine?

Children under six years are eligible to receive DTaP-IPV-Hib vaccine.

### DTaP-IPV-Hib Vaccine:

When DTaP-IPV-Hib vaccine is given in the recommended number of shots, it protects 85 per cent of children against pertussis, over 85 per cent of children against diphtheria, over 95 per cent of children against tetanus, 99 per cent of children against polio and around 90 per cent of children against serious Hib infections. It will not prevent meningitis caused by other germs. Vaccination also makes these diseases milder for those who may catch them.

A series of doses will be needed starting at two months of age followed by needles at four, six, and 18 months. A booster will follow at 4–6 years and then every ten years after that.

If your child misses a needle you should get the next needle as soon as possible. Your health care provider will recommend a special “catch-up” schedule.

## Who should NOT get the vaccine?

- anyone with a high fever or serious infection worse than a cold
- anyone with a severe allergy to ac component of the vaccine including latex, neomycin or polymyxin B
- a serious allergic reaction (anaphylaxis) to DTaP-IPV-Hib vaccine

## Side effects:

Most reactions are mild and include soreness, swelling and redness for a few days at the spot where the needle was given. Some children get a fever, rash, lose their appetite or are fussy or drowsy for a day or two after the needle.

## When should I seek medical attention?

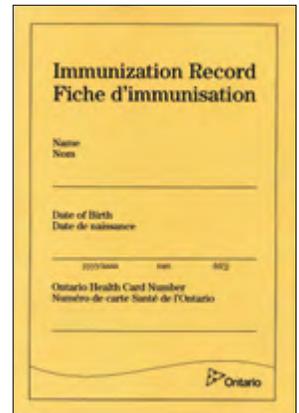
Severe reactions are rare. If you develop hives, swelling of the face or mouth, trouble breathing, serious drowsiness or other serious problems seek immediate medical attention.

## Your record of protection

After any immunization, ensure your personal immunization record or “yellow card” is updated. Keep it in a safe place.

## Questions?

Talk to your health care provider or contact Public Health at 519-575-4400.



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