



HEPATITIS B

ABOUT THIS DISEASE

Hepatitis B is a contagious liver disease caused by the hepatitis B virus. Hepatitis B can be either “acute” or “chronic:”

Acute Hepatitis B: a short-term illness that occurs within the first 6 months after someone is exposed to the Hepatitis B virus. Acute infection can, but does not always, lead to chronic infection.

Chronic Hepatitis B: a long-term illness that occurs when the Hepatitis B virus remains in a person’s body. The chance of developing a chronic infection depends on the age when a person becomes infected. Up to 90% of infants infected with the Hepatitis B virus will develop a chronic infection. In contrast, about 5% of adults will develop chronic Hepatitis B. Over time, as many as 1 in 4 people with chronic Hepatitis B can develop serious health problems, including liver damage, cirrhosis (scarring of the liver), liver cancer, and even death.

SIGNS AND SYMPTOMS

Although a majority of older children and adults (70%) develop symptoms from acute Hepatitis B infection, many young children below the age of 5 years do not. If symptoms occur, they can include:

- Fever
- Feeling tired
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine
- Clay-colored bowel movements
- Joint pain
- Jaundice (yellow color in the skin or the eyes)

On average, symptoms appear 3 months after exposure, but they can appear any time between 6 weeks and 6 months after exposure. Symptoms usually last a few weeks, but some people can be ill for as long as 6 months.

While some people have ongoing symptoms similar to acute Hepatitis B, most individuals with chronic Hepatitis B remain symptom free for as long as 20 to 30 years. However, liver damage from the disease can take place during this time.

TRANSMISSION

Hepatitis B virus is spread when blood, semen, or other body fluids infected with the virus enters the body of a person who is not infected. Chronically-infected people can spread Hepatitis B virus to others, even if they do not feel or look sick themselves.

The Hepatitis B virus is passed easily through breaks in the skin or in soft tissues such as the nose, mouth, and eyes. People can become infected during activities such as:

- Birth (spread from an infected mother to her baby during birth)
- Sex with an infected partner
- Sharing needles, syringes, or other drug-injection equipment
- Sharing items such as razors or toothbrushes with an infected person
- Direct contact with the blood or open sores of an infected person
- Exposure to blood from needle sticks or other sharp instruments

Hepatitis B virus can survive outside of the body on objects for at least 7 days. During that time, the virus can still cause infection if it enters the body of a person who is not infected.

Hepatitis B virus is not spread through food or water, sharing eating utensils, breastfeeding, hugging, kissing, hand holding, coughing, or sneezing.

DIAGNOSIS

Hepatitis B is diagnosed by one or more blood tests. These tests can help determine if a person:

- Has acute or chronic infection
- Has recovered from infection
- Is immune to Hepatitis B
- Could benefit from vaccination (has never been infected)

Only a health care professional can interpret individual test results.

The following persons should be tested for Hepatitis B to help determine the next best steps for vaccination or medical care:

- All pregnant women
- Household and sexual contacts of people with Hepatitis B
- People born in certain parts of the world that have increased rates of Hepatitis B
- People with [certain medical conditions](#)
- People who inject drugs
- Men who have sex with men
- Incarcerated persons
- Infants born to mothers infected with Hepatitis B

TREATMENT

There is no medication available to treat acute Hepatitis B. During this short-term infection, doctors usually recommend rest, adequate nutrition, and fluids, although some people may need to be hospitalized.

Persons with chronic disease should see a doctor with experience in treating Hepatitis B infections. Those with chronic Hepatitis B should be monitored regularly for signs of liver disease and evaluated for possible treatment to slow down or prevent the effects of liver disease.

IMMUNITY

Once a person recovers from Hepatitis B, antibodies will develop that protect against the virus for life. However, some people, especially those infected in early childhood, remain infected because they never clear the virus from their bodies (chronic Hepatitis B).

RISK IN HAWAII

Summary of Reported Cases of Notifiable Diseases:

<http://health.hawaii.gov/docd/resources/reports/summary-of-reported-cases-of-notifiable-diseases/>

PREVENTION

The best way to prevent Hepatitis B is by getting vaccinated. Hepatitis B vaccine is usually given as a series of 3 shots over a 6-month period. The entire series is needed for long-term protection. After receiving all three doses, Hepatitis B vaccine provides greater than 90% protection to infants, children, and young adults immunized before being exposed to the virus.

Hepatitis B vaccination is recommended for:

- All infants, starting with the first dose of Hepatitis B vaccine at birth
- All children and adolescents younger than age 19 years who have not been vaccinated
- People who are at greater risk for Hepatitis B infection:
 - Have sex with an infected person
 - Have multiple sex partners
 - Have a sexually transmitted disease
 - Are men who have sexual contact with other men
 - Inject drugs or share needles, syringes, or other drug equipment
 - Live with a person who has chronic Hepatitis B
 - Are exposed to blood on the job (e.g., health care and public safety workers)
 - Are hemodialysis patients
 - Are residents or staff of facilities for developmentally disabled persons
 - Travel to countries with moderate or high rates of Hepatitis B
- People with chronic liver disease
- People with HIV infection
- Anyone who wishes to be protected from Hepatitis B infection

An unvaccinated person who may have been exposed to the Hepatitis B virus should contact a health care provider immediately. If a person who has been exposed to Hepatitis B virus receives the Hepatitis B vaccine and/or a shot called "HBIG" (Hepatitis B immune globulin) within 24 hours, infection may be prevented.

Infants born to mothers infected with hepatitis B should receive HBIG. HBIG gives baby a “boost” or extra help to fight the virus and works best when given within the first 12 hours of life. The baby will also need to complete the full hepatitis B vaccination series for best protection.

ADDITIONAL RESOURCES

- CDC Website: <https://www.cdc.gov/hepatitis/hbv/index.htm>
- Vaccine Information Statement: <https://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-b.pdf>
- Traveler’s Health: <https://wwwnc.cdc.gov/travel/yellowbook/2018/infectious-diseases-related-to-travel/hepatitis-b#4621>

INFORMATION FOR CLINICIANS

- CDC Website: <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm>