



HEALTH AND SAFETY **FACT SHEET**

Hepatitis B

Hepatitis B is a potentially life-threatening disease. It causes a number of conditions, ranging from fever and jaundice to more serious illness, such as inflammation of the liver, cirrhosis and possibly liver cancer. Hepatitis B infection is transmitted by the hepatitis B virus (HBV) through exposure to blood and other body fluids. Any worker with occupational exposure to blood is at risk of contracting hepatitis B.

Is hepatitis B a serious problem?

Hepatitis B is probably the most frequently reported work-related infectious disease in Canada. The hepatitis B virus is much more infectious than the HIV/AIDS virus. According to the U.S. Centre for Disease Control, one in four HBV-infected health care worker will develop jaundice or other acute (short-term) symptom.

Approximately ten per cent of infected persons infected with HBV become "chronic carriers", which means that they can transmit the virus through their blood or body fluids. Many chronic carriers do not show symptoms of

disease, so they are not aware that they can spread the HBV.

Spread of hepatitis B

Hepatitis B can be transmitted through blood and other body fluids such as saliva, semen and vaginal fluids. Workers can be infected through a splash of blood in the eyes, nose, or mouth or infectious body fluids coming into contact with a cut, sore or broken skin. The HBV can be transmitted by bites that penetrate the skin. Workers can also be infected if they are cut by a sharp or stuck with a needle contaminated with infected blood.

High risk worker groups include:

- surgeons and operating room staff;
- emergency room and ambulance staff;
- blood bank staff;
- dialysis unit workers;
- clinical lab technologists (particularly those who do blood work);
- haematology, nephrology, hepatology and cancer ward staff;
- workers in institutions for the mentally handicapped;
- workers in prisons;

./2

- dentists, dental assistants and hygienists;
- pathologists and morgue attendants.

What are the symptoms?

Hepatitis may cause serious acute (short-term) and chronic (long-term) diseases of the liver for which there is no effective treatment. Infected persons show symptoms including tiredness, aches and pains, stomach upsets, and jaundice in some cases. When jaundice doesn't occur the symptoms of a mild case are similar to the flu. Approximately 75 per cent of persons infected with HBV have no symptoms of acute hepatitis, while the remaining 25 per cent show clinical features, such as jaundice or liver swelling. One in several hundred people who are infected with HBV dies from overwhelming (fulminant) hepatitis.

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

About 6–10 per cent of infected adults become **chronic carriers** of the disease (particularly those infected in early childhood or persons who have problems with their immune systems). While these persons may not develop liver disease, they can pass the virus on to others. A small number of the chronic carriers develop serious, chronic, incurable liver disease in the form of chronic **active** hepatitis, cirrhosis and liver cancer. Hepatitis infection is also associated with serious diseases outside the liver, including simultaneous swelling of arteries, joints and nerves throughout the body.

Preventing the spread of hepatitis B

The best way to prevent the spread of hepatitis is the establishment of a good basic infection control program, which limits exposure to all 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 protective clothing such as gowns and face protection whenever workers might come into contact with blood and body fluids;
- strict control of potential contamination sources such as linen, dressings and paper goods such as tissues;
- ensuring that employers provide sufficient numbers of puncture-resistant containers designed for needle and sharp disposal;
- ensuring that 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; and
- 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. The hepatitis vaccination is a non-infectious vaccine prepared from recombinant yeast cultures, rather than human blood

or plasma. Since the vaccine is genetically engineered, there is no risk

The vaccine develops antibodies against the HBV to protect you from infection. The vaccine is good for at least five years, so 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 and swelling. Smaller numbers have reported flu-like symptoms including nausea, headache, dizziness, fever and chills. These normally last a few days or less.

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

If you get stuck with a needle or a sharp, gently squeeze blood from the wound, and then wash the area 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. See your own doctor as soon as possible after the injury. If you have not had the hepatitis B vaccine, you should start the vaccination process. You should also get a hepatitis B immune globulin (HBIG) shot unless you know 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

of acquiring HIV/AIDS, HBV or other infectious disease from the vaccine.

report and any other related reports. Keep a copy of all reports and send a copy to your union.

For more information contact:

CUPE National Health and Safety Branch
1375 St-Laurent Boulevard
OTTAWA, ON K1G 0Z7
Tel: (613) 237-1590
Fax: (613) 237-5508
Email: health_safety@cupe.ca
www.cupe.ca

cope 491

Updated November 2007

K:\FACTSHEETS - 2007\Hepatitis B.doc