# Hepatitis B: What you need to know

#### What is hepatitis?

Hepatitis is a term that means inflammation of the liver. In many cases, hepatitis is caused by viruses, and this is known as **viral hepatitis**. Viral hepatitis can be either an **acute** infection (infection lasting less than 6 months) or a **chronic** infection (infection lasting longer than 6 months).

There are five main type of hepatitis viruses that cause hepatitis, known as types A, B, C, D, and E.



In Canada, the hepatitis A, B, and C viruses cause 90% of acute hepatitis infections. Only hepatitis A infection and hepatitis B infection can be prevented by vaccination. All provinces and territories have a routine hepatitis B immunization program, given at different times (from birth to Grade 7).

#### **Hepatitis B: An overview**

The hepatitis B virus causes hepatitis B, and the virus lives in the **blood and some bodily fluids** of infected persons (e.g., semen and vaginal fluid). Hepatitis B can start as an acute infection and then become chronic.

Cases of hepatitis B have declined in Canada due to the success of immunization programs. However, hepatitis B infections are still common worldwide. Globally, it is estimated that there are over **2 billion** people living with hepatitis B. Around **600,000 deaths occur each year** due to hepatitis B.

#### **Memory Aid**

Causes of viral hepatitis: An overview of hepatitis A versus hepatitis B

Name of infection	Cause of infection	Result of infection	Where the virus lives in the body	Possible duration of infection
Hepatitis A	Hepatitis A virus	Inflammation of the liver (hepatitis)*	Feces and blood	Acute (less than 6 months)
Hepatitis B	Hepatitis B virus	Inflammation of the liver (hepatitis)*	The blood and some bodily fluids (e.g., semen, vaginal fluid, and saliva)	Acute (less than 6 months)  Chronic (longer than 6 months)

<sup>\*</sup>This is a generalized statement as there are differences between the symptoms and severity of hepatitis A and B infections. For more information about hepatitis A, please see our hepatitis A factsheet.

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## What are the symptoms of hepatitis B?

Many people living with hepatitis B will not have any symptoms, or will have only mild symptoms. If they do develop symptoms, these can include:

- fever.
- fatique.
- · loss in appetite,
- nausea,
- stomach pain,
- dark urine, and
- yellowing of the skin and eyes (jaundice).

In acute cases of hepatitis B, symptoms on average appear 60 to 90 days after exposure to the hepatitis B virus, and can last up to 3 months. In acute cases, the body rids itself of the hepatitis B virus within 6 months.

Some people who catch hepatitis B become chronic carriers of the virus, meaning the virus stays in the body for longer than 6 months. In fact, the virus can stay in the body for years or a lifetime. Chronic carriers can develop serious liver diseases such as scarring of the liver (cirrhosis) and liver cancer.

#### **How does hepatitis B spread?**

Hepatitis B virus spreads from person to person. Transmission occurs when an infected person's **blood or bodily fluids** enter another person. This can happen through sharing needles, having sex (especially if unprotected), sharing razors or toothbrushes if they are contaminated with blood, and in other ways. Pregnant persons who have hepatitis B can also pass the virus to their **newborn** during childbirth.

Chronic carriers of hepatitis B remain contagious for as long as the virus remains in their liver.

For more information on how to prevent catching and spreading hepatitis B, please read CATIE's factsheet on hepatitis B: <a href="https://www.catie.ca/hepatitis-b">https://www.catie.ca/hepatitis-b</a>.

#### Who is at risk?

While **anyone** can catch hepatitis B, there are certain factors that put people more at risk for experiencing severe infection. In general, the risk for severe infection increases with age. Other people more at risk for severe infection include anyone:

- who has a liver disorder, or
- who is pregnant (the risk of liver failure and death is higher in pregnancy).



For **chronic** hepatitis B, the **younger** a person is, the more likely they are to become a chronic carrier. Infants are most at risk for becoming chronic carriers; they have a **90% to 95%** chance of becoming a chronic carrier if infected. The risk for adolescents and adults is between 3% and 10%. Persons who are immunocompromised or who have diabetes are also at greater risk of becoming chronic carriers.

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#### Who should be immunized?

Anyone who wants to lower their risk of hepatitis B infection should be immunized against this disease. Below is a list of people for whom immunization is particularly recommended.

#### For routine immunizations:

• Infants, children, and adolescents should be immunized against hepatitis B according to the childhood immunization schedule in their province/territory.

Publicly funded immunization schedules for hepatitis B may vary between provinces and territories.

People/groups disproportionately affected by hepatitis B should be immunize	ed. including:
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Adults and children who immigrate to Canada from areas where hepatitis B is common	People who work in professions where they are at risk for coming into contact with blood, blood products, or bodily fluids infected with hepatitis B (e.g., healthcare workers)	
Travellers who are going to areas where hepatitis B is common, or who will be in close contact with someone who lives in an area where hepatitis B is common	Staff and inmates of correctional facilities	
Household contacts or close contacts of children adopted from countries where hepatitis B is common	Staff and residents of residences for people with intellectual and developmental disabilities (IDD)	
People living in communities where hepatitis B is very common	People who use injectable substances	
Certain close contacts of persons who have acute or chronic hepatitis B (e.g., persons who work in childcare facilities where a child or worker has hepatitis B, and persons who live with or are the sexual partner of some	People who have had more than one sexual partner within 6 months	
Persons who commonly receive blood transfusions or products	People who engage in condomless sex, especially with new partners	
People with chronic renal (kidney) disease	People who have had sexually transmitted infections in the past	
Persons who are immunocompromised (have a weakened immune system), such as people with HIV, who were hematopoietic stem cell transplant (HSCT) recipients, who are awaiting solid organ transplant, or who have congenital immunodeficiencies	Gay, bisexual, and other men who have sex with men (gbMSM)*  *There is little information on how affected transgender, gender non-conforming, and non-binary people are by hepatitis B.	

Anyone at increased risk for experiencing severe hepatitis B infection should also be immunized (please see the section *Who is at risk?*).

If you think you have been exposed to hepatitis B, talk to your healthcare professional about whether or not you need to get immunized immediately against this disease.



### Are you protected against hepatitis B?



# The hepatitis B vaccines are safe and the best way to protect against this infection.

Talk to your doctor, nurse, pharmacist, or local public health office about getting immunized against hepatitis B.

#### References

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