

Hepatitis B is a disease of the liver caused by hepatitis B virus. Most adults who have hepatitis B will recover on their own. However, children and some adults can develop chronic (lifelong) hepatitis B.

# Hepatitis B

## How is it spread?

Hepatitis B virus is spread by contact with body fluids that carry the virus, such as:

- ◆ Blood.
- ◆ Semen.
- ◆ Vaginal fluids.
- ◆ Other body fluids.

Hepatitis B is spread by contact with infected body fluids, mostly by:

- ◆ Sexual contact: (This is the most common way it is spread in the U.S.).
  - Vaginal and anal sex.

- Sharing unclean sex toys.
- Body fluids with hepatitis B can enter tiny breaks or rips in the linings of the vagina, vulva, rectum, or mouth. Rips and tears in these areas can be common and often unnoticed.
- ◆ Needle sharing:
  - Used or unclean needles.
  - During illegal drug or drug equipment use.

**Infected mothers can pass hepatitis B to their babies during childbirth.**

- ◆ Contact with blood:
  - Open sores of an infected person.
  - Sharing items such as razors or toothbrushes with an infected person.
  - Being tattooed or pierced with tools that were not properly cleaned.
- ◆ Pregnancy and birth:
  - Hepatitis B can spread to babies during pregnancy and birth.

Hepatitis B is rarely spread from a blood transfusion because:

- ◆ Hepatitis B tests are done on all donated blood.
- ◆ Blood and blood products that test positive for hepatitis B are safely destroyed. None are used for transfusions.
- ◆ There is no risk of getting hepatitis B when donating or giving blood.



### Who is at risk of hepatitis B?

Anyone can get hepatitis B if not vaccinated. However, in the U.S., you may be at a higher risk if you:

- ◆ Have sex partners that have hepatitis B.
- ◆ Have HIV or another STD.
- ◆ Inject drugs or share needles, syringes, or other drug-injection equipment.
- ◆ Live with someone who has hepatitis B.
- ◆ Are undergoing dialysis.
- ◆ Have diabetes.
- ◆ Travel to areas that have moderate to high rates of hepatitis B (see: [wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx#363](http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx#363)).
- ◆ Work in health care or public safety and are exposed to blood or body fluids on the job.
- ◆ Are an infant born to an infected mother.

### What are signs of hepatitis B?

When you first get hepatitis B, it is called acute hepatitis B. Most adults who have hepatitis B will recover on their own. However, children and some adults can develop chronic (lifelong) hepatitis B.

**Acute hepatitis B:** Signs of acute hepatitis B can appear within 3 months after you get the virus. These signs may last from several weeks to 6 months. Up to 50% of adults have signs of acute hepatitis B virus infection. Many young children do not show any signs. Signs include:

- ◆ Yellow skin or eyes (jaundice).
- ◆ Tiredness.
- ◆ Fever.
- ◆ Nausea.
- ◆ Vomiting.
- ◆ Loss of appetite.
- ◆ Stomach pain.
- ◆ Light stools.
- ◆ Dark urine.
- ◆ Joint pain.

**Chronic hepatitis B:** Hepatitis B is chronic when the body can't get rid of the virus. Children, mostly infants, are more likely to get chronic hepatitis B than adults. People with chronic hepatitis B may have no signs for as long as 20 or 30 years. Signs may be the same as acute hepatitis B. There may also be signs of liver damage and cirrhosis such as:

- ◆ Weakness.
- ◆ Weight loss.
- ◆ Small, red, spider-like blood vessels on the skin.
- ◆ Confusion or problems thinking.
- ◆ Loss of interest in sex.
- ◆ Swollen stomach or ankles.
- ◆ A longer than normal amount of time for bleeding to stop.

## How do you know if you have hepatitis B?

The only way to know if you have hepatitis B is by a medical exam. There are several blood tests your health care provider can use to diagnose hepatitis B. These tests can tell you:

- ◆ If it is an acute or a chronic infection.
- ◆ If you have recovered from infection.
- ◆ If you are immune to hepatitis B.
- ◆ If you could benefit from vaccination.

## How is it treated?

**Acute hepatitis B:** There are no drugs to treat acute hepatitis B. Doctors usually suggest rest, good nutrition, and fluids. Some people may need to be in the hospital.

**Chronic hepatitis B:** People with chronic hepatitis B virus infection should receive care from a provider who has experience treating hepatitis B. These providers can be:

- ◆ Some internists or family medicine providers.
- ◆ Infection specialists.
- ◆ Gastroenterologists (digestive system specialists).
- ◆ Hepatologists (liver specialists).

