

# Viral Hepatitis A to E and Beyond

*National Digestive Diseases Information Clearinghouse*



National  
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Digestive  
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Hepatitis is inflammation of the liver. Several different viruses cause viral hepatitis. They are named the hepatitis A, B, C, D, and E viruses.

All of these viruses cause acute, or short-term, viral hepatitis. The hepatitis B, C, and D viruses can also cause chronic hepatitis, in which the infection is prolonged, sometimes lifelong.

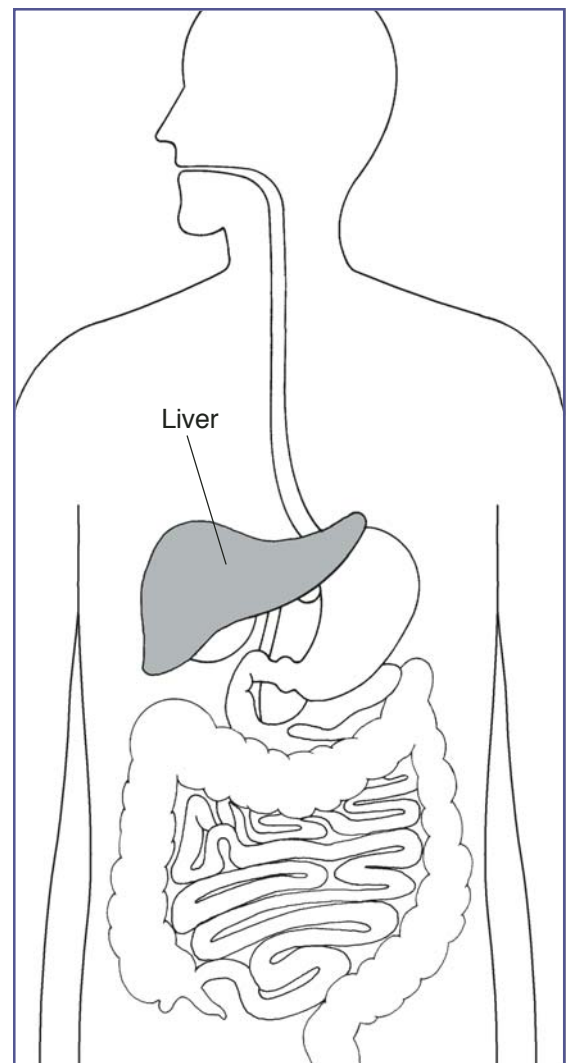
Other viruses may also cause hepatitis, but they have yet to be discovered and they are obviously rare causes of the disease.

## Symptoms of viral hepatitis

Symptoms include

- jaundice (yellowing of the skin and eyes)
- fatigue
- abdominal pain
- loss of appetite
- nausea
- diarrhea
- vomiting.

However, some people do not have symptoms until the disease is advanced.



*Hepatitis is inflammation of the liver.*

## Hepatitis A

### Disease Spread

Primarily through food or water contaminated by feces from an infected person. Rarely, it spreads through contact with infected blood.

### People at Risk

International travelers; people living in areas where hepatitis A outbreaks are common; people who live with or have sex with an infected person; and, during outbreaks, day care children and employees, sexually active gay men, and injection drug users.

### Prevention

The hepatitis A vaccine; also, avoiding tap water when traveling internationally and practicing good hygiene and sanitation.

### Treatment

Hepatitis A usually resolves on its own over several weeks.

## Hepatitis B

### Disease Spread

Through contact with infected blood, through sex with an infected person, and from mother to child during childbirth.

### People at Risk

Injection drug users, people who have sex with an infected person, men who have sex with men, children of immigrants from disease-endemic areas, people who live with an infected person, infants born to infected mothers, health care workers, and hemodialysis patients.

### Prevention

The hepatitis B vaccine.

### Treatment

Drug treatment with alpha interferon or lamivudine.

## Hepatitis C

### Disease Spread

Primarily through contact with infected blood; less commonly, through sexual contact and childbirth.

### People at Risk

Injection drug users, hemodialysis patients, health care workers, people who have sex with an infected person, people who have multiple sex partners, infants born to infected women, and people who received a transfusion of blood or blood products before July 1992 or clotting factors made before 1987.

### Prevention

There is no vaccine for hepatitis C—the only way to prevent the disease is to reduce the risk of exposure to the virus. This means avoiding behaviors like sharing drug needles or sharing personal items like toothbrushes, razors, and nail clippers with an infected person.

### Treatment

Drug treatment with alpha interferon or combination treatment with interferon and the drug ribavirin.

## Hepatitis D

### Disease Spread

Through contact with infected blood. This disease occurs only in people who are already infected with hepatitis B.

### People at Risk

Anyone infected with hepatitis B. Injection drug users who have hepatitis B have the highest risk. People who have hepatitis B are also at risk if they have sex with a person infected with hepatitis D or if they live with an infected person.

### Prevention

Immunization against hepatitis B for those not already infected; also, avoiding exposure to infected blood, contaminated needles, and an infected person's personal items (toothbrush, razor, nail clippers).

### Treatment

Drug treatment with alpha interferon.

## Hepatitis E

### Disease Spread

Through food or water contaminated by feces from an infected person. This disease is uncommon in the United States.

### People at Risk

International travelers; people living in areas where hepatitis E outbreaks are common; and people who live or have sex with an infected person.

### Prevention

There is no vaccine for hepatitis E—the only way to prevent the disease is to reduce the risk of exposure to the virus. This means avoiding tap water when traveling internationally and practicing good hygiene and sanitation.

### Treatment

Hepatitis E usually resolves on its own over several weeks to months.

## Other Causes of Viral Hepatitis

Some cases of viral hepatitis cannot be attributed to the hepatitis A, B, C, D, or E viruses. This is called non A...E hepatitis or hepatitis X. Scientists have identified several candidate viruses, but none have been proven to cause hepatitis. The search for the virus responsible for hepatitis X continues.

## For More Information

Information about viral hepatitis is also available from

American Liver Foundation  
75 Maiden Lane, Suite 603  
New York, NY 10038  
Phone: (800) GO-LIVER (465-4837)  
Internet: [www.liverfoundation.org](http://www.liverfoundation.org)

Centers for Disease Control and Prevention  
National Center for Infectious Diseases  
Hepatitis Branch  
1600 Clifton Road  
Atlanta, GA 30333  
Phone: (888) 443-7232  
Internet: [www.cdc.gov/ncidod/diseases/hepatitis](http://www.cdc.gov/ncidod/diseases/hepatitis)

Hepatitis Foundation International  
30 Sunrise Terrace  
Cedar Grove, NJ 07009-1423  
Phone: (800) 891-0707 or (973) 239-1035  
Internet: [www.hepfi.org](http://www.hepfi.org)

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Publications produced by the clearinghouse are carefully reviewed by both NIDDK scientists and outside experts. This fact sheet was reviewed by Bruce Bacon, M.D., St. Louis University.

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