



Hepatitis C

<https://www.niddk.nih.gov/health-information/liver-disease/viral-hepatitis/hepatitis-c>

What is hepatitis C?

Hepatitis C is a viral infection that causes liver inflammation and damage. Inflammation is swelling that occurs when tissues of the body become injured or infected. Inflammation can damage organs.

Viruses invade normal cells in your body. Many viruses cause infections that can be spread from person to person. The hepatitis C virus spreads through contact with an infected person's blood.

Hepatitis C can cause an acute or chronic infection.

Although no vaccine for hepatitis C is available, you can take steps to protect yourself from hepatitis C. If you have hepatitis C, talk with your doctor about treatment. Medicines can cure most cases of hepatitis C.

Acute hepatitis C

Acute hepatitis C is a short-term infection. Symptoms can last up to 6 months. Sometimes your body is able to fight off the infection and the virus goes away.

Chronic hepatitis C

Chronic hepatitis C is a long-lasting infection. Chronic hepatitis C occurs when your body isn't able to fight off the virus. About 75 to 85 percent of people with acute hepatitis C will develop chronic hepatitis C.¹³

Early diagnosis and treatment of chronic hepatitis C can prevent liver damage. Without treatment, chronic hepatitis C can cause chronic liver disease, cirrhosis, liver failure, or liver cancer .

How common is hepatitis C in the United States?

In the United States, hepatitis C is the most common chronic viral infection found in blood and spread through contact with blood.¹⁴

Researchers estimate that about 2.7 million to 3.9 million people in the United States have chronic hepatitis C.¹³ Many people who have hepatitis C don't have symptoms and don't know they have this infection. About 75 percent of U.S. adults who have hepatitis C are baby boomers, born between 1945 and 1965.¹⁴

Since 2006, the number of new hepatitis C infections has been rising, especially among people younger than age 30 who inject heroin or misuse prescription opioids and inject them.^{15,16}

New screening efforts and more effective hepatitis C treatments are helping doctors identify and cure more people with the disease. With more screening and treatment, hepatitis C may become less common in the future. Researchers estimate that hepatitis C could be a rare disease in the United States by 2036.¹⁷

Who is more likely to get hepatitis C?

People more likely to get hepatitis C are those who

- have injected drugs
- had a blood transfusion or organ transplant before July 1992
- have hemophilia and received clotting factor before 1987
- have been on kidney dialysis
- have been in contact with blood or infected needles at work
- have had tattoos or body piercings
- have worked or lived in a prison
- were born to a mother with hepatitis C
- are infected with HIV
- have had more than one sex partner in the last 6 months or have a history of sexually transmitted disease
- are men who have or had sex with men

In the United States, injecting drugs is the most common way that people get hepatitis C.¹³

Should I be screened for hepatitis C?

Your doctor may recommend screening for hepatitis C if you

- have a high chance of being infected
- were born between 1945 and 1965

Screening is testing for a disease in people who have no symptoms. Doctors use blood tests to screen for hepatitis C. Many people who have hepatitis C don't have symptoms and don't know they have hepatitis C. Screening tests can help doctors diagnose and treat hepatitis C before it causes serious health problems.

Your doctor may recommend screening you for hepatitis C if you were born between 1945 and 1965.

What are the complications of hepatitis C?

Without treatment, hepatitis C may lead to cirrhosis, liver failure, and liver cancer. Early diagnosis and treatment of hepatitis C can prevent these complications.

Cirrhosis

Cirrhosis is a condition in which the liver slowly breaks down and is unable to function normally. Scar tissue replaces healthy liver tissue and partially blocks the flow of blood through the liver. In the early stages of cirrhosis, the liver continues to function. However, as cirrhosis gets worse, the liver begins to fail.

Liver failure

Also called end-stage liver disease, liver failure progresses over months, years, or even decades. With end-stage liver disease, the liver can no longer perform important functions or replace damaged cells.

Liver cancer

Having chronic hepatitis C increases your chance of developing liver cancer. If chronic hepatitis C causes severe liver damage or cirrhosis before you receive hepatitis C treatment, you will continue to have an increased chance of liver cancer even after treatment. Your doctor may order an ultrasound test to check for liver cancer every 6 months. Finding cancer at an early stage improves the chance of curing the cancer.

