

Hepatitis B

What is hepatitis B?

Hepatitis B (HBV) is a serious viral infection of the liver. HBV can cause chronic infection, cirrhosis (scarring) of the liver, liver cancer, liver failure and death. It is estimated that 4,000 to 5,000 people die each year in the United States due to the complications of cirrhosis and liver cancer as a result of HBV.

How common is hepatitis B?

According to Centers for Disease Control and Prevention (CDC), it is estimated that 1 to 1.25 million people in the United States have chronic HBV. There are an estimated 140,000 to 320,000 new HBV infections each year in the United States.

How can I get hepatitis B?

HBV is found in transmittable levels in body fluids including:

- Semen
- Vaginal secretions
- Saliva
- Blood

HBV has also been found in low concentrations in other body fluids, though these fluids have NOT been associated with transmission:

- Tears
- Urine
- Feces
- Breast milk
- Cerebrospinal fluid

HBV may be transmitted:

- Sexually (having unprotected sex with an infected person)
- Intravenously (sharing injecting drug needles or paraphernalia with an infected person)
- Neonatally (mother-to-child if the mother is infected with HBV)

HBV may also be transmitted in rare cases:

- Horizontally (oral exposure to infected secretions such as saliva). Saliva can be a means of transmission through bites; however, other types of exposure to saliva, including kissing, are unlikely ways of transmission.
- Risk of transmission from blood transfusion is currently low in the United States since blood banks screen donated blood that appears to be infected.

HBV is not spread through food or water or by casual contact.

What are the signs or symptoms of hepatitis B?

Many adults have few or no symptoms. Symptoms may include:

- Anorexia (loss of appetite)
- Malaise
- Nausea and vomiting
- Abdominal pain
- Dark urine
- Jaundice (yellowing of the skin and eyes)
- Rash or arthritis may occur during the prodromal or early acute stage.

How can I find out if I have hepatitis B?

Your health care provider can confirm HBV by using a special blood test to detect HBV particles or antibodies in the blood.

If your health care provider thinks you may have chronic HBV, other tests, like ultrasound

or liver biopsy, may be needed.

Considerations for confirmatory testing one to two months after receiving the hepatitis B vaccine (three shot series) should be made if:

- A sex partner has chronic hepatitis B.
- The immune system is not working (for instance, if someone has AIDS).
- A person has a job that exposes them to human blood.

Babies born to infected mothers should get blood tests at aged 9 to 15 months to be certain that the vaccine worked well and that the mother did not pass HBV to her baby during birth.

What can I do to reduce my risk of getting hepatitis B?

Hepatitis B is preventable through vaccination. Since hepatitis D can only co-exist with hepatitis B, getting vaccinated against hepatitis B also protects you against hepatitis D.

- The HBV vaccine is given in a series of three doses.
- A new combination vaccine called Twinrix has been approved for protection from both HAV and HBV in persons 18 and older. It reduces the total number of injections for vaccination from both viruses from five to three.
- The first and second doses must be given at least one month apart.
- The first and third doses must be given at least 4 months apart.
- If a dose is missed, it should be given as soon as possible.
- The series should not be restarted if a dose is missed.
- Routine booster doses of the HBV vaccine are NOT currently recommended.
- Consult your health care provider for more information about the HBV vaccine and if it is right for you.
- HIV can impair the response to the hepatitis vaccine.

Vaccination against hepatitis B is recommended for those who are risk of infection, including:

- Health care professionals
- Clients/staff of institutions for the developmentally disabled
- Sexually active homosexual and bisexual men
- Household/sexual contacts of chronic HBV carriers
- Travelers to and immigrants from countries with high incidence of HBV
- Sexually active heterosexual men and women, including:
 - a) those in whom another STD was recently diagnosed (hepatitis B infection with an HIV infected individual is more likely to lead to chronic HBV)
 - b) those who have had more than one sex partner in the preceding six months
 - c) those who have received treatment in an STD clinic
 - d) those who are sex workers or prostitutes
- Injecting and non-injecting drug users
- Hemodialysis patients
- Recipients of certain blood products
- Infants and children

Post exposure treatment to prevent illness (Immune globulin and HBV vaccine); if a person is exposed to hepatitis B and has NOT been vaccinated before the exposure:

- For unvaccinated individuals who have had recent exposure to someone with acute hepatitis B, a dose of hepatitis B immune globulin (HBIG) may prevent illness.
- The hepatitis B vaccine given with HBIG is also recommended. (The hepatitis B vaccine in conjunction with HBIG is more effective than administering the hepatitis B vaccine alone.)
- Both should be administered within 14 days after the exposure, as treatment is recommended even without testing.

- Since 1985, all plasma units for preparation for immune globulin have been screened for HIV.

Sexual prevention of hepatitis B:

- Latex condoms are effective prevention during vaginal, oral and anal sex by reducing contact with infected bodily fluids (semen, vaginal secretions and blood).
- Abstinence and mutual monogamy also offer a high level of protection.

What is the treatment for hepatitis B?

Treatment considerations for HBV vary depending on whether the infection is acute or chronic. Always consult your health care provider for specific recommendations and treatment options.

Acute (newly acquired):

- No specific treatment is available for acute HBV infection.
- Most patients with acute viral hepatitis experience a self-limited illness (one that runs a defined, limited course), and go on to recover completely.
- There is no accepted therapy, now restrictions on diet or activity.
- In most cases, hospitalization should be avoided, to prevent spread of the virus to other patients. It should, however, be considered for patients who are severely ill. Hospitalization in these cases would be to provide supportive care.
- Your health care provider can recommend the best options based on your individual needs for care.

Chronic (persistent):

- Lamivudine (Epivir) is now available to treat chronic HBV. It is the first medication specifically formulated to do so. Consult your health care provider for more information about Lamivudine and to learn it is right for you.
- Interferon is used to help stop the replication of HBV. It is called an antiviral agent. Interferon has been 40 percent effective in eliminating chronic HBV infection. Persons who became infected during adulthood were most likely to respond to this treatment. Long-term follow up of treated patients suggests that remission of chronic HBV from treatments with interferon is of long duration. Consult your health care provider about the use of Interferon.

Why worry about hepatitis B?

Hepatitis B can cause:

- Chronic infection
- Cirrhosis (scarring) of the liver
- Liver cancer
- Death

The best news is that hepatitis B is preventable through vaccination. A person can choose to be vaccinated and not have to worry.

Do I need to talk to my partner about hepatitis B?

Yes. If you have an acute or chronic hepatitis B infection then you DO need to talk to your partner about it so they can decide what option is best for them to prevent getting infected.

Do I need to talk to my health care provider about hepatitis B?

Yes. Since hepatitis B is a preventable disease through vaccination, it is a good idea to talk to your health care provider about whether the vaccine is right for you.

If you find out you have been exposed to hepatitis B, consult your health care provider as soon as possible to discuss your best options to help prevent infection.