

STD/STI INFORMATIONAL FACT SHEET

HEPATITIS B (hep-uh-tahy-tis)

What is hepatitis B?

Hepatitis is an inflammation of the liver that can be caused by a series of viruses (hepatitis A, B, C, D, and E). The hepatitis B virus (HBV) is the most likely to be linked to a sexually transmitted disease and is one of the most common types of viral hepatitis in the U.S. Chronic hepatitis B can result in serious illnesses, such as cirrhosis of the liver (scarring of the liver), liver cancer, and possibly death.

How common is hepatitis B?

About 1.25 million people in the U.S. have chronic HBV. There are about 73,000 (or one out of 20) new HBV infections each year with nearly 750,000 people chronically infected. Nearly 5,000 die each year from HBV infection.

How is hepatitis B transmitted?

HBV can be 100 times more contagious than HIV infection. It is transmitted through unprotected anal, oral, and vaginal intercourse with an infected person; through contaminated needles or syringes; from an infected mother to her newborn during childbirth; by sharing personal items (such as toothbrushes or razors) with an infected person; or having a job that involves contact with infected human blood or body fluids. A few cases have been documented in the U.S. related to HBV transmission through tattoos, body piercing, or acupuncture needles. This type of virus can be found in transmittable levels in blood, saliva, semen, and vaginal secretions. HBV is not spread through sharing food or water, sitting on public toilets, using the same eating utensils, hugging, kissing, coughing, shaking hands, sneezing, touching door knobs or through blood transfusions (since the U.S. screens all donated blood).

What are the signs and symptoms of hepatitis B?

About 50 percent of adults infected with HBV do not experience signs or symptoms. When people experience symptoms, they appear six weeks to six months after infection and mimic the flu: abdominal pain or tenderness, extreme fatigue, fever, headaches, loss of appetite, joint pain, or nausea and vomiting. Later on, individuals may have symptoms of hives or rash, more severe abdominal pain, dark urine, pale colored bowel movements, jaundice eyes and skin, or arthritis. When the HBV damages liver cells, scar tissue forms and those cells can no longer function. Because there are fewer healthy liver cells to process the blood, this may lead to symptoms of mental confusion in some people.

What are complications of hepatitis B?

Most cases of HBV are self-resolving and are not a serious threat to a person's health, unless it becomes chronic. Chronic infection increases the risk for cirrhosis, liver cancer, or liver failure. Nearly 15-25 percent of people with chronic HBV die prematurely. Of special note regarding complications of HBV is that HIV can hinder and individual's response to the HBV vaccine.

How does hepatitis B affect a pregnant woman and her baby?

Pregnant women who may have been exposed to HBV should be tested for hepatitis B surface antigen (HBsAg) before giving birth. If infected mothers are not treated, their newborns will most likely get HBV. To prevent infection soon after birth, newborns need to get hepatitis B vaccine and another shot call HBIG (hepatitis B immune globulin). During the following six to 15 months, the infant should have two additional doses of vaccine.

How is hepatitis B diagnosed?

After infection, it normally takes three to eight weeks for the HBV to show up in the blood and HBV is diagnosed only through a blood test. Because of this, it may take up to two months after infection for the HBV test to be accurate. When taken, the blood test can determine if the infected person has acute (newly acquired) or chronic (persistent) hepatitis. Testing for HBV is not generally included in routine blood tests, people who suspect HBV infection will need to request that particular test. Results of the blood tests can help health care providers determine the best treatment options.

What is the treatment for hepatitis B?

There is no cure for HBV; however, there is a vaccine to protect against infection. Individuals who think they need the vaccine can talk with their health care providers. Once a person is infected with HBV, the treatment varies. There are no medications for acute HBV infection. Most people with this form of HBV allow the illness to run its course and they may recover completely. Hospitalization in these cases should be avoided to prevent transmitting the virus to patients seeking health care for other illnesses. For those infected with chronic HBV, there are several antiviral and other drugs approved for treatment, such as Interferon, Lamivudine, Adefovir Dipivoxil, Entecavir, and, most recently, Peginterferon. Talking with health care providers is necessary to determine which medication is best for specific cases.

How can hepatitis B be prevented?

Vaccination before exposure to HBV is the best prevention against the virus. The vaccine is recommended for infants and youth under 18 years of age, as well as for adults at-risk for infection. Adults considered at high-risk for HBV include, but are not limited to: health care providers, those in households of chronic HBV carriers,

travelers to and from countries with high incidence of HBV, recipients of certain blood products, hemodialysis patients, individuals working or living in institutions for the developmentally disabled, men and women who have more than one sexual partner, injecting and non-injecting drug users, and inmates in long-term correctional facilities.

The vaccine is offered in a series of three doses, with the first and second doses being given minimally one month apart and the first and third doses being given at least four months apart. Missed doses should be given as soon as possible rather than re-starting the series. Booster shots of the HBV vaccine are not recommended.

If not vaccinated, the best way to avoid transmission of HBV, as with other STDs, is to abstain from sexual intercourse or be in a long-term, monogamous relationship with an uninfected partner. Latex condoms used consistently and correctly for anal, oral, or vaginal intercourse may reduce the risk of HBV infection. Other ways to avoid HBV infection are to: never inject illegal drugs, especially with unclean needles or works; not share household items like razors or toothbrushes that may have infected blood on them; wash hands with soap after changing diapers, using the toilet, and before eating; cover cuts, sores, and rashes with bandages; and disinfect surfaces that contain blood or other body fluids.

Updated May 2007

For information about specific STDs/STIs, below are sources to use:

**Alan Guttmacher Institute
(AGI)**

120 Wall Street, 21st Floor
New York, NY 10005
Phone: 212/248-1111
Fax: 212/248-1951
<http://www.agi-usa.org>

**American Social Health
Association (ASHA)**

P. O. Box 13827
Research Triangle Park, NC 27709-
3827
Phone: 800-783-9877
<http://www.ashastd.org/>

**Centers for Disease Control and
Prevention – Sexually Transmitted**

Disease - STD information and
referrals to STD Clinics
CDC-INFO
Phone: 800-CDC-INFO (800-232-
4636); TTY: 888-232-6348 In English,
en Espanol
<http://www.cdc.gov/std/default.htm>

**CDC National Prevention
Information Network (NPIN)**

P.O. Box 6003
Rockville, MD 20849-6003
Phone: 800-458-5231;
Fax: 888-282-7681
1-800-243-7012 TTY
E-mail: info@cdcnpin.org

**The Henry J. Kaiser Family
Foundation**

2400 Sand Hill Road
Menlo Park, CA 94025
Phone: 650/854-9400
Fax: 650/854-4800
<http://www.kff.org>

National Herpes Hotline (NHH)

Open from 9 A.M. to 7 P.M., ET,
Monday - Friday.
Phone: 919/361-8488

**National HPV and Cervical
Cancer Prevention Hotline**

Open from 2 P.M. to 7 P.M., ET,
Monday - Friday.
Phone: 919/361-4848

**Planned Parenthood Federation
of America**

434 West 33rd St.
New York, NY 10001
212/541-7800
FAX: 212/245-1845
<http://www.plannedparenthood.org/>

**Sexuality Information and
Education Council of the United
States (SIECUS)**

130 West 42nd Street, Suite 350
New York, New York 10036-7802
Phone: 212/819-9770
Fax: 212/819-9776
<http://www.siecus.org>

Virginia Department of Health

109 Governor Street
Richmond, VA 23219
VIRGINIA STD/AIDS HOTLINE
Phone: 800-533-4148
<http://www.vdh.virginia.gov/epidemiology/DiseasePrevention/factsheets.htm>