

HEPATITIS C

General Information



Can Hepatitis C be prevented?

Yes. To reduce the risk of becoming infected with the Hepatitis C virus:

- Do not share needles or other equipment to inject cosmetic substances, drugs, or steroids
- Do not use personal items that may have come into contact with an infected person's blood, such as razors, nail clippers, toothbrushes, or glucose monitors
- Do not get tattoos or body piercings from an unlicensed facility or in an informal setting

Is there a vaccine for Hepatitis C?

Although there is currently no vaccine to prevent Hepatitis C, research is being conducted to develop one.

What is hepatitis?

"Hepatitis" means inflammation of the liver. The liver is a vital organ that processes nutrients, filters the blood, and fights infections. When the liver is inflamed or damaged, its function can be affected.

Hepatitis is most often caused by a virus. In the United States, the most common types of viral hepatitis are Hepatitis A, Hepatitis B, and Hepatitis C. Heavy alcohol use, toxins, some medications, and certain medical conditions can also cause hepatitis.

What is Hepatitis C?

Hepatitis C is a contagious liver disease that results from infection with the Hepatitis C virus. When first infected, a person can develop an "acute" infection, which can range in severity from a very mild illness with few or no symptoms to a serious condition requiring hospitalization.

Acute Hepatitis C is a short-term illness that occurs within the first 6 months after someone is exposed to the Hepatitis C virus. For reasons that are not known, 15%–25% of people "clear" the virus without treatment. Approximately 75%–85% of people who become infected with the Hepatitis C virus develop "chronic," or lifelong, infection.

Chronic Hepatitis C is a long-term illness that occurs when the Hepatitis C virus remains in a person's body. Over time, it can lead to serious liver problems, including liver damage, cirrhosis, liver failure, or liver cancer (see chart).

How is Hepatitis C spread?

Hepatitis C is usually spread when blood from a person infected with the Hepatitis C virus enters the body of someone who is not infected. Today, most people become infected with Hepatitis C by sharing needles or other equipment to inject drugs. Before widespread screening of the blood supply began in 1992, Hepatitis C was also commonly spread through blood transfusions and organ transplants. Although uncommon, outbreaks of Hepatitis C have occurred from blood contamination in medical settings.

Can Hepatitis C be spread through sex?

Yes, although scientists do not know how frequently this occurs. Having a sexually transmitted disease or HIV, sex with multiple partners, or rough sex appears to increase a person's risk for Hepatitis C. There also appears to be an increased risk for sexual transmission of Hepatitis C among gay men who are HIV-positive.

Can a person get Hepatitis C from a tattoo or piercing?

There is little evidence that Hepatitis C is spread by getting tattoos in licensed, commercial facilities. Whenever tattoos or body piercings are given in informal settings or with non-sterile instruments, transmission of Hepatitis C and other infectious diseases is possible.

Progression of Hepatitis C



OVER TIME



How is Hepatitis C treated?

Since acute Hepatitis C rarely causes symptoms, it often goes undiagnosed and therefore untreated. When it is diagnosed, doctors recommend rest, adequate nutrition, fluids, and antiviral medications. People with chronic Hepatitis C should be monitored regularly for signs of liver disease. Even though a person may not have symptoms or feel sick, damage to the liver can still occur. Antiviral medication can be used to treat some people with chronic Hepatitis C, although not everyone needs or can benefit from treatment. For many, treatment can be successful and results in the virus no longer being detected.

What can people with Hepatitis C do to take care of their liver?

People with chronic Hepatitis C should see a doctor regularly. They also should ask their health professional before taking any prescriptions or over-the-counter medications—including herbal supplements or vitamins—as they can potentially damage the liver. People with chronic Hepatitis C should also avoid alcohol since it can accelerate liver damage.

How common is Hepatitis C?

An estimated 3.2 million people in the United States have chronic Hepatitis C. Most are unaware of their infection. Each year, about 17,000 Americans become infected with Hepatitis C.

How serious is Hepatitis C?

Chronic Hepatitis C is a serious disease that can result in long-term health problems, including liver damage, liver failure, and liver cancer. Approximately 12,000 people die every year from Hepatitis C-related liver disease.

What are the symptoms of Hepatitis C?

Many people with Hepatitis C do not have symptoms and do not know they are infected. Even though a person has no symptoms, the virus can still be detected in the blood.

If symptoms occur with acute infection, they can appear anytime from 2 weeks to 6 months after exposure. Symptoms of chronic Hepatitis C can take up to 30 years to develop. Damage to the liver can silently occur during this time. When symptoms do appear, they often are a sign of advanced liver disease. Symptoms for both acute and chronic Hepatitis C can include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, grey-colored stools, joint pain, and jaundice.

How is Hepatitis C diagnosed?

Doctors can diagnose Hepatitis C using specific blood tests that are not part of blood work typically done during regular physical exams. Typically, a person first gets a screening test that looks for “antibodies” to the Hepatitis C virus. Antibodies are chemicals released into the bloodstream when a person becomes infected. The antibodies remain in the bloodstream, even if the person clears the virus. If the screening test is positive for Hepatitis C antibodies, different blood tests are needed to determine whether the infection has been cleared or has become a chronic infection.

Who should get tested for Hepatitis C?

Testing for Hepatitis C is recommended for certain groups, including people who:

- Currently inject drugs
- Injected drugs in the past, even if it was just once or occurred many years ago
- Have HIV infection
- Have abnormal liver tests or liver disease
- Received donated blood or organs before 1992
- Have been exposed to blood on the job through a needlestick or injury with a sharp object
- Are on hemodialysis

For more information

Talk to your health professional, call your health department, or visit www.cdc.gov/hepatitis.



