

Hepatitis B

What is hepatitis?

Hepatitis is an inflammation of the liver caused by certain viruses and other factors, such as alcohol abuse, some medications and trauma. Its various forms affect millions of Americans. Although many cases of hepatitis are not a serious threat to health, infection with certain hepatitis viruses can become chronic and can sometimes lead to liver failure and death.

How many kinds of viral hepatitis are there?

There are four major types of viral hepatitis, all caused by different viruses: hepatitis A, hepatitis B, hepatitis C and delta hepatitis (hepatitis D).

What is hepatitis B and how is it transmitted?

Infection with the hepatitis B virus (HBV) may be without any symptoms, mild or severe. Among adults infected by HBV, 90% to 94% recover completely and have no long term effects. Six to ten percent will become chronic carriers of HBV and will be at risk of developing cirrhosis or liver cancer. Over time, hepatitis B can destroy the liver (cirrhosis) and can cause liver cancer.

HBV is spread by direct contact with blood or other body fluids of infected people (hepatitis D is spread the same ways as HBV; however, it can only be acquired in the presence of hepatitis B virus).

Since the disease is not easily spread, persons with HBV do not pass the virus to others through casual contact, such as shaking hands or sharing a work space or bathroom facilities. Hepatitis B is most commonly transmitted by sharing drug needles, by engaging in high-risk sexual behavior (especially anal sex), from a mother to her baby during childbirth and in the health-care setting.

What are the symptoms of hepatitis B?

Many people infected with viral hepatitis have no symptoms. For example, about one-third of people infected with HBV have a completely "silent" disease. When symptoms are present, they may be mild or severe. The most common early symptoms are mild fever, headache, muscle aches, fatigue, loss of appetite, nausea, vomiting and diarrhea. Later symptoms can include dark coffee-colored rather than dark yellow urine, clay-colored stools, abdominal pain, and yellowing of the skin and whites of the eyes (jaundice).

About 15 to 20% of patients develop short-term arthritis-like problems. Another 30% of those with hepatitis B develop only mild flu-like symptoms without jaundice. Very severe hepatitis B is rare, but it

is life-threatening. Signs and symptoms which require immediate medical attention include prolonged blood clotting time, personality changes and agitated behavior.

Can people with no symptoms pass hepatitis B to others?

Some people infected with HBV become chronic carriers of the virus, although they may have no symptoms. There are an estimated 1.5 million HBV carriers in the United States and 300 million carriers worldwide. Children, when exposed to HBV, are at greatest risk of becoming carriers. Up to 90% of babies who become infected at birth with HBV, and up to half of youngsters who are infected before 5 years of age, become chronic carriers.

How is hepatitis B diagnosed?

Several blood tests can detect signs of HBV even before symptoms develop. These tests measure liver function and identify HBV antigens (certain parts of the hepatitis B virus) or antibodies (proteins produced by the body in response to the virus) in the blood.

How is hepatitis B treated?

There are no specific treatments for the symptoms of viral hepatitis B. Doctors recommend bed rest, adequate fluid intake, a healthy diet and avoidance of alcoholic beverages.

A synthetic form of the protein interferon alpha is used to treat people with chronic hepatitis B. The drug improves liver function in some people with hepatitis and reduces symptoms, although it may cause side effects such as headache, fever and other flu-like symptoms.

Most patients with mild to severe hepatitis begin to feel better in two to three weeks and recover completely within four to eight weeks. People with HBV infection, who also become infected with the hepatitis C virus at the same time, may be at particular risk for developing severe, life-threatening hepatitis.

Many chronic carriers remain symptom free or develop only a mild condition of hepatitis B. However, approximately 25% go on to develop the most serious complications of viral hepatitis: cirrhosis of the liver, liver cancer and immune system disorders.

How can hepatitis B be prevented?

The most effective means of preventing hepatitis B virus infection is to avoid contact with the blood and body fluids, including semen and vaginal secretions, of infected individuals. People who have hepatitis B virus infection should:

- avoid sharing items that could infect others, such as razors or toothbrushes;

- protect sex partners from exposure to semen, vaginal fluids or blood through the proper use of latex condoms.

There are several vaccines available to prevent hepatitis B. Vaccination should be considered by people at high risk of infection: men who have sex with men, men and women with multiple partners, people who receive dialysis or blood products, household and sexual contacts of HBV carriers, and users of street drugs who share needles. Many health care and laboratory workers who handle blood and other body fluids also are vaccinated. People who come into direct contact with the blood or body fluids of an HBV carrier may receive one or more injections of hepatitis B immune globulin, sometimes in combination with hepatitis B vaccine. Immune globulin offers temporary protection, while the vaccine provides long-term immunity.

In an effort to eliminate chronic carriers of HBV, the U.S. Centers for Disease Control and Prevention (CDC) recommends that all newborn babies be vaccinated against the hepatitis B virus. The CDC and other groups have recommended that pregnant women be screened for hepatitis B as part of routine prenatal care. If the mother is infected, her baby can be given hepatitis B immune globulin and vaccine immediately after birth.

For more information about STDs, talk to your health care provider or call:

The State of Tennessee HIV/STD Hotline: 1-800-525-2437

(Monday through Friday 8:00 to 4:30 p.m. CST)

OR

The CDC National STD Hotline: 1-800-227-8922

Other Informational Links:

American Social Health Association

<http://www.ashastd.org/>

Centers for Disease Control and Prevention

<http://www.cdc.gov/STD/>

E-Cards, Centers for Disease Control and Prevention

<http://www2c.cdc.gov/ecards/index.asp?category=174>

Get Yourself Tested

<http://www.gytnow.org/>

National Institute of Health Medline

<http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html>

U.S. Department of Health and Human Services

<http://www.womenshealth.gov/faq/sexually-transmitted-infections.cfm>

World Health Organization

http://www.who.int/topics/sexually_transmitted_infections/en/