

Hepatitis

WHAT IS VIRAL HEPATITIS?

Hepatitis is an inflammation of the liver caused by medications, alcohol, or a variety of other agents including the viruses that cause mumps, measles, herpes and infectious mononucleosis. However, when health professionals talk about viral hepatitis, they usually mean hepatitis caused by the hepatitis A, hepatitis B, or hepatitis C virus.

WHAT'S THE DIFFERENCE BETWEEN HEPATITIS A, B AND C?

Although hepatitis A, B and C have similar symptoms, the viruses themselves are quite different. The hepatitis A virus can enter a person's body when he/she eats or drinks something contaminated with the stool or blood of someone who has the disease. Symptoms usually appear within 2-6 weeks, but are not followed by the chronic problems that hepatitis B and C viruses can cause.

The hepatitis B and C viruses can infect a person if his/her mucous membranes or blood are exposed to an infected person's blood, saliva, wound exudates, semen or vaginal secretions. Symptoms appear more gradually than in hepatitis A. Unlike the hepatitis A virus, the hepatitis B and C viruses can stay in the body - sometimes for a lifetime - and eventually cause chronic, serious liver diseases.

HOW CAN I PROTECT MYSELF FROM INFECTION?

Because the different viruses that cause hepatitis enter the body in different ways, there are several steps you can take to protect yourself from infection. Practicing good hygiene and safer sexual behaviors is a good first step. For more specific information, see the individual sections for hepatitis A, B and C.

WHAT ARE THE SYMPTOMS OF VIRAL HEPATITIS?

Early Symptoms of Viral Hepatitis Include:

- fatigue
- tenderness in the upper right abdomen
- sore muscles & joints
- loss of appetite
- an altered sense of taste & smell
- nausea, vomiting & diarrhea

- low-grade fever
- malaise

Later symptoms can include:

- jaundice - abnormally yellow skin & eyes caused by bile entering the blood
- darkened urine; light-colored or gray stool

HOW IS IT DIAGNOSED?

Although health providers use information about a person's symptoms, health history and behaviors to help make a diagnosis, only blood tests can confirm the diagnosis and pinpoint which type of hepatitis a person has.

HOW IS VIRAL HEPATITIS TREATED?

Since there's no medication that can treat the initial illness that viral hepatitis causes, health professionals manage symptoms as they occur and try to help the body's immune system fight the infection. If you have viral hepatitis, your health care provider may tell you to:

- Avoid alcohol and other drugs, large doses of vitamins, and prescription drugs metabolized by the liver (sometimes including birth control pills).
- Drink high-calorie fluids such as fruit juices and eat a balanced diet that includes dairy products; meat, poultry or seafood; breads and cereals; and fruits and vegetables. (To control nausea, try eating several smaller meals.)
- Limit activity if your hepatitis is symptomatic; this typically means bed rest at first, progressing to normal activity as symptoms disappear.

Your health professional may recommend hospitalization if you experience severe vomiting or do not feel better after several weeks. You should know that researchers are making gains in treating the chronic liver disease associated with both hepatitis B and C. There is not much available for treatment. Interferon has been approved in chronic hepatitis B and C cases for those aged 18 or older. Prevention is still the best option.

HEPATITIS A

Hepatitis A infects 125,000 - 200,000 people each year and can be easily transmitted. You can become infected by eating or drinking something that has been contaminated with the stool (feces) or blood of someone who has the disease.

Some facts about Hepatitis A:

- Symptoms occur 2-6 weeks after exposure and can last from several days to six months.
- The virus usually causes mild illness and is often mistaken for a stomach virus, although occasionally symptoms are more serious. It is rarely fatal and does not cause permanent liver damage.
- A person with hepatitis A is considered contagious, which means they can transmit the virus to others as early as two weeks before symptoms appear.
- The hepatitis A virus does not cause the long-term, chronic symptoms that other hepatitis viruses can cause.

What behaviors could put me at risk for infection with the Hepatitis A virus?

- Eating contaminated food, such as undercooked shellfish from contaminated water or food handled by someone who has hepatitis A.
- Using silverware, cups or glasses that an infected person touched with unwashed hands.
- Changing diapers or linens that contain stool from someone with hepatitis A and neglecting to wash your hands.
- Sharing food with an infected person or drinking water contaminated with sewage.
- Oral or anal sexual contact with an infected person.
- Traveling to developing countries where the disease is common.

Sharing needles can also put you at risk. The hepatitis A virus can be transmitted through blood if needles are shared. However, poor hygiene - either among people who use drugs or among drug producers - is probably a more important reason for the high prevalence among drug users.

What can be done to prevent Hepatitis A?

Practice good personal hygiene. Always wash your hands after changing diapers, when cleaning or after using the toilet, and before preparing or eating food. Avoid foods that could be contaminated, such as under-cooked shellfish or food that's been prepared by someone who has the virus. When traveling to developing countries, drink only bottled or boiled water, don't use ice, and don't eat raw fruits or vegetables unless they've been peeled. It is also a good idea to get the hepatitis A vaccine.

What if I've been exposed?

If you think you've been directly exposed to the hepatitis A virus, visit your health care provider immediately for treatment. Some treatments can help ward off the infection if administered in time (hepatitis A vaccine and IgG). All people who have close household or sexual contact with an infected person also need treatment.

If I'm infected, how do I keep from infecting others? Always wash your hands well after using the toilet. Don't prepare or handle food for others while you are infectious. Avoid sexual contact with other people until you are fully recovered.