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Centers for Disease Control and Prevention

Division of Viral Hepatitis



HEPATITIS C

Information About Testing



Why is it important to get tested?

Most people with Hepatitis C do not have any symptoms and do not know they are infected. As a result people could be living with Hepatitis C and appear healthy while liver damage silently occurs.

If you think you might have been exposed to the Hepatitis C, talk to your doctor about getting tested. By knowing your test results, you can get medical care, take care of your liver, and take action to avoid spreading the virus to others. If you are told you have Hepatitis C, be sure to ask if both your antibody and confirmatory tests are positive.

What is Hepatitis C?

Hepatitis C is a contagious liver disease that results from infection with the Hepatitis C virus. When first infected, a person can develop an “acute” infection, which can range in severity from a very mild illness with few or no symptoms to a serious condition requiring hospitalization. Acute Hepatitis C is a short-term illness that occurs within the first 6 months after someone is exposed to the Hepatitis C virus. For reasons that are not known, 15%–25% of people “clear” the virus without treatment.

For approximately 75%–85% of people who become infected with the Hepatitis C virus, the acute infection progresses to a “chronic,” or lifelong, infection. Chronic Hepatitis C is a long-term illness that occurs when the Hepatitis C virus remains in a person’s body. Over time, it can lead to serious liver problems, including liver damage, cirrhosis, liver failure, or liver cancer. Chronic Hepatitis C is one of the leading causes of liver disease and is the leading cause of liver transplantation in the United States.

How common is Hepatitis C?

It is estimated that 3.2 million people in the United States are living with Hepatitis C. Most do not know they are infected. More than 18,000 people become infected each year.

**Millions of Americans have Hepatitis C,
but most don’t know they are infected.**

How can a person get Hepatitis C?

Hepatitis C is usually spread when blood from a person infected with the Hepatitis C virus enters the body of someone who is not infected. Most people become infected with Hepatitis C by sharing needles or other equipment to inject drugs.

It is possible to have gotten Hepatitis C from injecting drugs, even if just once or many years ago. Before widespread screening of the blood supply began in 1992, Hepatitis C was commonly spread through blood transfusions and organ transplants. Some people don’t know how they got infected.

Sometimes the Hepatitis C virus can be spread by having sex with an infected person, although scientists believe this does not happen very often. Having a sexually transmitted disease or HIV, sex with many partners, or rough sex appears to increase a person’s risk for Hepatitis C. There also appears to be an increased risk for getting Hepatitis C among gay men who are HIV positive.





Questions to ask when you are getting tested:

- What test or tests am I getting today?
- How long does it take to get my results?
- When and how will I learn about my results?
- Will I need additional tests?
- What else should I do?

How does a person know if she or he is infected with the Hepatitis C virus?

Two different types of blood tests are needed to tell if a person has Hepatitis C.

- **The antibody test.** A person first gets a blood test that looks for “antibodies” to the Hepatitis C virus. Antibodies are released into the bloodstream when a person becomes infected. The initial screening test is a Hepatitis C antibody test or the anti-HCV test. One of the most common names for this test is EIA (enzyme immunoassay). If the screening test is positive for Hepatitis C antibodies, it means the person is or has been infected with the Hepatitis C virus. Some people who get infected are able to fight the virus and clear it from their bodies. For most people, the virus remains and becomes a chronic infection. Once people become infected, they will always have antibodies in their blood, regardless of whether they have cleared the virus or become chronically infected.
- **The confirmatory test.** If a person has a positive antibody test for Hepatitis C, he or she must also have a confirmatory test. This test looks for the presence of the Hepatitis C virus. Unlike the antibody test, when the confirmatory test is positive, this means a person currently has the virus in his or her blood.

The test detects the genetic material in the Hepatitis C virus, called RNA. There are different ways of detecting viral RNA, but the test most commonly used is called PCR (polymerase chain reaction).

If you think you may have been exposed to the Hepatitis C virus, get tested. Early detection can save lives.

What do the results of the two tests mean?

People who have a **positive** antibody test along with a **negative** RNA test have had an infection that has been cleared. He or she is not infected now.

People who have a **positive** antibody test along with a **positive** RNA test have an ongoing Hepatitis C infection.

When a person becomes infected with Hepatitis C, it can take a few weeks or a few months until the blood tests can show the presence of antibodies and the virus. A few people can have negative test results, but still have the Hepatitis C infection. If a person might have been exposed to the virus right before the tests, it is a good idea to repeat the tests in 6 months to check if the virus is present.

For more information

Talk to your health professional, call your health department, or visit www.cdc.gov/hepatitis.



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HEPATITIS C IS NOT SPREAD BY:

- breast-feeding
- sneezing
- casual contact
- sharing eating utensils or drinking glasses
- hugging
- food or water
- coughing

No one should be excluded from work, school, play, child-care, or other settings because of HCV infection.

HOW DO I GET TESTED?

Contact your local IHS, tribal or urban Indian healthcare facility. Tell your provider you want a blood test for hepatitis C because you think you are at risk.

Getting tested for hepatitis C can help you to:

- learn how to protect your liver from further harm.
- learn how to prevent spreading hepatitis to others.
- learn whether treatment is needed or available.



For information on viral hepatitis:
<http://www.cdc.gov/hepatitis> or call:

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Hepatitis C

KNOW THE RISKS, GET TESTED

Almost 4 million Americans have been infected with hepatitis C virus




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Albuquerque, NM



WHAT IS HEPATITIS C?

