BRITISH COLUMBIA | HealthLinkBC

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Diphtheria, Tetanus, Pertussis, Polio, *Haemophilus influenzae* Type b (DTaP-IPV-Hib) Vaccine

Keep your child safe.
Get all vaccines on time.

By getting all vaccines on time, your child can be protected from many diseases over a lifetime.

Immunization has saved more lives in Canada in the last 50 years than any other health measure.

What is the DTaP-IPV-Hib vaccine?

The DTaP-IPV-Hib vaccine protects against 5 diseases:

- Diphtheria
- Tetanus
- Pertussis (whooping cough)
- Polio
- *Haemophilus influenzae* type b

The vaccine is approved by Health Canada and is provided free as part of your child's routine immunizations. Call your health care provider to make an appointment.

Who should get the DTaP-IPV-Hib vaccine?

The DTaP-IPV-Hib vaccine is given to children at 18 months of age. This is a booster dose for children who completed a 3 dose primary series of DTaP-**HB**-IPV-Hib at 2, 4, and 6 months of age. The DTaP-**HB**-IPV-Hib vaccine also protects against hepatitis B infection. For more information, see HealthLinkBC File #105 Diphtheria, Tetanus, Pertussis, Hepatitis B, Polio, and *Haemophilus influenzae* Type b (DTaP-HB-IPV-Hib) Vaccine.

If your baby has been started on a primary series of DTaP-IPV-Hib, which does not include hepatitis B, they should complete their immunizations with the same vaccine. They should also receive the hepatitis B vaccine. Although the DTaP-IPV-Hib and hepatitis B vaccines are given as separate injections they should be given at the same time when possible. After completing the primary series of DTaP-IPV-Hib, your baby should receive a booster dose of DTaP-IPV-Hib at 18 months of age. For more information, see HealthLinkBC File #25c Hepatitis B Infant Vaccine.

The DTaP-IPV-Hib vaccine is also provided free to people who have received a stem cell transplant.

It is important to keep a record of all immunizations received.

What are the benefits of DTaP-IPV-Hib vaccine?

The DTaP-IPV-Hib vaccine protects your child against diphtheria, tetanus, pertussis, polio, and *Haemophilus influenzae* type b, which are serious and sometimes fatal diseases.

When you get your child immunized, you help protect others as well.

What are the possible reactions after the vaccine?

Vaccines are very safe. It is safer to get the vaccine than to get the disease.

Common reactions to the vaccine may include soreness, redness and swelling where the vaccine was given. Some children may have a fever, or experience crankiness, drowsiness, loss of appetite, vomiting and diarrhea. These reactions are mild and generally last 1 to 2 days. Large areas of redness and swelling may be present but these generally do not interfere with normal activity.

Acetaminophen (e.g. Tylenol®) or ibuprofen* (e.g. Advil®) can be given for fever or soreness. ASA (e.g. Aspirin®) should not be given to anyone under 18 years of age due to the risk of Reye Syndrome.

*Ibuprofen should not be given to children under 6 months of age without first speaking to your health care provider.

For more information on Reye Syndrome, see HealthLinkBC File #84 Reye Syndrome.

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility, less than 1 in a million, of a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips. Should this reaction occur your health care provider is prepared to treat it. Emergency treatment includes administration of epinephrine (adrenaline) and transport by ambulance to the nearest emergency department. If symptoms develop after you leave the clinic, call **9-1-1** or the local emergency number.

It is important to always report serious or unexpected reactions to your health care provider.

Who should not get the DTaP-IPV-Hib vaccine?

Speak with your health care provider if your child has had a life-threatening reaction to a previous dose of a diphtheria, tetanus, pertussis, polio, or *Haemophilus influenzae* type b vaccine, or any component of the vaccine, including neomycin, polymyxin B, or streptomycin. The vaccine is not usually given to people 7 years of age and older.

People who developed Guillain-Barré Syndrome (GBS) within 8 weeks of getting a tetanus vaccine, without another cause being identified, should not get the DTaP-IPV-Hib vaccine. GBS is a rare condition that can result in weakness and paralysis of the body's muscles. It most commonly occurs after infections, but in rare cases can also occur after some vaccines.

There is no need to delay getting immunized because of a cold or other mild illness. However, if you have concerns, speak with your health care provider.

What are Diphtheria, Pertussis, Tetanus, Polio, and *Haemophilus influenzae* type b?

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

Pertussis, also known as whooping cough, is a serious infection of the airways caused by pertussis bacteria. Pertussis can cause pneumonia, seizures, 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. About 1 in 170 infants who get pertussis may die. For more information about pertussis, see HealthLinkBC Files #15c Pertussis (Whooping Cough).

Tetanus, also known as lockjaw, is caused by bacteria mostly found in the soil. When the bacteria 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 if the breathing muscles are affected. Up to 1 in 5 people who get tetanus may die.

Polio is a disease caused by infection with a virus. While some polio infections show no symptoms, others can result in paralysis of arms or legs and even death. Paralysis occurs in about 1 in 200 people infected with the polio virus. Polio can be spread by contact with the bowel movements (stool) of an infected person. This can happen from eating food or drinking water contaminated with stool.

***Haemophilus influenzae* type b** is a bacteria that most commonly infects children under 5 years of age. It can cause serious and life-threatening infections including meningitis, an infection of the lining that covers the brain, and septicemia, an infection of the blood. *Haemophilus influenzae* type b infection is spread by coughing, sneezing or having close face-to-face contact. For every 20 children who get sick, 1 may die.

Diphtheria, tetanus, polio and *haemophilus influenza* type b are now rare in B.C. because of routine childhood immunization programs. Whooping cough still occurs, but it is much less common than it used to be and is much milder in immunized people.

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BC Centre for Disease Control
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