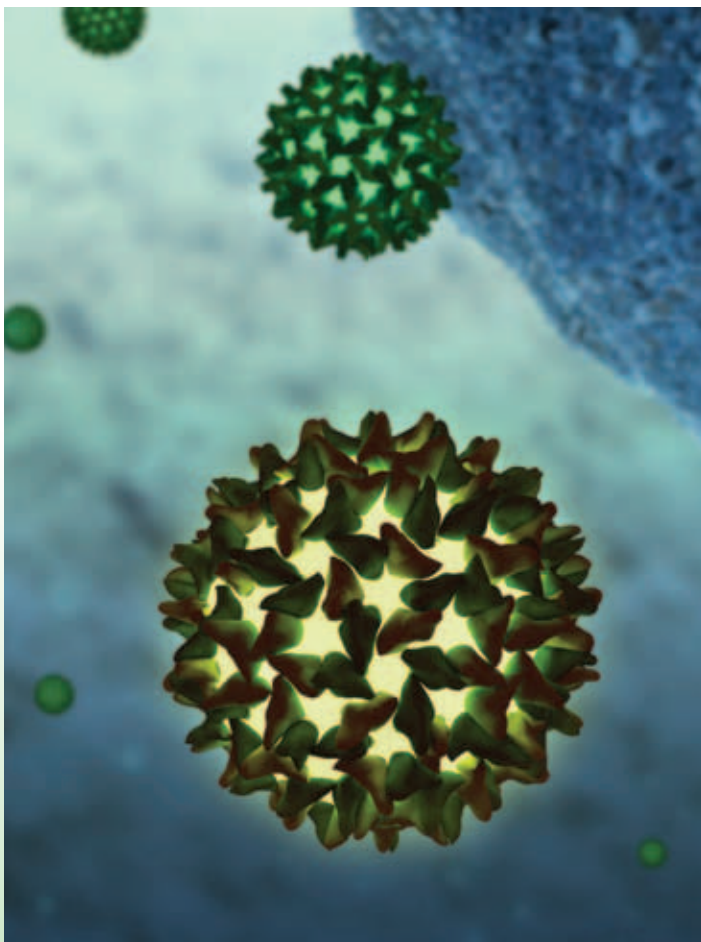
If you have chronic hepatitis B, get checked regularly for signs of liver disease. Discuss treatment with your health care provider. Not every person with chronic hepatitis B needs treatment. If you show no signs of liver damage, your provider will continue to check you for liver disease.

## What can happen if chronic hepatitis B is not treated?

Chronic hepatitis B is a serious disease that can result in long-term health problems. Up to 1 in 4 people with chronic hepatitis B develop serious liver problems.

These include:

- ◆ Liver damage and scarring (cirrhosis).
- ◆ Liver failure.
- ◆ Liver cancer.
- ◆ Death.



*Model of hepatitis B virus particles.*

## If you have hepatitis B:

- ◆ See your health care provider regularly.
- ◆ Tell current and recent sex partners that you have hepatitis B.
- ◆ Get plenty of rest.
- ◆ Eat healthy foods.
- ◆ Drink plenty of fluids.
- ◆ Avoid drinking any alcohol. There are ways to help you stop drinking alcohol at: [www.hepatitis.va.gov/patient/alcohol/what-you-can-do.asp](http://www.hepatitis.va.gov/patient/alcohol/what-you-can-do.asp).
- ◆ Check with your health care provider before taking:
  - Prescription medicines.
  - Supplements or herbal medicines.
  - Over-the-counter drugs.
- ◆ Avoid spreading hepatitis B to others by:
  - Having safer sex and using condoms during all sexual contact.
  - Not sharing used or unclean needles and sex toys.
  - Not donating blood, blood products, or organs.
  - Cleaning all blood spills – even those that have already dried. Use a mixture of bleach and water (one part household bleach to 10 parts water). Even dried blood is a risk to others.
  - Not sharing personal care items like razors, toothbrushes, nail clippers or earrings.
  - Not sharing glucose-monitoring equipment.
  - Asking sexual partner(s) and people living in close contact with you to be tested and vaccinated.

## How can you avoid hepatitis B?

**Getting the vaccine for hepatitis B is the best way to prevent hepatitis B.** The hepatitis B vaccine is safe and effective. It is usually given as 3-4 shots over a 6-month period. You will not get hepatitis B from the vaccine. Ask your health care provider if you should get this vaccine. It is recommended for:

- ◆ All infants, starting with the first dose of hepatitis B vaccine at birth.
- ◆ Everyone under the age of 19 who has not been vaccinated.
- ◆ People whose sex partners have hepatitis B.
- ◆ Sexually active people who are not in a long-term, faithful relationship.
- ◆ People with a sexually transmitted disease.
- ◆ People who share needles, syringes, or other drug-injection equipment.
- ◆ People who have close household contact with someone infected with the hepatitis B virus.
- ◆ Health care and public safety workers at risk for exposure to blood or body fluids on the job.
- ◆ People with kidney disease. This includes all those on dialysis and those being considered for dialysis.
- ◆ Adults with diabetes.
- ◆ Residents and staff of facilities for disabled persons.
- ◆ People with chronic liver disease.
- ◆ People with HIV infection.
- ◆ Travelers to regions with moderate or high rates of hepatitis B (see: [wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx#363](http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx#363)).

