

# Hepatitis A, B, and C: Learn the Differences

	<b>Hepatitis A</b> caused by the hepatitis A virus (HAV)	<b>Hepatitis B</b> caused by the hepatitis B virus (HBV)	<b>Hepatitis C</b> caused by the hepatitis C virus (HCV)
<b>How is it spread?</b>	HAV is found in the feces (poop) of people with hepatitis A and is usually spread by close personal contact (including sex or living in the same household). It can also be spread by eating food or drinking water contaminated with HAV.	HBV is found in blood and certain body fluids. The virus is spread when blood or body fluid from an infected person enters the body of a person who is not immune. HBV is spread through having unprotected sex with an infected person, sharing needles or “works” when shooting drugs, exposure to needlesticks or sharps on the job, or from mother to baby during birth. Exposure to infected blood in ANY situation can be a risk for transmission.	HCV is found in blood and certain body fluids. The virus is spread when blood or body fluid from an HCV-infected person enters another person’s body. HCV is spread through sharing needles or “works” when shooting drugs, through exposure to needlesticks or sharps on the job, or sometimes from an infected mother to her baby during birth. It is possible to transmit HCV during sex, but it is not common.
<b>Who should be vaccinated?</b>	<ul style="list-style-type: none"> <li>• People who wish to be protected from HAV infection</li> <li>• All children at age 1 year (12–23 months)</li> <li>• Unvaccinated children age 2–18 years</li> <li>• Men who have sex with men</li> <li>• Users of street drugs (injecting and non-injecting)</li> <li>• People who travel or work in any area of the world where HAV infection is common</li> <li>• People who will have close contact with an international adoptee, from a country where HAV infection is common, during the first 60 days following the adoptee’s arrival in the U.S.</li> <li>• People with chronic liver disease, including HCV</li> <li>• People working with HAV in a laboratory</li> <li>• People with HIV infection</li> <li>• People in a healthcare setting that targets services to people who use drugs or in a group home or day care facility for developmentally disabled people</li> <li>• People who are homeless or in temporary housing (such as a shelter)</li> </ul>	<ul style="list-style-type: none"> <li>• All infants, children, teens, and adults ages 0 through 59 years</li> <li>• All adults age 60 or older with risk due to <ul style="list-style-type: none"> <li>• Sexual exposure (e.g., sex partners of HBsAg-positive people; sexually active people who are not in monogamous relationships; people seeking treatment for a sexually-transmitted infection: men who have sex with men)</li> <li>• Percutaneous or mucosal exposure to blood (e.g., current or recent injection-drug use; household contacts of HBsAg-positive people; residents and staff of facilities for developmentally disabled people; healthcare and public safety workers with reasonably anticipated risk for exposure to blood; all dialysis and pre-dialysis patients; dialysis, and pre-dialysis patients; patients with diabetes at the discretion of the clinician)</li> <li>• Other factors (e.g., anticipated travel to countries with high or intermediate endemic hepatitis B; people with HCV infection; chronic liver disease, including but not limited to people with cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice upper limit of normal; HIV infection; incarceration)</li> </ul> </li> </ul>	<p>There is no vaccine to prevent HCV. Testing for HCV is recommended for the following groups of people.</p> <ul style="list-style-type: none"> <li>• All adults age 18 years and older</li> <li>• Pregnant women</li> <li>• Injecting drug users</li> <li>• Recipients of clotting factors made before 1987</li> <li>• Hemodialysis patients</li> <li>• Recipients of blood or solid organ transplant before 1992</li> <li>• Infants born to HCV-infected mothers</li> <li>• People with undiagnosed abnormal liver test results</li> <li>• People with HIV infection</li> </ul> <p>Although HCV is not commonly spread through sex, individuals having sex with multiple partners or with an infected steady partner may be at increased risk of HCV infection.</p>
<b>Symptoms</b>	Viral hepatitis symptoms are similar no matter which type of hepatitis you have. If symptoms occur, you might experience any or all of the following: jaundice (yellowing of the skin and whites of the eyes), fever, loss of appetite, fatigue, dark urine, joint pain, abdominal pain, diarrhea, nausea, and vomiting. Very rarely, a recently acquired case of viral hepatitis can cause liver failure and death. Note: For all types of viral hepatitis, symptoms are less common in children than in adults. Symptoms are least likely for people with HCV infection.		
