

Hepatitis B Vaccine

Vaccines have saved more lives compared to any other medical intervention. Vaccines help the immune system recognize and fight bacteria and viruses that cause serious diseases.

Hepatitis B (HB) is a vaccine preventable disease.

- Hepatitis B is a virus that infects the liver and can cause permanent scarring and damage (cirrhosis), liver cancer and death.
- The HB virus is found in the body fluids of infected persons (blood, semen, vaginal fluids and saliva).
- Many new HB cases occur in early adulthood.

How is HB spread?

- By sharing personal items like razors and toothbrushes.
- By reusing and/or sharing equipment used for tattooing, piercings, acupuncture or needles/equipment used to inject drugs or other substances (e.g. steroids).
- By being poked with an infected needle.
- Through unprotected sexual activity.
- From an infected mother to her baby during pregnancy or delivery.

What are the symptoms of HB?

- After the HB virus enters the body, it usually takes 2 to 3 months to develop signs of illness such as:
 - Tiredness and fever;
 - Loss of appetite, nausea and vomiting;
 - Pain in the upper abdomen (stomach area);
 - Jaundice (a yellow colouring of the skin and the whites of the eyes); and/or
 - Dark coloured urine and light coloured stools.
- About 50% of adults and 90% of children who are infected with HB do not have symptoms.
- Treatment does not provide a cure.
- The HB virus may remain in the blood and body fluids of some infected people. They are 'chronic carriers', can infect others and can develop serious liver disease and liver cancer.

How can HB be prevented?

- Be immunized. When you / your child are immunized, you help protect others as well.
- Practice good hygiene (e.g. handwashing).
- Limit the number of sexual partners you have and always use a condom during sexual activity.
- Avoid sharing personal items, needles and equipment used for tattooing and piercings, and drug use.

Who can get this vaccine for free?

- Grade 6 students as part of the routine immunization program.
- Those born since January 1, 1984.
- Select healthcare workers and healthcare students.
- Children not yet in Grade 6 whose families immigrated to Canada from regions of intermediate or high HB prevalence.
- Those who started a publicly funded series elsewhere.
- Those who have been exposed to blood and body fluids (e.g., needlestick injuries, sexual assault, biting).
- Household/sexual/close contacts of individuals who have an acute or chronic HB infection.
- Men who have sex with men (MSM).
- Males and females who have multiple sexual partners.
- Individuals that use or share illicit drug snorting, smoking or injection equipment.
- Sexual partners and household contacts of individuals who use illicit drugs.
- Residents living in facilities for the developmentally challenged.
- Inmates of provincial correctional facilities.
- Infants born to HB positive mothers.
- Non-immune individuals with bleeding disorders and others who receive repeated infusions of blood or blood products or plasma-derived replacement clotting factors.
- Non-immune individuals who are HIV positive.
- Non-immune individuals who have chronic liver disease (e.g., alcoholism, hepatitis C, cirrhosis).
- Non-immune individuals with kidney disease (predialysis, hemodialysis and peritoneal dialysis).
- Non-immune liver or kidney transplant candidates or recipients.
- Haematopoietic stem cell transplant recipients.

Who should not get this vaccine?

- Persons who have a serious acute illness, with or without a fever, should delay immunizations.
- People who had a serious or life-threatening reaction to a previous dose of a HB containing vaccine, or any components of the vaccine.

What are common reactions to this vaccine?

- **Vaccines are very safe and effective. It is much safer to get this vaccine than to get HB.**
- Temporary soreness, redness and swelling where the needle was given.
- Some individuals may experience fatigue, headache, mild fever or nausea.
- These reactions are mild and generally last 1 to 2 days.
- Only treat a fever (at least 6 to 8 hours after immunization) **if you/your child are uncomfortable and not sleeping.**

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips. This reaction can be treated, and occurs in less than one in one million people who get the vaccine. **If this happens after you leave the clinic, get medical attention or call 911 right away.**

Who should you report reactions to?

- Report any adverse or unexpected reactions to your local public health nurse, your doctor, nurse practitioner or 811 as soon as possible.

Talk to a public health nurse:

- If you have questions or concerns about you or your child's reaction to an immunization.
- If you or your child had to go to a doctor, a hospital or to a health centre with a symptom that might be related to immunization.

Use **Acetaminophen** (all ages; Tylenol®, Temptra®) or **Ibuprofen** (6 months & older; Advil®, Motrin®) to treat fevers and pain. **Never give ASA** (Aspirin®) to children younger than 18 years old because of the serious risk of Reye's syndrome.

What does this vaccine contain?

RECOMBIVAX HB®, **RECOMBIVAX HB® Pediatric** and **RECOMBIVAX HB® Dialysis** contain hepatitis B antigen, amorphous aluminum hydroxyphosphate, sodium chloride, sodium borate, water for injection, trace amounts of yeast proteins and is treated with formaldehyde. Thimerosal-free. The vial stoppers contain latex.

ENGERIX-B® and **ENGERIX-B® Pediatric** contain purified hepatitis B surface antigen, aluminum hydroxide, disodium phosphate dihydrate, sodium chloride, sodium dihydrogen phosphate dihydrate, and water for injection. Thimerosal-free. Latex-free.

Mature Minor Consent

It is recommended that parents/guardians discuss consent for immunization with their children. Efforts are first made to get parental/guardian consent for immunizations. However, children at least 13 years of age up to and including 17 years of age, who are able to understand the benefits and possible reactions for each vaccine and the risks of not getting immunized, can legally consent to or refuse immunizations in Saskatchewan by providing mature minor informed consent to a healthcare provider.

Provincial immunization fact sheets are available at www.saskatchewan.ca/immunize.

For more information, contact your local public health office, your physician, nurse practitioner, HealthLine online or by calling 811.

References: [Canadian Immunization Guide](#). Product monographs (RECOMBIVAX HB® 2023; ENGERIX-B® 2020).