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV). HCV is found in the blood of people who have it. HCV is spread by contact with the blood of an infected person. Hepatitis C can lead to liver damage and death.

HOW SERIOUS IS HEPATITIS C?



Hepatitis C can be a serious disease. It may take many years for the liver damage to become a problem that needs medical help. Doing things that hurt the liver, like heavy drinking and substance abuse, can make the damage happen faster. Over time, the damage may lead to cirrhosis (scarring) of the liver, cancer of the liver and liver failure.

IS THERE TREATMENT FOR HEPATITIS C?

Yes - Medicines are approved for the treatment of some people with hepatitis C. If you test positive for HCV infection, you should check with your doctor to see if you have chronic infection and if so, whether treatment can help you.

HOW DO PEOPLE FEEL WHEN THEY HAVE HEPATITIS C?

When a person becomes infected with HCV, he or she may not notice any symptoms. If there are symptoms, they may include:

- Extreme tiredness
- Stomach pain and swelling
- Nausea and vomiting
- Loss of appetite
- Yellowish eyes and skin
- Dark urine

WHAT IF YOU DON'T FEEL SICK?

Many people with hepatitis C have no symptoms and feel well. For some people, the most common symptom is extreme tiredness. If you think you are at risk, the only way to tell if you have been infected with HCV is to have a blood test.

WHO IS AT RISK FOR HEPATITIS C?

To get hepatitis C you must have blood-to-blood contact with a person who has hepatitis C. Ask your doctor for a blood test for hepatitis C if:

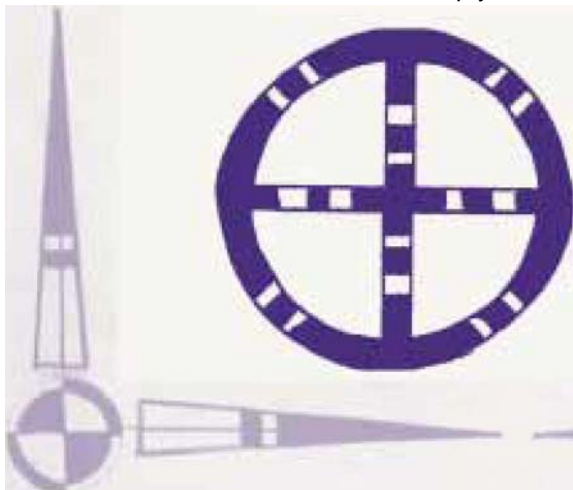
- You have injected illegal drugs, even once
- You were treated for clotting problems with a blood product made before 1987
- You received blood transfusions or organ transplants before , 1992
- You are a health care worker and have had contact with blood from someone who has hepatitis C
- You have ever been on long-term kidney dialysis
- You have signs of liver disease
- Your mother was hepatitis C positive when you were born

THINGS TO REMEMBER:

- HCV can be spread by sex, but this does not occur very often.
- A person who has hepatitis C can still get other types of viral hepatitis, like hepatitis A or hepatitis B.
- Drinking alcohol can cause more damage to your liver, allowing hepatitis C to develop more quickly
- There is no vaccine for hepatitis C.
- There is treatment for hepatitis C, but it is not always effective
- You can avoid HCV infection by taking simple preventive measures!

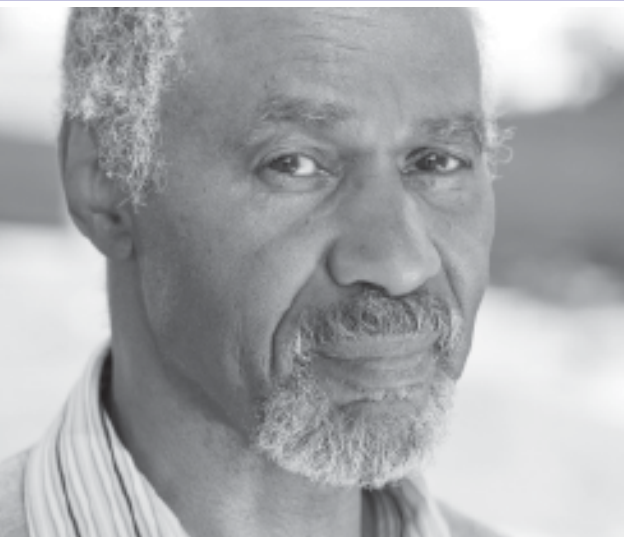
HOW CAN I PROTECT MYSELF?

- *Don't ever shoot drugs.* If you do, stop and get into a drug treatment program. If you cannot stop, do not reuse or share syringes, water, or drug works. Get vaccinated against hepatitis A and hepatitis B.
- *Wear gloves if you touch anyone's blood.* Healthcare workers should get vaccinated against hepatitis B.
- *Do not share toothbrushes, razors, or anything else that could have blood on it.*
- *If you get a tattoo or body piercing, you can get infected if:*
 - The tools that are used have someone else's blood on them
 - The artist or piercer doesn't follow good health practices (sterilizing instruments, washing hands, using gloves)



HEPATITIS C

Living with Chronic Hepatitis C



How does a person know if he or she has chronic Hepatitis C?

Two different types of blood tests are needed to tell if a person has Hepatitis C. A person first gets a test that looks for “antibodies” to the Hepatitis C virus. Antibodies are released into the bloodstream when a person becomes infected. If a person has a positive test for Hepatitis C antibodies, he or she must have a confirmatory test. This test looks for the presence of the Hepatitis C virus. When the confirmatory test is positive, this means a person currently has the virus in his or her blood.