What are the symptoms of hepatitis C?

Most people infected with hepatitis C have no symptoms. Some people with an acute hepatitis C infection may have symptoms within 1 to 3 months after they are exposed to the virus. These symptoms may include

- dark yellow urine
- feeling tired
- fever
- gray- or clay-colored stools
- joint pain
- loss of appetite
- nausea
- pain in your abdomen
- vomiting
- yellowish eyes and skin, called jaundice

If you have chronic hepatitis C, you most likely will have no symptoms until complications develop, which could be decades after you were infected. For this reason, hepatitis C screening is important, even if you have no symptoms.

What causes hepatitis C?

The hepatitis C virus causes hepatitis C. The hepatitis C virus spreads through contact with an infected person's blood. Contact can occur by

- sharing drug needles or other drug materials with an infected person
- getting an accidental stick with a needle that was used on an infected person
- being tattooed or pierced with tools that were used on an infected person and were not properly sterilized, or cleaned in a way that destroys all viruses and other microorganisms
- having contact with the blood or open sores of an infected person
- using an infected person's razor, toothbrush, or nail clippers
- being born to a mother with hepatitis C
- having unprotected sex with an infected person

You can't get hepatitis C from

- being coughed or sneezed on by an infected person
- drinking water or eating food
- hugging an infected person
- shaking hands or holding hands with an infected person
- sharing spoons, forks, and other eating utensils
- sitting next to an infected person

A baby can't get hepatitis C from breast milk.¹⁸

How do doctors diagnose hepatitis C?

Doctors diagnose hepatitis C based on your medical history, a physical exam, and blood tests. If you have hepatitis C, your doctor may perform additional tests to check your liver.

Medical history

Your doctor will ask about your symptoms and whether you have any history of blood transfusions or injected drug use.

Physical exam

During a physical exam, your doctor will typically examine your body to check for signs of liver damage such as

- changes in skin color
- swelling in your lower legs, feet, or ankles
- tenderness or swelling in your abdomen

What tests do doctors use to diagnose hepatitis C?

Doctors use blood tests to diagnose hepatitis C. Your doctor may order additional tests to check for liver damage, find out how much liver damage you have, or rule out other causes of liver disease.

Blood tests

Your doctor may order one or more blood tests to diagnose hepatitis C. A health care professional will take a blood sample from you and send the sample to a lab.

Blood tests for hepatitis C include the following:

- **Screening test for antibodies to the hepatitis C virus.** A screening blood test will show whether you have developed antibodies to the hepatitis C virus. A positive antibody test means you were exposed to the hepatitis C virus at some point. However, the virus may no longer be present in your blood if your body fought off the infection on its own or if you received treatment that cured the infection.
- **Hepatitis C RNA test.** If your antibody test is positive, your doctor will use a hepatitis C RNA test to detect RNA—a type of genetic material—from the hepatitis C virus. The hepatitis C RNA test can show whether you still have the hepatitis C virus and how much virus is in your blood. This information can help your doctor treat the infection. To see if you are responding to treatment, your doctor may order this test while you are undergoing treatment to find out if the amount of virus in your blood is changing.
- **Genotype test.** Your doctor can use this test to find out what strain, or form, of hepatitis C virus you have. At least six specific strains—called genotypes—of hepatitis C exist. Genotype 1 is the most common hepatitis C genotype in the United States.¹ Your doctor will recommend treatment based on which hepatitis C genotype you have.

Your doctor may order one or more blood tests to diagnose hepatitis C.

Additional tests

If you've had chronic hepatitis C for a long time, you could have liver damage. Your doctor may recommend additional tests to find out whether you have liver damage, how much liver damage you have, or to rule out other causes of liver disease. These tests may include

- blood tests
- transient elastography, a special ultrasound of your liver
- liver biopsy, in which a doctor uses a needle to take a small piece of tissue from your liver

Doctors typically use liver biopsy only if other tests don't provide enough information about a person's liver damage or disease. Talk with your doctor about which tests are best for you.

How do doctors treat hepatitis C?

Doctors treat hepatitis C with antiviral medicines that attack the virus and can cure the disease in most cases.

Several newer medicines, called direct-acting antiviral medicines, have been approved to treat hepatitis C since 2013. Studies show that these medicines can cure chronic hepatitis C in most people with this disease. These medicines can also cure acute hepatitis C. In some cases, doctors recommend waiting to see if an acute infection becomes chronic before starting treatment.

