

Fact Sheet - Hepatitis B Vaccine

1. What is Hepatitis B and What Are the Complications of Having Hepatitis B?

Hepatitis B is one of several types of hepatitis virus that attack the liver. It is spread from person to person through contact with infected blood and body fluids in one of the following ways:

- 1) through a break in skin or directly in a mucous membrane (e.g. mouth);
- 2) by sharing a toothbrush, razor or needle, particularly with sharing of needles while sharing drugs for injection;
- 3) during sexual intercourse; and
- 4) during birth from an infected mother to her baby.

It can be mild or usually does not cause any symptoms and some people do not know they have it. Other people are very sick with fever, develop a yellow colour of the skin and eyes and have vomiting and pain in the abdomen.

Sometimes this illness may cause liver cancer and other serious liver problems such as cirrhosis of the liver. This occurs over many years rather than soon after infection.

There are no medications that cure Hepatitis B. Some medications may decrease the level of Hep B virus circulating in the blood. Some people will get better on their own by making antibodies. Others cannot get rid of the virus and may spread it.

What Is the Hepatitis B Vaccine?

Hepatitis B vaccine is one of the safest vaccines in use today. It does not contain a live virus, therefore getting the vaccine cannot cause Hepatitis B illness. When given as recommended in a series of three doses, Hepatitis B vaccine is over 90 per cent effective in those with normal immune system. The duration of protection is not yet known. Presently, routine doses of the vaccine are not required.

2. What Are the Contents of the Vaccine?

This vaccine is developed from inactivated dead virus cultured on a yeast cell and when administered, causes the body to make an antibody against Hepatitis B virus. The vaccine contains traces of a form of aluminum hydroxide (to improve the body's ability to form antibodies). All vaccine contents are licensed for use in Canada by the Biologics and Genetics Therapies Directorate within Health Canada. A complete listing of products contained in the vaccine is available from the public health nurse.

3. What Are the Possible Reactions From the Vaccine?

The most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life threatening and usually occurs within 15 to 20 minutes of receiving the vaccine. Procedures are in place for the nurse to quickly respond to anaphylaxis by administering adrenaline.

The most common side effects of the vaccine include:

- 1) Localized swelling, redness, itching, warmth and/or tenderness/pain at the injection site
- 2) Fever, headache, nausea, dizziness and tiredness have been reported but are not common.

It is not necessary to give acetaminophen (e.g., Tylenol or Tempra) with every immunization. However, if your child is experiencing discomfort or fever, acetaminophen can relieve these symptoms.

- 1) Please remain in the waiting room for 15 minutes after immunization.**
- 2) See a doctor or seek medical attention if your child has any serious side effects.**
- 3) Report serious reactions to the public health nurse whenever they occur.**

4. When Should the Vaccine Not Be Given?

- 1) Persons who have had an anaphylactic (severe or life threatening) reaction to any of the contents of this vaccine **should not receive** this vaccine.
- 2) Those who are acutely ill, especially with fever, should return for their immunization at a later date.

5. What Are the Risks If the Vaccine Is Not Received?

Hepatitis B is a preventable disease.

The chance of acquiring Hepatitis B is related to a person's risk of exposure. These risks include:

- careers that have higher rates of exposure to blood and body fluids such as health care and emergency service personnel,
- persons working in or living in or visiting an area where Hep B is common,
- those involved in high-risk lifestyle activities,
- household contacts of an infected person and
- infants born to Hepatitis B positive mothers
- non health care occupations such as corrections, policing, waste workers who may be exposed to sharps, aggressive behavior, injury.