If you have been told that you have chronic Hepatitis C, it is important to discuss with your doctor:

- Your past or current risks
- The results of the two tests
- What to do next

What is chronic Hepatitis C?

Chronic Hepatitis C is a contagious liver disease that results from a long-term infection with the Hepatitis C virus (HCV). Chronic Hepatitis C can lead to serious health problems including liver damage, liver failure, or liver cancer. Over time, approximately 60%-70% of people with chronic Hepatitis C develop liver disease and 1%-5% of people get liver cancer or cirrhosis.

What are the symptoms of Hepatitis C?

Most people with chronic Hepatitis C do not have any symptoms. Whether or not you show symptoms depends on many factors, such as how long you have had the virus and any other health conditions you have. Symptoms of chronic Hepatitis C can take up to 30 years to develop. When symptoms do appear, they can be a sign of serious liver problems. If and when you experience symptoms, they can include: fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, grey-colored bowel movements, joint pain, and jaundice.

What if I don't feel sick?

People with Hepatitis C often do not feel sick for many years. As a result, people could be living with Hepatitis C and appear healthy while liver damage silently occurs. Whether or not you have symptoms, the virus can be spread to others.

Why do I need to go to a doctor?

Your doctor will evaluate your overall health and may do additional tests to check your liver. There are several different tests your doctor may order:

- Liver function tests, also called a liver panel, to tell how well your liver is working. One of the most common tests is called ALT. The ALT levels are often, but not always, higher in people with hepatitis
- An ultrasound exam to create a visual image of your liver
- A liver biopsy, which is removal of a tiny bit of your liver, to allow your doctor to look directly at the health of the liver
- A genotype test which determines the type of Hepatitis C virus you have
- A viral load test which determines how much virus you have in your body

How is chronic Hepatitis C treated?

Medications, called antivirals, can be used to treat many people with chronic Hepatitis C. However, not everyone needs or can benefit from treatment. It is important to be checked by a doctor experienced in treating chronic Hepatitis C. He or she can determine the most appropriate medical care. Decisions about starting antiviral treatment are based on many factors, such as the type of virus, the condition of the liver, and other health conditions. Whether or not to be treated or when to start treatment should be discussed with your doctor.



Can a person spread Hepatitis C to his or her family or people he or she is close to?

Since the Hepatitis C virus is transmitted through blood, it is important that the person not share any personal items that might have blood on them, even in tiny amounts, such as toothbrushes, razors, or nail clippers. It is important to cover all cuts and sores and thoroughly clean all surfaces after they may have come in contact with infected blood.

What are some ways Hepatitis C is NOT spread?

Hepatitis C is not spread by kissing, hugging, sneezing, coughing, or sharing food, eating utensils or glasses.

Can a person spread Hepatitis C to his or her sex partners?

While the Hepatitis C virus can be passed during sex, it is uncommon. If a person has one, long-term steady sexual partner, the chance is very low that he or she will give Hepatitis C to that person through sexual activity. However, having multiple sex partners, or HIV, or engaging in rough sex can increase the risk of spreading the virus during sex.

What is treatment like?

Current treatment typically involves taking combinations of different antiviral medications for 6 to 12 months. These medications help your body to fight the Hepatitis C virus. Treatment can cause side effects such as flu-like symptoms, depression, weight loss, rash, anemia, and insomnia. Sometimes side effects can disrupt a person's life and day-to-day activities. Even though side effects are common, many can be managed with the help of your doctor. Some people may stop treatment because of side effects. Never change your dosage or stop taking medication without talking to your doctor. New medications are available that may increase the number of people who get rid of the virus and may reduce the length of treatment.

What about alternative treatments?

You may have heard about some "natural," herbal, or other products that are sold as treatments or cures for Hepatitis C. There is no herbal supplement or vitamin which has been proven safe and effective for treating Hepatitis C. Some herbal products are actually dangerous for your liver. Just because something is promoted as "natural" does not mean that it is safe to take. Always talk to your doctor before you try any alternative treatment.

Can Hepatitis C be cured?

For many people with Hepatitis C, medical treatment can be successful and can result in the virus no longer being detected in the blood. This is referred to as a sustained viral response, or SVR.

After treatment, is a person protected from Hepatitis C?

No. A person who has been successfully treated and has an SVR is not protected for life from Hepatitis C. A person can get infected with Hepatitis C again if he or she is exposed to blood infected with the Hepatitis C virus.

What else can I do to protect my liver?

You can:

- Ask your doctor before taking any prescription, over-the-counter medications, supplements or vitamins. For instance, some drugs, such as certain pain medications, can potentially damage the liver
- Avoid alcohol since it can increase the speed of liver damage
- Talk to your doctor about getting vaccinated against Hepatitis A and B

You may also want to consider joining a support group for people living with Hepatitis C. Talking with others may help you cope with your feelings and the challenges of living with Hepatitis C.

For more information

Talk to your health professional, call your health department, or visit www.cdc.gov/hepatitis.



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HEPATITIS C and Incarceration



Is Hepatitis C a health problem for people who have been incarcerated?

Yes. Of the 2.2 million people in U.S. jails and prisons, about 1 in 3 of them have Hepatitis C.

Why are adults in correctional facilities at risk for Hepatitis C?

Many people who enter jails or prisons have Hepatitis C. The most common way inmates get Hepatitis C is by sharing equipment used for injecting drugs, tattooing, and piercing with other people who are already infected. The virus can be spread easily to others through blood, even in very small amounts too small to see.

What happens if a person has Hepatitis C?