Your doctor may prescribe one or more of these newer, direct-acting antiviral medicines to treat hepatitis C:

- daclatasvir (Daklinza)
- elbasvir/grazoprevir (Zepatier)
- ledipasvir/sofosbuvir (Harvoni)
- ombitasvir/paritaprevir/ritonavir (Technivie)
- ombitasvir/paritaprevir/ritonavir/dasabuvir (Viekira Pak, Viekira XR)
- simeprevir (Olysio)
- sofosbuvir (Sovaldi)
- sofosbuvir/velpatasvir (Epclusa)
- sofosbuvir/velpatasvir/voxilaprevir (Vosevi)

Newer medicines are sometimes used along with these older hepatitis C medicines:

- ribavirin
- peginterferon alfa-2a (Pegasys) or peginterferon alfa-2b (PEG-Intron)

Doctors treat hepatitis C with antiviral medicines that attack the virus.

You may need to take medicines for 12 to 24 weeks to cure hepatitis C. Your doctor will prescribe medicines and recommend a length of treatment based on

- which hepatitis C genotype you have
- how much liver damage you have
- whether you have been treated for hepatitis C in the past

Your doctor may order blood tests during and after your treatment. Blood tests can show whether the treatment is working. Hepatitis C medicines cure the infection in most people who complete treatment.

Hepatitis C medicines may cause side effects. Talk with your doctor about the side effects of treatment. Check with your doctor before taking any other prescription or over-the-counter medicines.

For safety reasons, talk with your doctor before using dietary supplements, such as vitamins, or any complementary or alternative medicines or medical practices.

Cost of hepatitis C medicines

The newer direct-acting antiviral medicines for hepatitis C can be costly. Most government and private health insurance prescription drug plans provide some coverage for these medicines. Talk with your doctor about your health insurance coverage for hepatitis C medicines.

Drug companies, nonprofit organizations, and some states offer programs that can help pay for hepatitis C medicines. If you need help paying for medicines, talk with your doctor. Learn more about financial help for hepatitis C medicines .

How do doctors treat the complications of hepatitis C?

If hepatitis C leads to cirrhosis, you should see a doctor who specializes in liver diseases. Doctors can treat the health problems related to cirrhosis with medicines, surgery, and other medical procedures. If you have cirrhosis, you have an increased chance of liver cancer. Your doctor may order an ultrasound test to check for liver cancer every 6 months.

If hepatitis C leads to liver failure or liver cancer, you may need a liver transplant.

How can I protect myself from hepatitis C infection?

If you don't have hepatitis C, you can help protect yourself from hepatitis C infection by

- not sharing drug needles or other drug materials
- wearing gloves if you have to touch another person's blood or open sores
- making sure your tattoo artist or body piercer uses sterile tools
- not sharing personal items such as toothbrushes, razors, or nail clippers
- using a latex or polyurethane condom during sex

Do not share drug needles or other drug materials.

If you think you may have been exposed to the hepatitis C virus, see your doctor as soon as possible. Early diagnosis and treatment can help prevent liver damage.

How can I prevent spreading hepatitis C to others?

If you have hepatitis C, follow the steps above to avoid spreading the infection. In addition, you can protect others from infection by telling your doctor, dentist, and other health care providers that you have hepatitis C. Don't donate blood or blood products, semen, organs, or tissue.

If you have hepatitis C, tell your sex partner and talk with your doctor about safe sex practices. Although hepatitis C can spread from person to person during sex, the chances are low. People who have multiple sex partners, have HIV or other sexually transmitted diseases, or who engage in rough or anal sex have a higher chance of spreading hepatitis C. Using a condom can help prevent the spread of hepatitis C.

Is a hepatitis C vaccine available?

Researchers are still working on a vaccine for hepatitis C. If you have hepatitis C, talk with your doctor about vaccines for hepatitis A and hepatitis B. These vaccines can protect you from hepatitis A and hepatitis B infections, which could further damage your liver.

What should I eat and drink if I have hepatitis C?

If you have hepatitis C, you should eat a balanced, healthy diet. Talk with your doctor about healthy eating. You should also avoid alcohol because it can cause more liver damage.

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