



## HEPATITIS B

### What is hepatitis B?

Hepatitis B is a liver infection caused by the hepatitis B virus (HBV). Some people with hepatitis B are sick for only a few weeks (known as “acute” infection), but for others, the disease progresses to a serious, lifelong illness known as chronic hepatitis B.

Acute hepatitis B is a short-term illness that occurs within the first six months after someone is exposed to the hepatitis B virus. Some people with acute hepatitis B have no symptoms or only mild illness. For others, acute hepatitis B causes a more severe illness that requires hospitalization.

Some people, especially those who get infected in adulthood, are able to clear the virus from their bodies without treatment. For other people, acute hepatitis B leads to life-long infection known as chronic hepatitis B. Over time, chronic hepatitis B can cause serious health problems, including liver damage, cirrhosis, liver cancer, and even death.

### Who gets hepatitis B?

Anyone who is not vaccinated against hepatitis B can be infected. People at increased risk for hepatitis B include:

- infants born to mothers with hepatitis B
- people who inject drugs or share needles, syringes, and other types of drug equipment
- sex partners of people with hepatitis B
- men who have sex with men
- people who live with someone who has hepatitis B
- health care and public safety workers exposed to blood on the job
- people on dialysis.

Age plays a role in whether hepatitis B will become chronic. The younger a person is when infected with the hepatitis B virus, the greater the chance of developing chronic infection.

About nine in 10 infants who become infected go on to develop life-long, chronic infection. By contrast, approximately 95% of adults recover completely from HBV infection and do not become chronically infected.



## **How is hepatitis B spread?**

Hepatitis B is spread when blood, semen, or other infectious body fluid enters the body of a non-infected or unvaccinated individual. People can also become infected from:

- birth (spread from a mother who has hepatitis B to her baby during birth)
- sex with a partner who has hepatitis B
- sharing needles, syringes, or drug preparation equipment
- sharing items such as toothbrushes, razors, or medical equipment (like a glucose monitor) with a person who has hepatitis B
- direct contact with the blood or open sores of a person who has hepatitis B
- exposure to the blood from a person who has hepatitis B through needlesticks or other sharp instruments.

## **What are the symptoms of hepatitis B?**

Symptoms of acute HBV infections can include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stool, joint pain, and jaundice. Not all people with acute HBV infections have symptoms. The development and appearance of symptoms can vary by age and comorbidities. Most children less than 5 years and newly infected immunosuppressed adults are generally asymptomatic, whereas 30% to 50% of people aged 5 years or less have signs and symptoms.

Most people with chronic HBV infection are asymptomatic and have no evidence of liver disease or injury. However, some people develop chronic hepatitis (elevation of AST/ALT), cirrhosis, or hepatocellular carcinoma (primary liver cancer).

## **How soon do symptoms appear?**

If symptoms occur, the average time it takes for them to develop is 90 days (range: 60 to 150 days) after an exposure.

## **Should an infected person be excluded from work or school?**

Individuals with acute or chronic hepatitis B infections do not need to be excluded from work or school unless they have a bleeding problem, weeping sores that cannot be covered, or scratching/biting behaviors. These individuals can return when those conditions have resolved.

## **What is the treatment for hepatitis B?**

There is no medication available to treat acute hepatitis B. For people with mild symptoms, health care providers usually recommend rest, adequate nutrition, and fluids. Those with more severe symptoms may need to be hospitalized.



## Frequently Asked Questions

Several medications have been approved to treat people who have chronic hepatitis B, and new drugs are in development. However, not every person with chronic hepatitis B needs medication, and the drugs may cause side effects in some patients. People who start hepatitis B treatment may need to take medication indefinitely because these medications do not lead to a cure. People with chronic hepatitis B should be under the care of a health care provider that is knowledgeable about this and is able to regularly monitor their liver function over time.

### **What can a person or community do to prevent the spread of hepatitis B?**

The best way to prevent hepatitis B is by getting vaccinated. The hepatitis B vaccine is safe and effective. You need to get all shots in the series to be fully protected. The Advisory Committee on Immunization Practices recommends that all unvaccinated infants, children, and adolescents younger than 19, adults aged 19 to 59, and adults aged 60 and older with risk factors receive the hepatitis B vaccine series. Adults aged 60 and older without known risk factors should also be vaccinated.

Individuals at higher risk for hepatitis B infection, or who may have been exposed in the past, should visit a health care provider and be screened for hepatitis B.

### **Resources**

Centers for Disease Control and Prevention. (2022). Hepatitis B questions and answers for the public, <https://www.cdc.gov/hepatitis/hbv/bfaq.htm#bFAQd01>

Centers for Disease Control and Prevention. (2022). Hepatitis B: Questions and answers for health professionals, <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm>

Heymann, D. (2015). Pneumonia. In D. Heymann (Ed.), *Control of communicable diseases manual* (20th ed.) APHA Press.