It depends on many things, including a person's age, health, and use of drugs or alcohol. Some people have health problems within a few years of getting infected. Other people live with Hepatitis C for 20 or 30 years without serious health problems. But, over time, the virus can hurt the liver.

What is hepatitis?

"Hepatitis" means inflammation or swelling of the liver. The liver is an important organ that helps the body digest food, clean blood, and fight germs. When the liver is inflamed or damaged, it does not work very well.

Hepatitis is most often caused by a virus. There are three common types of viral hepatitis: Hepatitis A, Hepatitis B, and Hepatitis C. They are all different from each other and are spread from one person to another in different ways. Hepatitis C is the most common type of hepatitis in the United States. It is also the most common type in jails and prisons.

What is Hepatitis C?

Hepatitis C is an illness that is caused by the Hepatitis C virus. When a person first gets the Hepatitis C virus, many different things can happen.

- Many people have the virus and don't even know it because they don't feel sick.
- Some people have the virus and feel a little sick.
- Few people have the virus and feel very sick.

After a person gets Hepatitis C, a person's body can sometimes fight the virus and get better, but this does not happen very often. If a person gets rid of or clears the virus, it usually happens within 6 months. For most people who get Hepatitis C, the virus stays in their body for life. Doctors call this chronic Hepatitis C.

How is Hepatitis C spread?

Hepatitis C is most often spread when blood from a person who has Hepatitis C enters the body of someone who is not infected. Here are common ways someone can get Hepatitis C.

- **Blood:** The Hepatitis C virus can be in blood spills, droplets, and blood splatters outside the body. The virus can also survive in dried blood for several days. Whenever contact is made with surfaces, equipment, or objects that have infected blood on them—even in amounts too small to see—the virus can be spread to others.
- **Drugs:** Most people get the Hepatitis C virus from an infected person when sharing needles or other equipment to inject drugs. Even the tiniest amount of blood on needles and other types of drug equipment can spread Hepatitis C from one person to another.



- **Tattoos/Piercing/Scarring:** The Hepatitis C virus and other diseases can be spread when tattoo, piercing, or cutting equipment has tiny amounts of blood on it. Many people get tattoos, piercings, or other marks while incarcerated. When they share the equipment, it is easy for people to spread the virus and become infected with Hepatitis C.
- **Sex:** The Hepatitis C virus can be spread through sex, although this does not happen very often. The virus seems to be more easily spread through sex when a person also has HIV or an STD. People who have rough sex or many sex partners seem to get Hepatitis C more often.



What are the symptoms of Hepatitis C?

Many people with Hepatitis C have no symptoms and do not know they are infected. If a person has symptoms, they can include one or more of these signs:

- Fever
- Feeling very tired
- Not wanting to eat
- Upset stomach
- Throwing up
- Stomach pain
- Dark urine
- Grey colored stool
- Bone or joint pain
- Yellow skin and eyes

How can you tell if a person has Hepatitis C?

You cannot tell if a person has Hepatitis C by looking at them. Doctors use blood tests and a medical exam to see if a person has Hepatitis C.

Can Hepatitis C be prevented?

Yes. To prevent Hepatitis C:

- Do not use tattooing, piercing, or cutting equipment that has been used on someone else. This includes such things as sharp objects, ink, needles, or barrels that could have even tiny amounts of blood on them that are too small to see
- Do not share needles or other equipment, including cookers, cottons, ties, or water, to inject drugs
- Do not share razors, toothbrushes, or other personal items that may have come into contact with another person's blood

Why doesn't cleaning kill the Hepatitis C virus?

Bleaching, boiling, burning, or using common cleaning fluids, alcohol, or peroxide will **not** clean needles, tools, and other instruments. These methods are not strong enough to kill the Hepatitis C virus. The virus can still spread easily from one person to another.

Is there a test for Hepatitis C?

Yes. Doctors use blood tests to find out if a person has Hepatitis C. The first blood test looks for "antibodies," or signs in a person's blood that they have been exposed to the Hepatitis C virus. If the test is positive for Hepatitis C antibodies, a different test is needed. This second test will tell if the Hepatitis C virus is still in the body. If this test is positive, the person most likely has lifelong, or chronic, Hepatitis C. Additional tests and a medical exam are needed to confirm the diagnosis

Can Hepatitis C be treated?

Yes, but the treatment for Hepatitis C depends on many different things. Not everyone needs to get medical treatment. Often the virus stays in a person's body and does not cause problems. That's why it is important for a person who has Hepatitis C to get regular check-ups, if possible. A doctor will run tests to see if the virus is causing damage to the liver. If the liver is damaged, medicines called "antivirals" can sometimes help. These medicines can make people feel better, slow damage to the liver, and get rid of the virus.

What can people infected with Hepatitis C do to take care of their liver?

People with chronic Hepatitis C should not use alcohol or street drugs. They can hurt the liver. Some other products can also hurt people with Hepatitis C, even if they appear to be safe. Check with medical staff before taking any kind of pill, vitamin, herbal product, or medicine.

For more information

Talk to medical staff or your doctor, or have your loved ones talk to a doctor, clinic, or health department. Information on Hepatitis C can be found at: www.cdc.gov/hepatitis



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

VIRAL HEPATITIS

Information for Gay/Bisexual Men



Are gay and bisexual men at risk for viral hepatitis?

Yes. Among adults, an estimated

- 10% of new Hepatitis A cases and
- 20% of new Hepatitis B cases occur in gay or bisexual men

Gay and bisexual men are at increased risk for Hepatitis C if they are involved in high-risk behaviors. Sharing needles or other injection drug equipment puts a person at risk for both HIV and Hepatitis C. Of people with HIV infection, 25% also have Hepatitis C. New research shows that gay men who are HIV-positive and have multiple sex partners may increase their risk for Hepatitis C.

