



# Hepatitis B



Health Services Department, Public Health  
Infectious Diseases Control Division

## What is hepatitis B?

Hepatitis B is an infection of the liver caused by the hepatitis B virus (HBV). It is a concern because it can cause permanent liver damage such as cirrhosis (scarring) of the liver or cancer of the liver in some people.

## How is hepatitis B spread?

HBV is found in the blood and body fluids of an infected person. You can get HBV when an infected person's blood or body fluids enter your body through cracks and cuts in your skin or mucous membranes, or directly into your blood stream. This can happen during unprotected sexual contact or by sharing infected syringes or needles. The chances of becoming infected depend on the amount of virus present in the blood or body fluids, but overall, the virus is very infectious.

HBV can also pass from a hepatitis B carrier mother to her infant during childbirth.

## Who can get hepatitis B?

Anyone who comes in direct contact with or has frequent exposure to blood or body fluids is at risk of becoming infected with HBV. This includes:

- people who work in jobs where they are exposed to blood or blood products, such as health care workers, embalmers, and emergency workers
- people who have unprotected vaginal, anal or oral sex
- heterosexuals with more than one partner or who have recently had a sexually transmitted infection
- drug users who share drug related equipment
- those who receive blood or blood products
- household and sexual contacts of people who carry HBV
- people from areas where hepatitis B is very common

## Symptoms of HBV infection

Only 50 percent of people who are infected by HBV have symptoms. They may develop flu-like symptoms, fever, headache, joint pain, jaundice, tiredness and tenderness in the upper abdomen. These symptoms can last for up to three months.

The time between exposure to HBV and development of symptoms is 45 to 160 days.

Ninety percent of people infected with HBV recover completely from the disease. One percent can die from a severe case. Nine percent of cases go on to carry the virus for the rest of their lives. They may not be aware that they carry the virus, and may unknowingly infect others. Long-term carriers of HBV are at very high risk for eventually developing permanent liver damage, cirrhosis of the liver or cancer of the liver.

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## Is there a test to show I have had HBV?

A blood test can tell if you have been infected. It will show if you have developed antibodies to HBV or if you still have the virus in your body.

## Treatment

There is currently no cure or treatment for acute (severe) HBV.

Chronic (long-term) carriers of HBV may be offered Interferon. This is a very costly treatment, which has only limited effectiveness. Other treatments are being developed and researched.

People infected with hepatitis B can be assessed by the doctor for hepatitis A and receive free hepatitis A vaccine from York Region Health Services.

## Prevention and protection

**Vaccination:** There are two safe and effective vaccines available in Ontario to prevent infection with HBV. Hepatitis B vaccine is free to all Grade Seven students and to certain high-risk groups (York Region Health Services can tell you who is eligible for free vaccine). For Grade Seven students, the vaccine is given in two doses at least six months apart. For all others, the vaccine is given in three doses: the first dose now, the second dose in one month, and the third dose in six months.

**Hepatitis B Immune Globulin (HBIG):** HBIG may be offered if someone has had a needlestick injury or other high-risk exposure. It should be given within 48 hours of the exposure.

To protect babies from HBV infection, all infants born to infected mothers should be given HBIG within the first few hours of birth, as the effectiveness decreases sharply after 48 hours. The baby should also receive the first of the three doses of hepatitis B vaccine as soon as possible, but no later than seven days after birth.

To prevent the spread of HBV:

- treat all blood and body fluids as potentially infectious. You cannot tell who is infected by looking at the person
- disinfect the surface on any nondisposable equipment that has been in contact with patient/client body fluids to kill the hepatitis B virus. Use a solution of one part bleach to nine parts water and leave it on for at least ten minutes
- tell your sexual partner(s) if you are infectious. Protect them by using latex condoms during sexual intercourse. Encourage your partner(s) to be tested for HBV. Free hepatitis B vaccine is available for sexual partners and household contacts of a person who is ill with or carries hepatitis B, following a screening process
- do not share razors, toothbrushes, nail scissors, nail clippers and nail files
- do not share needles, spoons and other drug use equipment
- if you are infected with HBV, do not donate blood or blood products and organ tissue to others

**Hepatitis B is a reportable disease. York Region Health Services *must* be notified so appropriate case and contact follow up can be done.**

