

Hepatitis B

Hepatitis B is a viral infection of the liver. Along with other hepatitis types (such as hepatitis C and hepatitis E), hepatitis B is caused by **transmission** (spread) of the virus through blood and body fluids. Some persons infected with hepatitis B develop a chronic infection, become carriers, and are then able to pass on the infection to others. All individuals with hepatitis B are at higher risk of developing liver cancer and cirrhosis of the liver. **Hepatitis A** is a less serious type of viral liver infection that is transmitted by the **fecal-oral** route (by contaminated water, food, surfaces, and hands).

Hepatitis B affects more than 300 million individuals worldwide and is a serious health problem in many industrialized nations and developing countries. Most people who have chronic hepatitis B were infected at birth or in early childhood. The April 13, 2011, issue of *JAMA* includes an article about hepatitis B vaccine.

RISK FACTORS

- Intravenous illegal drug use, especially if reusing or sharing needles
- Unprotected sexual activity
- Blood product transfusion (the risk of contracting hepatitis B from a blood transfusion is low, approximately 1 in 200,000 units)
- Newborn infants can be infected with hepatitis B at delivery if their mother carries the virus.
- Exposure to blood at your job (such as health care and public safety workers)
- Persons receiving hemodialysis for severe kidney disease
- Body piercing, tattooing
- Medical tourism

TREATMENT

Most cases of acute hepatitis B resolve on their own, do not require treatment, and result in lifelong immunity. Supportive care for patients with acute illness includes rest and fluids for hydration. For individuals with a known exposure to hepatitis B, rapid treatment with hepatitis B immune globulin (HBIG) and the hepatitis B vaccine can prevent actual infection. Chronic hepatitis B infection may or may not require treatment, but patients should be monitored by a physician who has experience treating chronic hepatitis.

FOR MORE INFORMATION

- Centers for Disease Control and Prevention
www.cdc.gov
- Hepatitis Foundation International
www.hepatitisfoundation.org
- National Center for Biotechnology Information
www.ncbi.nlm.nih.gov

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page Index on JAMA's Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on hepatitis C was published in the February 21, 2007, issue; one on hepatitis A virus was published in the July 13, 2005, issue; one on blood donation was published in the May 21, 2008, issue; and one on liver transplantation was published in the May 10, 2006, issue.

HEPATITIS B VACCINATION

- Vaccination can reduce the likelihood of hepatitis B infection. The vaccine is given in a series of 3 to 4 injections during a 6-month period.
- Immunizing individuals of any age, including infants, is safe and effective. Infants should receive their first dose of vaccine at birth. Immunization is recommended for children and teens who have not been previously vaccinated.
- Persons who travel extensively in areas of the world where hepatitis B is common should consider having the vaccine, as should anyone in close contact with a patient who has hepatitis B.
- Anyone belonging to one of the high-risk groups, including health care workers, dialysis patients, persons who abuse intravenous drugs, and those who participate in unprotected sexual activity (heterosexual or homosexual), should receive the hepatitis B vaccine.
- Any individual who wants protection against hepatitis B should discuss the vaccine with his or her doctor.

Centers for Disease Control and Prevention; National Institute of Allergy and Infectious Diseases; National Heart, Lung, and Blood Institute; National Institute of Diabetes and Digestive and Kidney Diseases; American Red Cross; Hepatitis Foundation International; National Center for Biotechnology Information

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