



Hepatitis B is an infectious liver disease caused by the hepatitis B virus (HBV). There are an estimated 1.25 million chronically infected Americans, of whom 20% to 30% acquired their infection in childhood. About 95% of adults recover spontaneously; however, 90% of young children who get infected with HBV never clear the virus remaining chronically infected with an increased risk of scarring of the liver (cirrhosis) and liver cancer. An estimated 80,000 new cases occur each year and about 5000 deaths annually are related to HBV infections and resultant cirrhosis and liver cancer. *Safe and effective vaccines can prevent hepatitis B.*

## TRANSMISSION

Transmission of HBV occurs when blood or body fluids from an infected person enter the body of a person who is not immune. This can occur through:

- having sex, including foreplay, with an infected person without using a latex condom;
- sharing drugs, needles, syringes, water, or "works" when "shooting" drugs;
- getting an injury through needle sticks or sharps that may be contaminated;
- passing the infection from an infected mother to her baby during birth.

The following groups are at risk:

- persons with multiple sex partners or with a diagnosis of a sexually transmitted disease
- men who have sex with men
- sexual contacts of infected persons
- injecting drug users
- household contacts of chronically infected persons
- infants born to infected mothers
- infants and children of immigrants from areas with high rates of HBV infection
- health care and public safety workers

## SYMPTOMS

Many newly HBV infected people have no symptoms at all, or they may have flu-like symptoms, including loss of appetite, nausea, fatigue, muscle or joint aches, mild fever, and sometimes jaundice.

## DIAGNOSIS

The only way to know if you are currently infected with HBV, have had the infection and recovered, or if you are chronically infected, is to ask your doctor to test you for hepatitis B. Testing might include:

- **HBsAg (hepatitis B surface antigen):** When this is positive, it means that you are currently infected with HBV and are able to pass the infection on to others
- **Anti-HBc (antibody to hepatitis B core antigen):** When this is positive or reactive, it means that you have HBV infection or had it at some time in the past.
- **Anti-HBs (antibody to hepatitis B surface antigen):** When this is positive, it means that you are *immune* to HBV infection, either from vaccination or from past infection and cannot pass the disease on to others.
- **IgM anti-HBc:** When this is positive or reactive, it indicates recent infection with HBV.



## **TREATMENT**

Most people recover on their own within six months of the initial infection. If you remain infected after that period you are considered chronically infected and should be evaluated by your doctor for treatment options. Adefovir dipivoxil, alpha interferon, and lamivudine are 3 drugs licensed for the treatment of persons with chronic hepatitis B. These drugs should not be used by pregnant women. Drinking alcohol can make your liver disease worse.

## **PREVENTION**

Hepatitis B vaccine is the best protection.

Safe and effective Hepatitis B vaccines have been available since 1982.

- A combined vaccine for hepatitis A and B is available for those over 18 years of age.
- Routine vaccination is recommended for young people aged 0 to 18 years.
- Vaccination is also recommended for risk groups of all ages (see risk groups above).
- The usual dosage is three injections given over a 6 months period.
- If you are having sex with more than one steady partner use latex condoms correctly and every time to reduce the potential for infection.
- If you are pregnant, you should get a blood test for hepatitis B. Infants born to HBV-infected mothers should be given hepatitis B immune globulin and vaccine within 12 hours after birth.
- Do not shoot drugs. If you can't stop, never share drugs, needles, syringes, water, or "works," and get vaccinated against hepatitis A and hepatitis B (if not already infected), and get into a treatment program.
- Do not share personal-care items that might have blood on them (e.g., razors, toothbrushes).
- Assess the risk you are taking when getting a tattoo or body piercing. The tools being used may have someone else's infected blood on them.
- If you have or had hepatitis B, do not donate blood, organs, or tissue.
- If you are injecting drugs, make sure the tools you are using are sterile and don't share with others.

If you are a health care or public safety worker, get vaccinated against hepatitis B, always follow routine barrier precautions, and handle needles and other sharps safely.