

Viral Hepatitis: A Through E and Beyond

This information is at <http://digestive.niddk.nih.gov/ddiseases/pubs/viralhepatitis/index.htm> and is provided by the NDDIC, a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health under the U.S. Department of Health and Human Services.

(NIH Publication No. 03-4762, May 2003). A listing of other articles on hepatitis is available at <http://www.nlm.nih.gov/medlineplus/hepatitis.html>.

To obtain a free copy of this document, go to www.masterdocs.com.

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

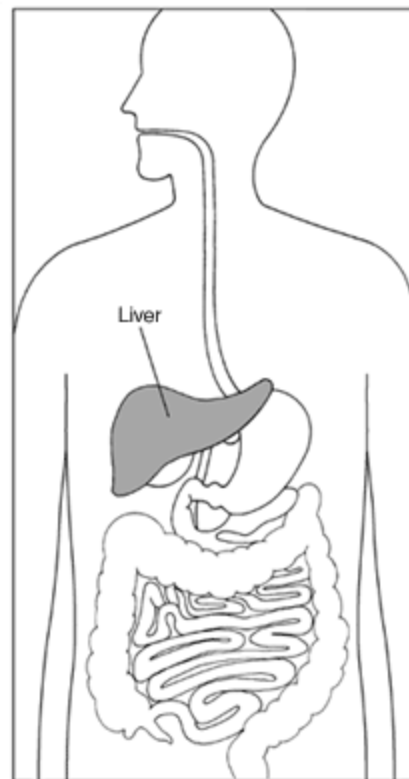
All of these viruses cause acute, or short-term, viral hepatitis. The hepatitis B, C, and D viruses can also cause chronic hepatitis, in which the infection is prolonged, sometimes lifelong.

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
- vomiting
- diarrhea
- low grade fever
- headache



Hepatitis is inflammation of the liver.

However, some people do not have symptoms.

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, men who have sex with 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

People who have sex with an infected person, men who have sex with men, injection drug users, children of immigrants from disease-endemic areas, infants born to infected mothers, people who live with an infected person, health care workers, hemodialysis patients, people who received a transfusion of blood or blood products before July 1992 or clotting factors made before 1987, and international travelers.

Prevention

The hepatitis B vaccine.

Treatment

For chronic hepatitis B: drug treatment with alpha interferon, peginterferon, lamivudine, or adefovir dipivoxil.

Acute hepatitis B usually resolves on its own. Very severe cases can be treated with lamivudine.

Hepatitis C

Disease Spread

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

People at Risk

Injection drug users, people who have sex with an infected person, people who have multiple sex partners, health care workers, infants born to infected women, hemodialysis patients, 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

Chronic hepatitis C: drug treatment with peginterferon alone or combination treatment with peginterferon and the drug ribavirin.

Acute hepatitis C: treatment is recommended if it does not resolve within 2 to 3 months.

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. Also at risk are people who received a transfusion of blood or blood products before July 1992 or clotting factors made before 1987.

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

Chronic hepatitis D: 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. Scientists continue to study the causes of non A-E hepatitis.

Hope Through Research

The National Institute of Diabetes and Digestive and Kidney Diseases, through its Division of Digestive Diseases and Nutrition, supports basic and clinical

research into the nature and transmission of the hepatitis viruses, and the activation and mechanisms of the immune system. Results from these studies are used in developing new treatments and methods of prevention.

For More Information

American Liver Foundation (ALF)

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New York, NY 10038-4810
Phone: 1-800-GO-LIVER (465-4837),
1-888-4HEP-USA (443-7872),
or (212) 668-1000
Fax: (212) 483-8179
Email: info@liverfoundation.org
Internet: www.liverfoundation.org

Centers for Disease Control and Prevention (CDC)

Division of Viral Hepatitis
1600 Clifton Road
Mail Stop C-14
Atlanta, GA 30333
Phone: 1-800-443-7232 or (404) 371-5900
Email: ncid@cdc.gov
Internet: www.cdc.gov/hepatitis

Hepatitis Foundation International (HFI)

504 Blick Drive
Silver Spring, MD 20904-2901
Phone: 1-800-891-0707 or (301) 622-4200
Fax: (301) 622-4702
Email: hfi@comcast.net
Internet: www.hepatitisfoundation.org

National Digestive Diseases Information Clearinghouse

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