What is hepatitis?

“Hepatitis” means inflammation of the liver. The liver is a vital organ that processes nutrients, filters the blood, and fights infections. When the liver is inflamed or damaged, its function can be affected. Heavy alcohol use, toxins, some medications, and certain medical conditions can cause hepatitis.

Hepatitis is most often caused by a virus. In the United States, the most common types of viral hepatitis are Hepatitis A, Hepatitis B, and Hepatitis C. These are three different, contagious liver diseases caused by three unrelated viruses. Although all three types of hepatitis can cause similar symptoms, they have different modes of transmission.

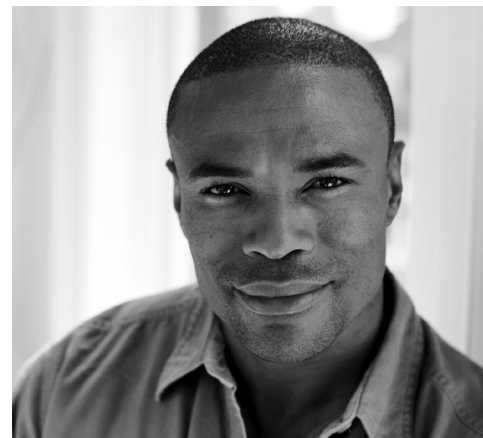
Acute and chronic viral hepatitis

Hepatitis A appears only as an “acute,” or newly occurring infection, and usually lasts no more than 6 months. Although Hepatitis B and Hepatitis C can also begin as acute infections, each can develop into a “chronic,” or lifelong, infection. Over time, about 15%–25% of people with chronic hepatitis develop serious liver conditions, including liver damage, cirrhosis, liver failure, and even liver cancer.

The best way to protect yourself from Hepatitis A and B is to get vaccinated.

How is hepatitis spread?

- **Hepatitis A** is usually spread when a person ingests fecal matter—even in microscopic amounts—from an infected person. Among men who have sexual contact with other men, Hepatitis A can be spread through direct anal-oral contact or contact with fingers or objects that have been in or near the anus of an infected person. Hepatitis A can also be spread through contaminated food or water, which is why travelers to certain countries are at risk.
- **Hepatitis B** is spread when body fluids—such as semen or blood—from a person infected with the Hepatitis B virus enter the body of someone who is not infected. The Hepatitis B virus is 50–100 times more infectious than HIV and is easily transmitted during sexual activity. Hepatitis B also can be spread through sharing needles, syringes, or other injection drug equipment.
- **Hepatitis C** is spread through contact with the blood of an infected person, primarily through sharing needles, syringes, or other injection drug equipment. Hepatitis C can also be spread through sexual contact, although scientists do not know how frequently this occurs. Having a sexually transmitted disease or HIV, sex with multiple partners, or rough sex appears to increase a person’s risk for Hepatitis C.





Should I be vaccinated?

Yes. Experts recommend that all gay and bisexual men be vaccinated for Hepatitis A and B. The Hepatitis A and B vaccines can be given separately or as a combination vaccine. The vaccines are safe, effective, and require 2–3 shots given over a period of 6 months depending on the type of vaccine. A person should complete all shots in the series for long-term protection. Booster doses are not currently recommended.

There is no vaccine for Hepatitis C. The best way to prevent Hepatitis C is by avoiding behaviors that can spread the disease, especially sharing needles or other equipment to inject drugs.

Should I be tested?

It depends upon the type of hepatitis and a person's risk factors. Testing is not recommended for Hepatitis A.

Testing is recommended for Hepatitis B. If at all possible, gay and bisexual men should be tested for Hepatitis B at the same time they get their first dose of vaccine. If tests indicate that a man has never been infected, then vaccination will protect him. If tests show that he has recovered from a past infection, he is now immune, and the vaccine offers no added benefit. If tests indicate he is chronically infected, the vaccine offers no protection, and he should get a thorough medical evaluation. Since people infected with Hepatitis B are capable of spreading the virus to others, their sexual partners should also be tested.

Testing for Hepatitis C is not recommended unless a person is engaging in risky behaviors or has HIV infection.

Is viral hepatitis common?

Yes. Each year, about 70,000 Americans become infected with one type of acute viral hepatitis. In addition, an estimated 1.2 million people have chronic Hepatitis B, and 3.2 million people have chronic Hepatitis C. Of those living with chronic hepatitis, many do not know they are infected.

What are the symptoms of viral hepatitis?

Many people with viral hepatitis do not have symptoms and do not know they are infected. Even though a person has no symptoms, the virus can still be detected in the blood.

Symptoms, if they do appear, are similar for all types of hepatitis. If symptoms occur with acute viral hepatitis, they usually appear within several weeks to several months of exposure and can last up to 6 months. Symptoms of chronic viral hepatitis can take up to 30 years to develop. Damage to the liver can silently occur during this time. When symptoms do appear, they often are a sign of advanced liver disease. Symptoms for both acute and chronic viral hepatitis can include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, grey-colored stools, joint pain, and jaundice.



How is viral hepatitis diagnosed and treated?

Doctors diagnose hepatitis using one or more blood tests, depending on the type of hepatitis. For people with acute viral hepatitis, doctors usually recommend rest, adequate nutrition, fluids, and in certain situations, antiviral medication. In some cases, people with acute viral hepatitis are hospitalized. People who have acute hepatitis typically feel sick for a few months before they recover.

