

# Hepatitis C

**H**epatitis C is a viral infection of the liver caused by the **hepatitis C virus (HCV)**. In the United States, 25 000 to 30 000 new infections occur each year. It is a slowly progressive liver disease, usually without symptoms, that may take 20 to 30 years to cause serious liver damage. About three quarters of persons infected with this virus develop **chronic** (long-term) **hepatitis** (inflammation of the liver). An estimated 2.7 million to 3.4 million Americans are chronically infected and 12 000 deaths per year are attributed to the medical complications related to hepatitis C. HCV has become the major cause of liver disease leading to **cirrhosis** (scarring of the liver) and liver cancer and is now the most frequent indication for liver transplantation.

There are 6 major types (strains) of hepatitis C, referred to as **genotypes** (based on DNA sequences). The most common genotype in the United States is genotype 1. In 1992, a blood test was discovered and implemented to identify individuals exposed to HCV and to screen blood donors. Knowing the genotype of the virus can have important consequences regarding care. The February 21, 2007, issue of *JAMA* includes an article about various tests for the diagnosis of HCV infection. These tests provide critical information for guiding treatment and measuring the response to therapy.

## EXPOSURE TO HEPATITIS C VIRUS

HCV is spread primarily by direct contact with the blood of an HCV-infected person. It is not spread by sneezing, hugging or kissing, coughing, breastfeeding, food or water, or other casual contact. There is no vaccine to prevent the infection or spread of HCV.

## SYMPTOMS

Most individuals who are newly infected or chronically infected with HCV do not have symptoms. If present, the symptoms may be very mild, nonspecific, and intermittent. They may be flu-like, including fatigue, poor appetite, nausea, muscle and joint pain, or a mild discomfort in the area of the liver.

## HEPATITIS C TESTING IS RECOMMENDED FOR PERSONS WHO

- Ever injected illegal drugs
- Received clotting factors made before 1987
- Received blood or organ transplants before July 1992
- Ever were treated with hemodialysis
- Have liver disease of uncertain cause
- Have a needlestick with HCV-positive blood
- Are 12 to 18 months of age and born to a mother who is HCV-positive

## TREATMENT

- Selection of patients for treatment is guided by virus testing (**NAT**-nucleic acid tests), liver function tests (blood tests), imaging studies (CT scan, MRI, or ultrasound), and liver biopsy.
- **Peginterferon** combined with **ribavirin** are the 2 antiviral drugs now being used.
- Side effects of drug treatment can be serious, and your doctor may suggest that mild cases of hepatitis C infection should be watched carefully instead of treated with drugs.
- Periodic blood tests are required to monitor the infection.
- Treatment includes eating a well-balanced diet, drinking plenty of fluids, avoiding alcohol, and exercising.
- For end-stage liver disease, liver transplantation may be the only treatment option.

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## FOR MORE INFORMATION

- American Liver Foundation  
[www.liverfoundation.org](http://www.liverfoundation.org)
- American Academy of Family Physicians  
[www.aafp.org](http://www.aafp.org)
- Hepatitis Foundation International  
[www.hepfi.org](http://www.hepfi.org)

## INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at [www.jama.com](http://www.jama.com). Many are available in English and Spanish. A Patient Page on hepatitis A was published in the July 13, 2005, issue; and one on hepatitis B was published in the November 10, 1999, issue.

Sources: American Liver Foundation, American Academy of Family Physicians, Hepatitis Foundation International