**The hepatitis B vaccine is the best way to prevent hepatitis B.**

### Travelers at increased risk for infection include:

- Adventure travelers.
- Peace Corps volunteers.
- Missionaries.
- Military personnel.

### Certain events may increase the risk for hepatitis B for travelers:

- An injury or illness that requires certain types of treatment. These include anything that breaks the skin such as shots, fluids in the vein, transfusion, stitches, and surgery.
- Dental treatment.
- Unprotected sexual contact.
- Sharing drug injection equipment.
- Tattooing, ear piercing, acupuncture and other practices that break the skin.
- Practices with risk for breaking the skin such as manicures and pedicures.
- Sharing certain items such as earrings, razors, toothbrushes and nail clippers.

### Other ways to avoid hepatitis B:

- ◆ Avoid sexual contact.
- ◆ Have safer sex:
  - Reduce the number of sexual partners.
  - Condoms, when used correctly, can reduce the risk of getting hepatitis B. Each time you have sex use a condom (male or female type):
    - Before vaginal sex.
    - Before anal sex.
    - Before oral sex.
  - Have sex with only one partner who does not have sex with others and does not have hepatitis B.



- ◆ Know that other forms of birth control do not protect against hepatitis B.
- ◆ Not using or injecting drugs.
- ◆ Not reusing or sharing syringes, or drug equipment (works).
- ◆ Wear gloves if you have to touch another person's blood.
- ◆ Do not use another person's toothbrush, razor, nail clippers or any other item that might have even a tiny bit of blood on it.
- ◆ Make sure any tattoos or body piercings are done under good conditions, using:
  - Sterile tools
  - Clean hands and gloves
  - Disinfected work surfaces



### What about pregnancy?

If you have hepatitis B, your baby has a very high chance of getting it. Pregnant women should be checked for hepatitis B by a health care provider. If you are at risk for hepatitis B, ask your provider about getting vaccinated. The hepatitis B vaccine is safe for pregnant women and their baby. The vaccine can help your baby if:

- ◆ It is given to the baby within 12 hours of birth.
- ◆ The baby finishes the vaccine series. **Note:** babies should be tested after the last vaccine shot to make sure they are protected from the disease.

Don't breastfeed until you have discussed it with your health care provider. Avoid breastfeeding if your nipples are cracking or bleeding until the sores heal. Until they heal, you can pump your milk to keep up your milk supply. Do not feed this milk to your baby. Throw it away.

**Hepatitis B is a very serious disease for babies. 9 out of 10 babies infected develop chronic hepatitis B.**



**For more on hepatitis B see:**

*Department of Veterans Affairs (VA):*

*Hepatitis B Basics*

*[www.hepatitis.va.gov/patient/basics/hepatitisB-index.asp](http://www.hepatitis.va.gov/patient/basics/hepatitisB-index.asp)*

*Centers for Disease Control and Prevention (CDC):*

*Hepatitis B Information for the Public*

*[www.cdc.gov/hepatitis/B/](http://www.cdc.gov/hepatitis/B/)*

*Infectious Diseases Related to Travel; Hepatitis B*

*[wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx#363](http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx#363)*

*Protect Your Baby for Life; When a Pregnant Woman Has Hepatitis B*

*[www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant-BW.pdf](http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant-BW.pdf)*

*National Institute of Allergy and Infectious Diseases (NIAID/NIH):*

*Hepatitis B*

*[www.niaid.nih.gov/topics/hepatitis/hepatitisb/Pages/Default.aspx](http://www.niaid.nih.gov/topics/hepatitis/hepatitisb/Pages/Default.aspx)*

*National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK/NIH):*

*What I need to know about Hepatitis B*

*[digestive.niddk.nih.gov/ddiseases/pubs/hepb\\_ez/](http://digestive.niddk.nih.gov/ddiseases/pubs/hepb_ez/)*

*U.S. National Library of Medicine:*

*Cirrhosis*

*[www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001301/](http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001301/)*

*U.S. Department of Health and Human Services (HHS), Office on Women's Health:*

*Viral hepatitis fact sheet*

*[www.womenshealth.gov/faq/viral-hepatitis.cfm](http://www.womenshealth.gov/faq/viral-hepatitis.cfm)*