	<b>Incubation period:</b> 15 to 50 days, average 28 days	<b>Incubation period:</b> 45 to 160 days, average 90 days	<b>Incubation period:</b> 14 to 180 days, average 45 days
<b>Chronic infection</b>	There is no chronic infection. Once you have had HAV infection, you cannot get it again. About 15 out of 100 people infected with HAV will have prolonged illness or relapsing symptoms over a 6–9 month period.	Chronic infection occurs in up to 90% of infants infected at birth; in about 30% of children infected at ages 1–5 years; and less than 5% of people infected after age 5 years. In the U.S., about 2,000 people die each year from hepatitis B. Death from chronic liver disease occurs in 15%–25% of chronically infected people. People who have chronic HBV infection have a much higher risk of liver failure and liver cancer.	Chronic infection occurs in 75%–85% of newly infected people and 70% of chronically infected people go on to develop chronic liver disease. In the U.S., about 20,000 people die each year from HCV. People who have chronic HCV infection have a much higher risk of liver failure and liver cancer. Chronic HCV-related liver disease is the leading cause for liver transplant.
<b>What treatment?</b>	<ul style="list-style-type: none"> <li>• There is no treatment for HAV other than supportive care.</li> <li>• Avoid alcohol while ill. It can worsen liver disease.</li> </ul>	<ul style="list-style-type: none"> <li>• People with chronic HBV infection should have regular medical monitoring for signs of liver disease or liver cancer. Medications can treat HBV infection. Liver transplant is the last resort.</li> <li>• Get vaccinated against hepatitis A.</li> <li>• Maintain a healthy lifestyle to avoid further liver damage.</li> <li>• No medication treats recently acquired HBV infection.</li> </ul>	<ul style="list-style-type: none"> <li>• Over 95% of HCV-infected people can be cured of HCV infection with 8–12 weeks of oral therapy. Medications can treat chronic or acute HCV (see <a href="http://www.cdc.gov/hepatitis-c/hcp/clinical-care/index.html">www.cdc.gov/hepatitis-c/hcp/clinical-care/index.html</a>).</li> <li>• Get vaccinated against hepatitis A and B.</li> <li>• Maintain a healthy lifestyle to avoid further liver damage.</li> </ul>
<b>How is it prevented?</b>	<ul style="list-style-type: none"> <li>• Get vaccinated! Vaccines to prevent HAV infection have been available in the U.S. since 1995.</li> <li>• Always wash your hands with soap and water after using the toilet, changing a diaper, and before preparing or eating food.</li> <li>• For a recent exposure to someone with HAV or if travel is soon (leaving in less than 2 weeks) to an area of the world where hepatitis A is common, see your healthcare provider about your need for vaccination or a dose of immune globulin (IG).</li> </ul>	<ul style="list-style-type: none"> <li>• Get vaccinated! Hepatitis B vaccination is the best protection. Two or three shots are given over a period of one to six months, depending on brand.</li> <li>• Mothers should be tested for hepatitis B (HBsAg blood test) during pregnancy; infants born to HBV-infected mothers should be given HBIG (hepatitis B immune globulin) and vaccine within 12 hours of birth.</li> <li>• Tell your sex partner(s) to get vaccinated too, and always follow “safer sex” practices (e.g., using condoms).</li> </ul>	<ul style="list-style-type: none"> <li>• There is no vaccine to prevent HCV infection.</li> <li>• HCV can be spread by sex, but this is not common. If you are not in a mutually monogamous relationship, use latex condoms correctly and every time to prevent the spread of sexually transmitted diseases. (The efficacy of latex condoms in preventing HCV infection is unknown, but their proper use may reduce transmission.)</li> </ul>

