What is hepatitis?

Hepatitis is any kind of inflammation (a reaction which can include swelling and pain) of the liver. Hepatitis has many causes, including viruses (type of germ), drugs, chemicals and alcohol, and even one’s own immune system attacking the liver. At this time, there are five viruses known to affect the liver in particular. In the United States, the most common types of viral hepatitis are hepatitis A, hepatitis B and hepatitis C. These viruses are very different from one another, but all are infectious (and can be spread from person to person) and may cause similar symptoms. They differ in how they are spread, how long the infection lasts, and how they are treated. A healthcare provider can test a person’s blood for the presence of infection with hepatitis A, B and C viruses.

What is hepatitis B?

Hepatitis B is a liver infection caused by the hepatitis B virus. Most people who get the disease recover from it and can never get it again. However, about 10% of adults who get hepatitis B will go on to have chronic (long-term) infection and can pass it on to others (be a carrier). When it is chronic, it can be a serious disease that can lead to cirrhosis (scarring of the liver) and/or liver cancer. The younger a person is when infected, the more likely he or she is to go on to have chronic infection and to develop serious liver disease. There is a vaccine to prevent hepatitis B infection.

How is it spread?

The hepatitis B virus is spread by direct contact with blood, semen, vaginal and other body fluids of an infected person. The virus is very infectious and is transmitted easily through breaks in the skin or through mucous membranes (nose, mouth, eyes). This can happen through:

- Sexual contact with an infected person
- Direct contact with infected blood, including sharing needles to inject drugs or other drug injection equipment that has blood on it
- Sharing personal items, such as toothbrushes, razors, syringes, or glucose monitors that may have blood on them
- Direct contact with open sores of an infected person
- Pregnant women infected with the virus passing it to their babies at birth.

The hepatitis B virus is NOT spread by casual contact such as hugging, or by sneezing, coughing, or sharing food and drinks. Hepatitis B is also not spread by breast feeding.

What are the symptoms of hepatitis B?

Many adults have few or no symptoms and do not know they are infected. When symptoms occur, they can include tiredness, loss of appetite, nausea, vomiting, stomach ache, and muscle or joint pain. Urine may become darker in color, and then jaundice (yellowing of the skin and whites of the eyes) may appear. Symptoms can begin as soon as six weeks to as long as six months after contact with the virus. Symptoms of chronic hepatitis B may begin to occur 20 to 30 years after infection occurred. Damage to the liver by hepatitis B virus causes symptoms similar to those of acute infection, and may indicate liver damage, scarring of the liver (cirrhosis), liver failure and even liver cancer.
How do I know if I have hepatitis B?

Hepatitis B is diagnosed with blood tests. These blood tests can tell the difference between recent and chronic, and current and past infection.

How is hepatitis B treated?

Most people with acute or new hepatitis B infection get better without treatment. People with chronic hepatitis B infection can be treated with drugs that fight the virus and help them stay healthy. People with hepatitis B should avoid drinking alcohol or taking any medications or dietary supplements that are harmful to the liver. Hepatitis A vaccine may also be recommended. Ask your doctor about treatment options and steps you can take to protect your liver.

How can I prevent hepatitis B?

The best way to prevent hepatitis B infection is to get vaccinated. All newborns, children through age 18, and adults who are at risk of hepatitis B infection should get the vaccine. Adults at risk of hepatitis B infection who should be vaccinated include:

- Household contacts and sex partners of people with hepatitis B
- People with multiple sex partners or sexually transmitted infections
- Men who have sex with men
- People who inject drugs
- People in high risk settings or programs (e.g., correction, substance abuse treatment, institutions or programs for people with developmental disabilities)
- People on hemodialysis
- People with chronic liver disease (including hepatitis C infection) or with HIV infection
- People with hemophilia and others who receive certain blood products
- People with diabetes mellitus between the ages of 19 to 59 years
- Health care and public safety workers who may have contact with blood/body fluids
- Travelers to certain countries where there are high rates of hepatitis B

Is hepatitis B vaccine required for anyone?

In Massachusetts, three doses of hepatitis B vaccine are required for all children attending licensed childcare or preschool, and kindergarten through grade 12. Three doses of hepatitis B vaccine are also required for full-time college and graduate students, as well as health science students attending college. Private employers must offer the vaccine to employees (such as health care workers) who might come in contact with blood and body fluids on the job.

What do I do if I am exposed to hepatitis B?

Contact your healthcare provider as soon as possible after the exposure. If you have not been vaccinated or are incompletely vaccinated, it may make sense for you to get a shot of hepatitis B immune globulin (HBIG) as soon as possible (and to start or complete the vaccination series). HBIG provides short-term protection against the hepatitis B virus. When given shortly after an exposure (within seven days), HBIG
is 70-75% effective in preventing hepatitis B infection. Hepatitis B vaccination can be given at the same time, for long-term protection.

**Where can you get more information?**

- Your doctor, nurse or health care clinic
- The Centers for Disease Control and Prevention (CDC) website at: [http://www.cdc.gov/hepatitis](http://www.cdc.gov/hepatitis)
- Your local board of health (listed in the telephone directory under “government”)
- The Massachusetts Department of Public Health (MDPH), Division of Epidemiology and Immunization at (617) 983-6800 or toll-free in Massachusetts at (888) 658-2850