People with chronic viral hepatitis should seek the advice of a doctor experienced in treating Hepatitis B or Hepatitis C and should be monitored on a regular basis. Some may also benefit from antiviral medication. Several treatments are available that can significantly improve health and delay or reverse the effects of liver disease.

For more information

Talk to your health professional, call your health department, or visit www.cdc.gov/hepatitis.



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The ABCs of Hepatitis

	HEPATITIS A is caused by the Hepatitis A virus (HAV)	HEPATITIS B is caused by the Hepatitis B virus (HBV)	HEPATITIS C is caused by the Hepatitis C virus (HCV)
U.S. Statistics	<ul style="list-style-type: none"> Estimated 25,000 new infections in 2007 	<ul style="list-style-type: none"> Estimated 43,000 new infections in 2007 Estimated 1.2 million people with chronic HBV infection 	<ul style="list-style-type: none"> Estimated 17,000 new infections in 2007 Estimated 3.2 million people with chronic HCV infection
Routes of Transmission	Ingestion of fecal matter, even in microscopic amounts, from: <ul style="list-style-type: none"> Close person-to-person contact with an infected person Sexual contact with an infected person Ingestion of contaminated food or drinks 	Contact with infectious blood, semen, and other body fluids, primarily through: <ul style="list-style-type: none"> Birth to an infected mother Sexual contact with an infected person Sharing of contaminated needles, syringes or other injection drug equipment Needlesticks or other sharp instrument injuries 	Contact with blood of an infected person, primarily through: <ul style="list-style-type: none"> Sharing of contaminated needles, syringes, or other injection drug equipment Less commonly through: <ul style="list-style-type: none"> Sexual contact with an infected person Birth to an infected mother Needlestick or other sharp instrument injuries
Persons at Risk	<ul style="list-style-type: none"> Travelers to regions with intermediate or high rates of Hepatitis A Sex contacts of infected persons Household members or caregivers of infected persons Men who have sex with men Users of certain illegal drugs (injection and non-injection) Persons with clotting-factor disorders 	<ul style="list-style-type: none"> Infants born to infected mothers Sex partners of infected persons Persons with multiple sex partners Persons with a sexually transmitted disease (STD) Men who have sex with men Injection drug users Household contacts of infected persons Healthcare and public safety workers exposed to blood on the job Hemodialysis patients Residents and staff of facilities for developmentally disabled persons Travelers to regions with intermediate or high rates of Hepatitis B (HBsAg prevalence of $\geq 2\%$) 	<ul style="list-style-type: none"> Current or former injection drug users Recipients of clotting factor concentrates before 1987 Recipients of blood transfusions or donated organs before July 1992 Long-term hemodialysis patients Persons with known exposures to HCV (e.g., healthcare workers after needlesticks, recipients of blood or organs from a donor who later tested positive for HCV) HIV-infected persons Infants born to infected mothers
Incubation Period	15 to 50 days (average: 28 days)	45 to 160 days (average: 120 days)	14 to 180 days (average: 45 days)
Symptoms of Acute Infection	Symptoms of all types of viral hepatitis are similar and can include one or more of the following: <ul style="list-style-type: none"> Fever Fatigue Loss of appetite Nausea Vomiting Abdominal pain Gray-colored bowel movements Joint pain Jaundice 		
Likelihood of Symptomatic Acute infection	<ul style="list-style-type: none"> < 10% of children < 6 years have jaundice 40%–50% of children age 6–14 years have jaundice 70%–80% of persons > 14 years have jaundice 	<ul style="list-style-type: none"> < 1% of infants < 1 year develop symptoms 5%–15% of children age 1–5 years develop symptoms 30%–50% of persons > 5 years develop symptoms Note: Symptoms appear in 5%–15% of newly infected adults who are immunosuppressed	<ul style="list-style-type: none"> 20%–30% of newly infected persons develop symptoms of acute disease
Potential for Chronic Infection	None	<ul style="list-style-type: none"> Among unimmunized persons, chronic infection occurs in >90% of infants, 25%–50% of children aged 1–5 years, and 6%–10% of older children and adults 	<ul style="list-style-type: none"> 75%–85% of newly infected persons develop chronic infection 15%–25% of newly infected persons clear the virus
Severity	Most persons with acute disease recover with no lasting liver damage; rarely fatal	<ul style="list-style-type: none"> Most persons with acute disease recover with no lasting liver damage; acute illness is rarely fatal 15%–25% of chronically infected persons develop chronic liver disease, including cirrhosis, liver failure, or liver cancer Estimated 3,000 persons in the United States die from HBV-related illness per year 	<ul style="list-style-type: none"> Acute illness is uncommon. Those who do develop acute illness recover with no lasting liver damage. 60%–70% of chronically infected persons develop chronic liver disease 5%–20% develop cirrhosis over a period of 20–30 years 1%–5% will die from cirrhosis or liver cancer Estimated 12,000 persons in the United States die from HCV-related illness per year
Serologic Tests for Acute Infection	<ul style="list-style-type: none"> IgM anti-HAV 	<ul style="list-style-type: none"> HBsAg in acute and chronic infection IgM anti-HBc is positive in acute infection only 	<ul style="list-style-type: none"> No serologic marker for acute infection

