

Hepatitis B Vaccine

What is the hepatitis B vaccine?

Hepatitis B vaccine protects against the hepatitis B virus. The vaccine does not protect against any other type of hepatitis. It is approved by Health Canada for use in infants, children and adults.

Routine immunization for infants against hepatitis B in New Brunswick began in 1995 along with a ten year catch-up program for grade 4 students. This means that all individuals born in 1986 and later are eligible to receive the vaccine as part of the Routine Immunization Schedule.

What are the benefits of the vaccine?

Hepatitis B vaccine is the best way to protect against hepatitis B infection and its complications. The vaccine provides good protection against hepatitis B, especially if given at an earlier age.

A person whose immune system is affected by illness, medications or treatments may have a lowered response to the vaccine.

The vaccine gives long term protection against hepatitis B because it creates a strong “immune memory” against the virus. Immune memory is the way the body’s immune system remembers vaccines or diseases it has been exposed to in the past. Current studies show that when healthy people receive a complete series of hepatitis B vaccine, the immune memory lasts for upwards of 20 years.

Repeating a series of hepatitis B vaccine is rarely required. Routine boosters are not required and post vaccination testing is not necessary *unless* continual or repeated potential exposure to hepatitis B occurs as may be the case in certain occupational groups. Talk to your health care provider about your risks.

How is the vaccine given?

The vaccine is usually given in a series of three injections into the thigh or upper arm over a period of 6 to 12 months. A special formulation of the vaccine is available for individuals receiving hemodialysis or whose immune system is affected by illness, medications or treatments. Hepatitis B vaccine is sometimes given in a combination vaccine with hepatitis A.

Who should receive the hepatitis B vaccine?

Hepatitis B vaccine is provided to children as part of the New Brunswick Routine Immunization Program. It is given in a series of three doses- at birth, two months and six months. The vaccine is given at the same time as other routine childhood immunizations.

In addition, it is provided to the following individuals through the Public Health Immunization Program:

- Infants born to mothers infected with hepatitis B (although they receive the vaccine through the routine schedule, it is especially important that these infants receive the vaccine on time);
- Individuals who live with or have been sexually active with people who have an acute or chronic hepatitis B infection;
- Individuals with lab-confirmed hepatitis C;
- Individuals receiving hemodialysis or multiple injections/transfusions of blood or blood products;
- Individuals who live in institutions for the developmentally challenged;
- Individuals who are injection drug users and who are participating in a methadone treatment program; and
- Men who have sex with men.

Although not funded through the Public Health Immunization Program, the *National Advisory Committee on Immunization* (NACI) also recommends hepatitis B vaccine for the following individuals:

- People who work in places where they may be exposed to blood or body fluids;
- People at increased risk including injection drug users and inmates in correctional facilities;
- Travelers to areas where hepatitis B is common.

Health Care workers should check with their Occupational Health Program and travelers can obtain more information from Travel Medicine Clinics.

Who should NOT receive the hepatitis B vaccine?

People who have had a **severe allergic reaction** to a previous dose of hepatitis B vaccine OR to any ingredients of the vaccine or its container should not receive the hepatitis B vaccine.

What are the possible reactions after receiving the vaccine?

Redness, and/or swelling where the vaccine was given frequently occur. In some instances people may experience a low fever, headache or stomach upset following hepatitis B vaccine.

With any vaccine, there is a very small chance that a serious allergic reaction can occur immediately following immunization. Therefore, **people are asked to remain on site for at least 15 minutes after the vaccine is given so that possible immediate reactions can be monitored and treated.**

What can be done for reactions to the vaccine?

- A cold compress at the injection site may reduce discomfort.
- For discomfort and fever, you may use acetaminophen (Tylenol®) or Ibuprofen (Advil®) according to the manufacturer's directions.
- If your baby is under 6 months of age, consult with your physician before using ibuprofen.
- Acetylsalicylic acid (ASA or Aspirin®) is NOT recommended for children and adolescents less than 18 years old because of its link to Reye's Syndrome.

What else do we need to know?

Inform your immunization provider if you or your child has any health problems or allergies.

Your immunization provider will give you a record of your or your child's immunization. Keep this record in a safe place and bring it with you the next time you or your child is immunized.

Individuals 16 years of age and older can give their own consent. Children under 16 *must* be accompanied by a parent or legal guardian *unless* consent has been given as part of the school immunization program.

If you or your child has any unusual reactions to the vaccine, or if you have any questions or concerns, please speak to your health care provider.

Further Information

For further information contact your health care providers, local Public Health office or Tele-Care (811).

Useful websites:

- Government of New-Brunswick www.gnb.ca/health
- Public Health Agency of Canada www.phac-aspc.gc.ca
- Canadian Coalition for Immunization Awareness and Promotion www.immunize.cpha.ca/www.immunize.cpha.ca