HEPATITIS B: THE SEXUALLY TRANSMITTED INFECTIONS (STI) THAT A VACCINE PREVENTS

The hepatitis B virus infects people of all ages. It is one of the fastest-spreading sexually transmitted infections (STI), and also can be transmitted by sharing needles or by any behavior in which a person's mucus membranes are exposed to an infected person's blood, semen, vaginal secretions, or saliva. While the initial sickness is rarely fatal, 10 percent of people who get hepatitis B are infected for life and run a high risk of developing serious, long-term liver diseases such as cirrhosis of the liver or liver cancer which can cause serious complications or death. A safe, effective vaccine that prevents hepatitis B is available. If you or someone you know practices behaviors that can spread hepatitis B, ask a medical professional about the vaccine. Don't become one of the 300,000 Americans who gets hepatitis B every year.

Some facts about hepatitis B:

- Symptoms, if they occur, appear from one to six months after exposure to the virus.
- An infected person can begin infecting others four to six weeks before symptoms appear, and can continue infecting others long after symptoms subside.
- About one in ten people infected with hepatitis B become chronic carriers; they continue carrying the virus and spread it to others even though their symptoms have disappeared. About one-quarter of these chronic carriers eventually die of severe, chronic liver diseases, including cirrhosis - a serious scarring of the liver - and liver cancer.
- About half of the people infected with hepatitis B virus never develop symptoms; but they can become chronic carriers.
- Since some areas of the world have high rates of infection, people from places such as Southeast Asia, South Pacific Islands, sub-Saharan Africa, Alaska, Amazon, Bahia, Haiti, and the Dominican Republic are at risk.

What behaviors could put me at risk?

- Practicing unsafe sex. The more partners with whom you have vaginal, anal or oral contact, the higher your risk of becoming infected with hepatitis B. Abstinence is the most effective way to prevent sex-related transmission. If you have vaginal, anal or oral contact, always use barrier protection. People who have sex with multiple partners should ask their health provider about getting vaccinated for hepatitis B.
- Sharing needles. No matter what drug is injected, whether it's crack, heroin or steroids, sharing needles is extremely risky. In fact, an estimated 60-80 percent of the people who share needles are or have been infected with hepatitis B. Similarly, beware of needles that could be contaminated when getting tattoos, having acupuncture or your ears pierced. Select a reputable professional for these services.
- Close, frequent contact with the blood, semen, vaginal secretions or saliva of infected patients. If you are a health care worker, consider getting vaccinated. Occasionally, people who share living quarters for a long time with others who have hepatitis B have gotten infected. Receiving a blood transfusion or other blood products no longer carries the threat of hepatitis B that it once did. Today, all blood is screened for hepatitis B before it is used.

What can be done to prevent hepatitis B?

If you are at risk of contracting hepatitis B, get vaccinated. The hepatitis B vaccine is an inactivated antigen (genetically engineered; not a live or killed virus). It is administered in a series of three injections over a six-month period. Approximately 95% of persons who receive the three injections obtain full immunity after receiving the vaccine. You are asked to report side effects (rash, nausea, joint pain, and/or fatigue) to your health care provider. Also, avoid high-risk behaviors and practice good personal hygiene when sharing food, kitchens, and bathrooms - especially if you live with someone who is infected with the hepatitis B virus. Don't share razors, toothbrushes or pierced earrings with anyone.

What if I've been exposed? If you have not been vaccinated against hepatitis B but are exposed to the virus, your health professional can treat you with hepatitis B immune globulin (HBIG), combined with the hepatitis B vaccination. Don't delay - get immunized and vaccinated as soon as possible after exposure.

If I'm infected, how do I avoid infecting others?

- Don't engage in vaginal, anal or oral sexual contact without a condom.
- Don't donate blood. Bandage all cuts and open sores.

- Don't share anything that could be contaminated with your blood, semen, vaginal secretions or saliva - such as needles, razors or toothbrushes.
- Wash your hands well after using the toilet. Don't prepare or handle food for others while infectious.
- If you have hepatitis B and you're pregnant, your baby must be immunized at birth. All pregnant women should be screened for hepatitis B.

HEPATITIS C

Hepatitis C is less likely than the other hepatitis viruses to cause serious illness at first (only one-quarter of the people infected actually develop symptoms); about 70% of those infected develop chronic liver disease.

Like hepatitis B, hepatitis C can be spread by contact with infected blood, and possibly semen, vaginal secretions and saliva. Hepatitis C infects about 150,000 Americans each year.

What behaviors could put me at risk?

You are at risk if you share needles; receive contaminated blood during a blood transfusion; work with contaminated blood as a health care worker; or have vaginal, oral or anal contact without barrier protection with infected partners.

What can be done to prevent hepatitis C?

Since hepatitis C is transmitted in much the same way as hepatitis B, you can help avoid infection by using some of the same precautions. Always use barrier protection during vaginal, anal or oral contact; practice good personal hygiene; and never share needles, razors, toothbrushes or pierced earrings with anyone.

All donated blood is screened for the virus. Drugs are licensed for treatment of persons with chronic infection, though they are only about 15-30% effective. Currently, there is no vaccine available.

DELTA HEPATITIS

The delta virus (also known as hepatitis D) is a defective virus that may cause infection only in the presence of active hepatitis B infection. The symptoms and routes of transmission are similar to those of hepatitis B infection, but are particularly significant with intravenous drug abusers and pregnant women.

References:

Centers for Disease Control - Website: www.cdc.gov

Centers for Disease Control -Fact Sheets: Hepatitis A, 5/98; Hepatitis B, 10/98; and Hepatitis C, 10/98.
1997 Red Book: Report of the Committee on Infectious Diseases. American Academy of Pediatrics.