



## Hepatitis B Virus

## FACT SHEET

HEPATITIS B IS REPORTABLE TO THE COOKCOUNTY DEPARTMENT OF PUBLIC HEALTH **WITHIN 7 DAYS**. TO REPORT A CASE OF HEPATITIS B, CALL 708-492-2150.

### **What is hepatitis B and how is it transmitted?**

Infection with the hepatitis B virus (HBV) may be without any symptoms, mild or severe. Among adults infected by HBV, 90 percent to 94 percent recover completely and have no long term effects. Six percent to 10 percent will become chronic carriers of HBV and will be at risk of developing cirrhosis or liver cancer. Over time, hepatitis B can destroy the liver (cirrhosis) and can cause liver cancer.

HBV is spread by direct contact with blood or other body fluids of infected people. (Delta hepatitis is spread the same ways as HBV; however, it is a defective hepatitis virus that can only be acquired in the presence of hepatitis B virus.)

Each year, an estimated 200,000 to 300,000 persons in the United States become infected with HBV. In Illinois, there were 591 cases of HBV reported in 1990; this declined to 315 reported cases in 1994.

Since the disease is not easily spread, persons with HBV do not pass the virus to others through casual contact, such as shaking hands or sharing a work space or bathroom facility. HBV is most commonly transmitted by sharing drug needles, by engaging in high-risk sexual behavior (especially anal sex), from a mother to her baby during childbirth and in the health-care setting.

### **What are the symptoms of hepatitis B?**

Many people infected with viral hepatitis have no symptoms. For example, about one-third of people infected with HBV have a completely "silent" disease. When symptoms are present, they may be mild or severe. The most common early symptoms are mild fever, headache, muscle aches, fatigue, loss of appetite, nausea, vomiting and diarrhea. Later symptoms may include dark coffee-colored, rather than dark yellow, urine, clay-colored stools, abdominal pain, and yellowing of the skin and whites of the eyes (jaundice).

About 15 percent to 20 percent of patients develop short-term arthritis-like problems. Another one-third of those with hepatitis B develop only mild flu-like symptoms without jaundice. Very severe hepatitis B is rare, but it is life-threatening. Signs and symptoms, which require

immediate medical attention, include prolonged blood clotting time, personality changes and agitated behavior.

### **Can people with no symptoms pass hepatitis B to others?**

Some people infected with HBV become chronic carriers of the virus, although they may have no symptoms. There are an estimated 1.5 million HBV carriers in the United States and 300 million carriers worldwide. Children, when exposed to HBV, are at greatest risk of becoming carriers. Up to 90 percent of babies who become infected at birth with HBV, and up to half of youngsters who are infected before 5 years of age, become chronic carriers.

### **How is hepatitis B diagnosed?**

Several blood tests can detect signs of HBV even before symptoms develop. These tests measure liver function and identify HBV antigens (certain portions of the hepatitis B virus) or antibodies (proteins produced by the body in response to the virus) in the blood.

### **How is hepatitis B treated?**

There are no specific treatments for the acute symptoms of viral hepatitis B. Doctors recommend bed rest, preventing dehydration, a healthy diet and avoidance of alcoholic beverages.

A synthetic form of the protein interferon alpha is used to treat people with chronic hepatitis B. The drug improves liver function in some people with hepatitis and diminishes symptoms, although it may cause side effects such as headache, fever and other flu-like symptoms.

Most patients with mild to severe acute hepatitis begin to feel better in two to three weeks and recover completely within four to eight weeks. People with HBV infection who also become infected with the hepatitis C virus at the same time may be at particular risk for developing severe, life-threatening hepatitis.

Many chronic carriers remain symptom free or develop only a mild condition, chronic persistent hepatitis. However, approximately 25 percent go on to develop the most serious complications of viral hepatitis: cirrhosis of the liver, liver cancer and immune system disorders.

### **How can hepatitis B be prevented?**

The most effective means of preventing hepatitis B virus infection is to avoid contact with the blood and body fluids, including semen and vaginal secretions, of infected individuals. People who have hepatitis B virus infection should

- Avoid sharing items that could infect others, such as razors or toothbrushes.
- Protect sex partners from exposure to semen, vaginal fluids or blood through the proper use of latex condoms.

There are several vaccines available to prevent hepatitis B. The Advisory Committee on Immunization Practices (ACIP) recommends that all infants and children receive three-doses of hepatitis B vaccine. Vaccination should also be considered by people at high risk of infection: male homosexuals and heterosexuals with multiple partners, people who receive hemodialysis or blood products, household and sexual contacts of HBV carriers, and users of street drugs who share needles. Many health care and laboratory workers who handle blood and other body fluids also are vaccinated. People who come into direct contact with the blood or body fluids of an HBV carrier may receive one or more injections of hepatitis B immune globulin, sometimes in combination with hepatitis B vaccine. Immune globulin offers temporary protection, while the vaccine provides long-lasting immunity.

In an effort to eliminate chronic carriers of HBV, the U.S. Centers for Disease Control and Prevention (CDC) recommends that all newborn babies be vaccinated against the hepatitis B virus. The CDC and other groups have recommended that pregnant women be screened for hepatitis B as part of routine prenatal care. If the mother is infected, her baby can be given hepatitis B immune globulin and vaccine immediately after birth.

### **Who do I contact if I need more information about Hepatitis B?**

You can call the Cook County Department of Public Health, Vaccine Preventable Diseases Unit at (708) 492-2150 or log on to: [www.cookcountypublichealth.org](http://www.cookcountypublichealth.org)