The Issue

Hepatitis B is a liver disease caused by the hepatitis B virus. The virus is carried in blood and body fluids. It can lead to serious liver damage, life-long infection, liver cancer, liver failure and even death. Fortunately, there is a vaccine that can protect you against hepatitis B.

Background

Hepatitis B virus (HBV) is one of a group of viruses that attacks the liver. Six hepatitis viruses have been identified but three – known as A, B, and C – cause about 90% of the acute hepatitis cases in Canada.

HBV is the most common form of hepatitis virus in the world. It is easily transmitted and is significantly more infective than HIV. HBV is primarily transmitted from one person to another through blood or other body fluids, such as vaginal secretions and semen. It can also be transmitted from mother to child during pregnancy and birth.

The majority of people infected with HBV do not have noticeable symptoms and may unknowingly be experiencing liver damage and infecting others. That is why it is important for those most at risk to be vaccinated against the virus and avoid risky behaviour.

Symptoms of HBV

As indicated above, many people who are infected do not have any symptoms. Those who do may have:

- Jaundice (a yellowing of the skin and eyes)
- Tiredness
- Loss of appetite
- Joint pain
- Pain in the stomach area
- Nausea and vomiting

Risks of Hepatitis B Exposure

Like HIV, HBV can be spread through contact with infected blood or body fluids. The most common ways of being infected with HBV are:

- Sexual contact with an infected partner. Those most at risk are those who have multiple sexual partners,
especially in areas where HBV is common.

- Sharing needles, straws, pipes, spoons, cookers, and other drug equipment. Cleaning equipment with bleach may not kill the virus.
- Tattooing, body piercing, or acupuncture when non-sterile equipment or techniques are used.
- Being born to a mother with HBV.
- Being exposed in the workplace by getting pricked by a needle or sharp equipment that has infected blood on it.

The Health Effects of Hepatitis B

HBV attacks the liver, an essential organ that acts as a filter for chemicals and toxins that enter the body. The liver also helps in the digestion of food, stores vitamins and minerals, and aids in the manufacture of blood.

Most people infected with HBV recover completely and develop a lifelong immunity to the virus. However, about 5-10% of adults will develop chronic HBV infection and 15-40% of them will develop liver disease. Each year, 15-25% of those with liver damage (about one million people worldwide) will die of liver disease or cancer of the liver.

About 90% of babies born to mothers who have HBV infection have a high risk of developing chronic HBV infection later in life, which can lead to diseases such as cirrhosis (extensive scarring that can inhibit the normal function of the liver) and cancer of the liver.

Currently, there is no cure for chronic HBV infection but there is a vaccine available to prevent it. The National Advisory Committee on Immunization (NACI) recommends that all people who are at risk, including those travelling to parts of the world where HBV is common, talk to their health care provider about being vaccinated.

All provinces and territories in Canada have universal HBV immunization programs. These programs provide the vaccine either during early infancy or through school-based immunization programs. All provinces and territories also have HBV programs for high risk groups.

Treatment is not required for all HBV infections, but it may be necessary in some cases. Generally, treatment is used for short periods of time until the body can suppress the virus on its own.

If you think you may be at risk of HBV infection, see your healthcare provider. The infection can be detected by a blood test.

Minimizing Your Risk

Hepatitis B immunization is your best protection against HBV infection. You can also follow these steps:

- Always practice safe sex. Using a condom will not only protect you against HBV, but also against sexually transmitted infections (STIs).
- Never share needles or any other drug equipment such as straws, pipes, spoons, and cookers.
- Wear latex gloves if you are likely to be in contact with someone else’s blood.
- Avoid sharing personal items that are likely to become infected with blood, such as toothbrushes and razors.
- If you are the parent of a school-aged child, ask about vaccination for HBV. It is recommended that all children be vaccinated.
- If you are getting a tattoo, body piercing or having acupuncture treatments, make sure all equipment is sterile. Do not allow anyone to use homemade or reused equipment, including needles, ink or jewellery.
- If you are pregnant, be sure to be tested for HBV. There are measures which can help protect your newborn baby from infection.
- If you are a healthcare worker or work in an environment where exposure to blood or body fluids is possible, you should be vaccinated against HBV.

Government of Canada’s Role

The Government of Canada works collaboratively with provincial and territorial authorities to monitor HBV across the country. The Public Health Agency of Canada has produced The Canadian Guidelines on Sexually Transmitted Infections which includes recommendations on the management of HBV. The latest edition of the Canadian Immunization Guide also includes recommendations for HBV immunization.
Need More Info?

To learn more about HBV, go to:
Public Health Agency of Canada, Hepatitis B Fact Sheet
www.phac-aspc.gc.ca/hcai-iamss/bbp-pts/hepatitis/hep_b_e.html

Canadian Immunization Guide Seventh Edition - 2006, Part 4 Active Immunizing Agents

For the Canadian Immunization Guide

For additional articles on health and safety issues go to the It’s Your Health Web site at: www.healthcanada.gc.ca/iyh
You can also call toll free at 1-866-225-0709
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