

HEPATITIS B



Hepatitis B

Hepatitis B is a vaccine preventable, potentially life-threatening liver infection caused by the hepatitis B virus (HBV). It is transmitted through exposure to blood and other body fluids. Any worker with occupational exposure to blood is at risk.

The hepatitis B virus is much more infectious than the HIV/AIDS virus. It causes several conditions, ranging from fever and jaundice (yellowing of the skin and whites of the eyes) to more serious illnesses, like liver inflammation, cirrhosis (scarring of the liver), and liver cancer. It may also lead to the inflammation of the blood vessels and kidney disease.

Is hepatitis B a serious problem?

In 2006, the Public Health Agency of Canada (PHAC) reported 2 cases for every 100,000 people in Canada. In 2013, the incident rate was .5 per 100,000.

Incidents of work-related infections are declining due to increased HBV awareness, as well as increased vaccination rates.

Despite lower infection rates, hepatitis B is still a serious problem. Hepatitis B remains the most frequently reported work-related infectious disease in Canada.

Spread of hepatitis B

Hepatitis B can be transmitted through blood and other body fluids, like saliva, semen, and vaginal fluids. The virus can be detected in dry blood for up to 7 days.

Workers can contract hepatitis B if infected blood or body fluids happen to splash into their eyes, nose, or mouth. The virus can be transmitted through bites that break the skin or through contact with broken skin, cuts, or sores. Being cut or stuck with a contaminated needle can also lead to a hepatitis B infection.

High risk worker groups include:

- surgeons
- paramedics and ambulance staff
- emergency room staff
- blood bank staff
- dialysis unit workers
- clinical lab technologists (particularly those who do blood work)
- hematology, nephrology, hepatology, and cancer ward staff
- people who work in facilities where the patients or residents may exhibit aggressive or unpredictable behaviour
- people who work in prisons
- dentist and dental hygienists, pathologists, and morgue attendants

What are the symptoms?

Symptoms usually appear within one to four months of infection, although some can appear within 2 weeks. Symptoms include fever, fatigue, aches and pains, abdominal pain, loss of appetite, stomach upset, dark urine, and jaundice. While some experience symptoms and serious conditions, others might not experience any at all.

When jaundice does not occur, the symptoms of a mild case are similar to the flu. Approximately 75 per cent of people with HBV have no symptoms of acute (short term) hepatitis, while the remaining 25 per cent experience jaundice or liver swelling. One in several hundred people who are infected with HBV dies from overwhelming (fulminant) hepatitis.

While an acute infection can last up to six months, the chronic infections are of greater concern.

About 10 per cent of infected adults become chronic carriers of the disease (particularly those infected in early childhood or persons who are immunocompromised). While these persons may not develop liver disease, they can pass HBV on to others. A small number of the chronic carriers develop serious, incurable liver disease in the form of chronic active hepatitis, cirrhosis, and liver cancer. Hepatitis B infection is also associated with serious conditions outside the liver, including simultaneous swelling of arteries, joints, and nerves throughout the body, as well as kidney disease.

Treatment

Treatment in the form of antiviral therapy may help reduce symptoms and slow the progression of liver damage. Although medical advancements have been made for effective therapy in treating HBV, there is no cure. Once treatment is stopped, it can result in disease reactivation.

Preventing the spread of hepatitis B

The best way to prevent the spread of hepatitis B is by establishing an infection control program which limits exposure to blood and body fluids. This should include:

- treating all blood and body fluids as potentially infectious
- washing hands after physical contact with any body fluid, even if you were wearing gloves
- using gloves and any other personal protective equipment such as gowns and face protection whenever you might come into contact with blood and body fluids
- strictly controlling potential contamination sources such as linens, dressings, and paper goods such as tissues
- ensuring that employers provide a sufficient amount of puncture resistant containers designed for needle and sharp disposal
- ensuring that all staff who use needles and sharps dispose of them safely into puncture resistant containers
- establishing the use of safer-designed needles to reduce needlestick injuries
- proper sterilization of reusable equipment
- training all workers in the hazards of hepatitis B (and other communicable diseases)

Immunization

A safe and effective vaccine is available to protect against hepatitis B. It is a non-infectious vaccine prepared from recombinant yeast cultures, rather than human blood or plasma.

The vaccine helps you develop antibodies against HBV. These antibodies protect you from infection. The vaccine is good for at least 5 years. A booster may be required.

While most vaccine recipients experience no side effects, approximately 20 per cent may have mild effects such as local reactions at the injection site including soreness, pain, warmth or swelling. Smaller numbers have reported flu-like symptoms including nausea, headache, dizziness, fever, and chills. These normally last a few days or less.

Since HBV infection is often asymptomatic, immunization and boosters are recommended, especially for workers in high-risk settings.

What should I do if I am stuck with a needle or splashed with blood?

If you get stuck with a needle or a sharp, gently squeeze blood from the wound. Then wash with soap and water. If blood or other body fluids get on or in your unprotected skin, eyes, nose, or mouth, wash the area immediately with soap and water. Seek medical assistance as soon as possible after the injury. If you have not had the hepatitis B vaccine, you should start the vaccination process immediately. You should also get a hepatitis B immune globulin (HBIG) shot unless you are certain that the source of contact is not known to be infected with HBV.

Report the incident to your employer and to your joint health and safety committee. Make sure that all the necessary documents are completed: injury report, workers' compensation report, and any other related reports. Keep a copy of all reports and send a copy to your union.

For more information contact:

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