

# What You Should Know About Hepatitis B

## What is hepatitis B?

Hepatitis B is a viral infection that attacks the liver. The hepatitis B virus (HBV) can be spread through contact with an infected person's blood or other body fluids, such as semen and vaginal fluids. Infection cannot be transmitted by casual contact. However, it is 50 to 100 times more infectious than the human immunodeficiency virus (HIV). Worldwide, it is estimated that 600,000 persons die from complications due to chronic hepatitis B infection, which include cirrhosis, liver failure, and liver cancer.

## Who is at risk for getting hepatitis B?

Transmission of the virus from an infected woman to her newborn poses the greatest risk of infection, which is why all pregnant women should be screened for hepatitis B. If their results are negative, vaccination can be recommended if they are at high risk for exposure. If their results are positive for hepatitis B, they should be immediately referred to a knowledgeable provider for further evaluation.

Others who are at increased risk for acquiring hepatitis B include household members or sexual contacts of persons with hepatitis B, injection drug users, men who have sex with men, persons with conditions that may require immunosuppressive or immune-modifying therapy, persons with elevated liver enzymes of unknown cause, blood or tissue donors, hemodialysis patients, and HIV-positive persons. Persons found to be infected have a high probability of transmitting the virus to others, especially to household and sexual contacts.

## What are the symptoms of hepatitis B infection?

The hepatitis B virus can initially cause an acute illness with symptoms that last several weeks, including yellowing of the skin and eyes (jaundice), dark urine, fatigue, nausea, vomiting, and abdominal pain. If an individual's immune system cannot clear the virus, the virus can also result in a chronic infection that may lead to cirrhosis, liver failure, or liver cancer.

## How is hepatitis B treated?

For acute infections, there is no specific treatment. Care involves minimizing the symptoms and maintaining adequate nutritional balance, including replacement of fluids lost from vomiting and diarrhea. Of note, about 90% of healthy adults who are infected will recover and completely clear the viral infection within 6 months.

For those who are unable to clear the virus and develop chronic hepatitis B, there are effective treatment options available that include 2 injectable interferons and

5 oral antiviral drugs. Although not everyone requires treatment, drug therapy may be required if there are signs of active liver disease to decrease the risk of progression to cirrhosis or liver cancer. However, none of the current drugs are curative. It is important, though, that all chronically infected persons seek regular care from a provider knowledgeable about hepatitis B to monitor disease progression. Liver cancer screening, which includes regular blood tests and ultrasounds, should be started in women over 50 years and men over 40 years. Early detection provides for early intervention, which improves outcomes. Treatment for people who develop cirrhosis and liver cancer may include surgery, chemotherapy, or, ultimately, transplantation.

## How can hepatitis B be prevented?

The hepatitis B vaccine is the best protection against infection. All persons at high risk for getting hepatitis B, such as health care workers and those who live with someone with hepatitis B, should be vaccinated. Further, the hepatitis B vaccine should be given to pregnant women who are at high risk of contracting hepatitis B.

To prevent mother-to-child transmission, it is recommended that the first dose of the HBV vaccine and one dose of hepatitis B immunoglobulin (HBIG) be given to the newborn in the delivery room or within the first 12 hours of life. This protocol provides protection in over 95% of infants born to HBV-infected women.

The hepatitis B vaccine has an outstanding record of safety and effectiveness, with over one billion doses being given worldwide since 1986. The vaccine is the primary means of preventing and controlling hepatitis B infection among infants, children, and adults, including women of childbearing age.

### Patient Resources

**Hepatitis B Foundation** [www.hepb.org](http://www.hepb.org)  
A national nonprofit organization dedicated to finding a cure and improving the lives of those affected worldwide through research, education, and patient support.

**Centers for Disease Control and Prevention** [www.cdc.gov/hepatitis](http://www.cdc.gov/hepatitis)  
Division of Viral Hepatitis

**Medline Plus—Hepatitis B**  
[www.nlm.nih.gov/medlineplus/hepatitisb.html](http://www.nlm.nih.gov/medlineplus/hepatitisb.html)

**American Liver Foundation**  
[www.liverfoundation.org](http://www.liverfoundation.org)