

# Hepatitis C

#### What is hepatitis C?

Hepatitis C is a virus that can infect humans and cause disease. It is spread through contact with infected blood.

Hepatitis C infection can cause a mild illness lasting a few weeks to a much more serious illness that may lead to lifelong disease.

Patients who have a long-term hepatitis C infection, called a chronic infection, are at risk of developing liver scarring (called liver cirrhosis) and liver cancer. They may eventually need a liver transplantation.

#### How common is hepatitis C?

A total of 2,967 cases of acute hepatitis C were reported in the United States in 2016. That translates to 1 case per 100,000 people, which is a higher rate than in previous years.

There are approximately 3.9 million people in the United States infected with the hepatitis C virus.

#### Who is at risk of hepatitis C?

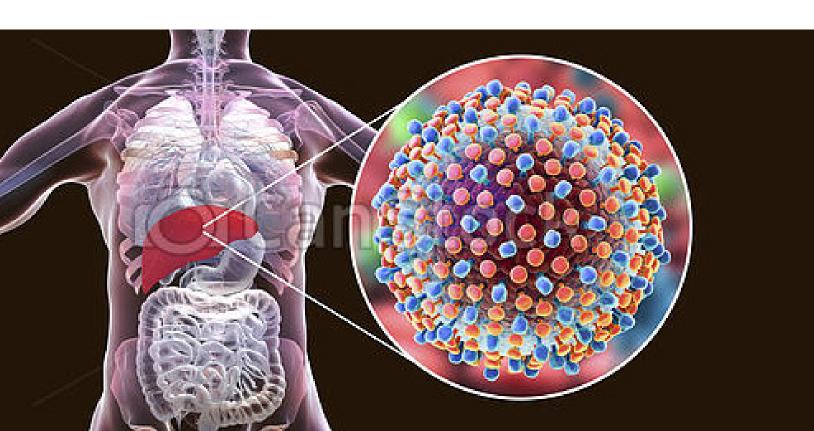
Hepatitis C occurs most commonly in Central and East Asia, North Africa, and the Middle East.

If a mother is infected with hepatitis C, she can pass the virus on to her child. A simultaneous infection with HIV increases the risk of transmission. However, a baby cannot get hepatitis C from breast milk.

Risk factors for hepatitis C infection include intravenous drug use or blood transfusion. Healthcare workers who are in contact with blood or infected needles, patients on kidney dialysis, and people who get tattoos or body piercings with unsterilized equipment also are at risk of hepatitis C infection.

Hepatitis C can be sexually transmitted by having unprotected sex with an infected person.

Hepatitis C is not spread by shared use of utensils, breastfeeding, hugging, kissing, holding hands, coughing, or sneezing, as long as there are no open cuts or wounds.



#### What are the symptoms of hepatitis C?

Most people recently infected with hepatitis C do not have any symptoms. However, some people may develop the following symptoms:

- Fever
- · Poor appetite
- Nausea
- Vomiting
- Diarrhea
- Muscle soreness
- Dark urine
- Pale stool (clay color)
- Fatigue, tiredness
- Abdominal pain
- Jaundice (yellowing of the whites of the eyes and skin)
- Enlarged liver (hepatomegaly)
- Enlarged spleen (splenomegaly)

If symptoms develop, they usually occur 1–2 months after being exposed to the virus.

Approximately 75%–85% of newly infected patients with hepatitis C will develop chronic infection. Of these, about 60%–70% will develop liver disease. Patients who develop chronic hepatitis C infection may not have any symptoms for a long time, until they develop symptoms related to their damaged liver.

### When should you contact your doctor?

If your child develops symptoms of hepatitis, you should seek medical attention immediately. Children born to mothers with hepatitis C should be tested by their doctor for hepatitis C by blood tests.

There are other causes of liver disease in children that also cause dark urine, pale stools, or jaundice. Your doctor can test your child to determine the cause of these symptoms.

Your doctor also will determine if your child should see a pediatric gastroenterologist if blood tests show that your child's liver is not functioning well.

#### How is hepatitis C diagnosed?

Your child's doctor will perform a physical examination. Many children with hepatitis C have a normal exam. However, your child's exam may indicate that your child is jaundiced, and the doctor may be able to feel an enlarged liver (hepatomegaly) or spleen (splenomegaly).

The doctor also will perform a blood test to confirm if your child has hepatitis C. The presence of antibodies to hepatitis C in the blood indicates that a person is infected.

Additional blood testing will determine if there is a chronic infection with hepatitis C. However, this test should not be done until at least 3 months of age, because infants younger than 3 months of age frequently have positive test results even if they do not have chronic infection.

There are 6 different types of hepatitis C virus. Your child's doctor may also perform a blood test to determine what type of hepatitis C virus your child has. Other blood tests can be used to monitor inflammation in the liver [aspartate transaminase (AST) and alanine transaminase (ALT)] and measure your child's liver function [prothrombin time (PT), albumin, and bilirubin].

A type of imaging called ultrasound may be used to see if your child's liver and/or spleen is enlarged. In addition, ultrasound can be used to screen for cancer in patients with chronic hepatitis C.

### What is the treatment for hepatitis C?

New infections with hepatitis C, called acute hepatitis C, are usually not treated. Up to 40% of children who are infected with hepatitis C immediately before or after birth will clear the virus without treatment by 2 years of age.

Chronic hepatitis C infection can be cured and is usually treated with a combination of medications. Response to treatment depends on the type of hepatitis C virus your child has. New medications are appearing very rapidly. Talk to your child's doctor about which treatment is best for your child.

## What can I expect if my child has hepatitis C?

Many children who are newly infected with hepatitis C will develop chronic infection and liver disease. Rarely, some children infected with hepatitis C may develop acute liver failure, which requires an urgent liver transplantation.

Many children with chronic hepatitis C infection who have not been treated will develop serious liver problems as an adult and may require a liver transplantation.

If diagnosed with hepatitis C infection, children should be periodically tested for liver function and status of the virus. Older patients should be screened with ultrasounds to check for liver cancer.

#### Can hepatitis C be prevented?

There is no vaccine for hepatitis C. To avoid getting infected with hepatitis C, do not share drug needles or other drug materials. Wear gloves if touching another person's blood or open sores. Do not share toothbrushes,

razors, or nail clippers. If your child is getting a tattoo or body piercing, make sure sterile equipment and sterile ink are used. Always use condoms during sex.

If your child has hepatitis C, he or she should be vaccinated against hepatitis A and hepatitis B to prevent additional infections.

#### **Ouick Facts**

Hepatitis C is a contagious disease caused by infection with the hepatitis C virus, which results in inflammation and damage to the liver.

There are approximately 3.9 million people in the United States infected with the hepatitis C virus.

Hepatitis C is diagnosed with blood tests.

There is no specific treatment for newly acquired hepatitis C infection. Children with chronic hepatitis C should be seen by a pediatric gastroenterologist or pediatric hepatologist to discuss the most appropriate treatments and medications.

All children with hepatitis C should be vaccinated against hepatitis A and hepatitis B.



**IMPORTANT REMINDER:** This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general educational information as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.



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