	HEPATITIS A	HEPATITIS B	HEPATITIS C
Serologic Tests for Chronic Infection	<ul style="list-style-type: none"> Not applicable—no chronic infection 	<ul style="list-style-type: none"> HBsAg (and additional markers as needed) 	<ul style="list-style-type: none"> Screening assay (EIA or CIA) for anti-HCV Verification by an additional, more specific assay (e.g., nucleic acid testing (NAT) for HCV RNA)
Screening Recommendations for Chronic Infection	<ul style="list-style-type: none"> Not applicable—no chronic infection <p>Note: Screening for past acute infection is generally not recommended</p>	<p>Testing is recommended for:</p> <ul style="list-style-type: none"> All pregnant women Persons born in regions with intermediate or high rates of Hepatitis B (HBsAg prevalence of $\geq 2\%$) U.S.-born persons not vaccinated as infants whose parents were born in regions with high rates of Hepatitis B (HBsAg prevalence of $\geq 8\%$) Infants born to HBsAg-positive mothers Household, needle-sharing, or sex contacts of HBsAg-positive persons Men who have sex with men Injection drug users Patients with elevated liver enzymes (ALT/AST) of unknown etiology Hemodialysis patients Persons needing immunosuppressive or cytotoxic therapy HIV-infected persons Donors of blood, plasma, organs, tissues, or semen 	<p>Testing is recommended for:</p> <ul style="list-style-type: none"> Persons who currently inject drugs or who have injected drugs in the past, even if once or many years ago Recipients of clotting factor concentrates before 1987 Recipients of blood transfusions or donated organs before July 1992 Long-term hemodialysis patients Persons with known exposures to HCV (e.g., healthcare workers after needlesticks, recipients of blood or organs from a donor who later tested positive for HCV) HIV-infected persons Children born to infected mothers (do not test before age 18 mos.) Patients with signs or symptoms of liver disease (e.g., abnormal liver enzyme tests) Donors of blood, plasma, organs, tissues, or semen
Treatment	<ul style="list-style-type: none"> No medication available Best addressed through supportive treatment 	<ul style="list-style-type: none"> Acute: No medication available; best addressed through supportive treatment Chronic: Regular monitoring for signs of liver disease progression; some patients are treated with antiviral drugs 	<ul style="list-style-type: none"> Acute: Antivirals and supportive treatment Chronic: Regular monitoring for signs of liver disease progression; some patients are treated with antiviral drugs
Vaccination Recommendations	<p>Hepatitis A vaccine is recommended for:</p> <ul style="list-style-type: none"> All children at age 1 year Travelers to regions with intermediate or high rates of Hepatitis A Men who have sex with men Users of certain illegal drugs (injection and non-injection) Persons with clotting-factor disorders Persons who work with HAV-infected primates or with HAV in a research laboratory Persons with chronic liver disease, including HBV- and HCV-infected persons with chronic liver disease Anyone else seeking long-term protection 	<p>Hepatitis B vaccine is recommended for:</p> <ul style="list-style-type: none"> All infants at birth Older children who have not previously been vaccinated Susceptible sex partners of infected persons Persons with multiple sex partners Persons seeking evaluation or treatment for an STD Men who have sex with men Injection drug users Susceptible household contacts of infected persons Healthcare and public safety workers exposed to blood on the job Persons with chronic liver disease, including HCV-infected persons with chronic liver disease Persons with HIV infection Persons with end-stage renal disease, including predialysis, hemodialysis, peritoneal dialysis, and home dialysis patients Residents and staff of facilities for developmentally disabled persons Travelers to regions with intermediate or high rates of Hepatitis B (HBsAg prevalence of $\geq 2\%$) Anyone else seeking long-term protection 	<p>There is no Hepatitis C vaccine.</p>
Vaccination Schedule	2 doses given 6 months apart	<ul style="list-style-type: none"> Infants and children: 3 to 4 doses given over a 6- to 18-month period depending on vaccine type and schedule Adults: 3 doses given over a 6-month period 	No vaccine available



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Reference for Interpretation of Hepatitis C Virus (HCV) Test Results

If Your HCV Test Result Is:			Interpretation		Action
Anti HCV Screening Test*	Anti-HCV Supplemental Test RIBA†	HCV RNA	Anti HCV	HCV Infection	Additional Testing or Evaluation
Negative	Not Needed	Not Needed	Negative	None	No
Positive	Not Done	Not Done	Not Known	Not Known	Supplemental anti-HCV (RIBA) or HCV RNA
Positive	Not Done	Negative	Not Known	Not Known♦	Supplemental anti-HCV (RIBA)
Positive (high s/co ratio§)	Not Done	Not Done	Positive	Past/Current	Evaluate for chronic infection and liver disease
Positive	Negative	Not Needed	Negative	None	No
Positive	Positive	Not Done	Positive	Past/Current	Evaluate for chronic infection and liver disease
Positive	Positive	Negative	Positive	Past/Current♦	Repeat HCV RNA; Evaluate for chronic infection and liver disease
Positive	Positive/Not Done	Positive	Positive	Current	Evaluate for chronic infection and liver disease
Positive	Indeterminate	Not Done	Indeterminate	Not Known	Test for HCV RNA or repeat anti-HCV testing
Positive	Indeterminate	Positive	Positive	Current	Evaluate for chronic infection and liver disease
Positive	Indeterminate	Negative	Indeterminate	Not Known♦	Test for HCV RNA or repeat anti-HCV testing

* EIA (enzyme immunoassay) or CIA (enhanced chemiluminescence immunoassay).

† RIBA (recombinant immunoblot assay), a more specific anti-HCV assay.

♦ Single negative HCV RNA result cannot determine infection status, as persons might have intermittent viremia.

§ Samples with high signal-to-cut-off ratios usually (>95%) confirm positive, but supplemental serologic testing was not performed. Less than 5 of every 100 might represent false positives; more specific testing should be requested, if indicated.

Anti-HCV: Antibody to HCV

RNA: Ribonucleic acid



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