



BREAKING THE CYCLE OF INFECTION FROM CARRIER MOTHER TO NEWBORN

HEPATITIS B – A SERIOUS, OFTEN “INVISIBLE” THREAT

Hepatitis B is a serious liver infection. It is caused by a virus and spread by contact with infected blood, saliva, semen and contaminated needles.

New Cases. There are an estimated 140,000 new hepatitis B infections a year in the U.S.

- Up to 10% of young adults who get the disease become carriers.
- Since more than 2/3 of cases have no symptoms—or unrecognized symptoms—thousands of people who become carriers never know it.

Carrier Pool. As many as 1,200,000 Americans are hepatitis B carriers.

GROUPS AT HIGH RISK OF HEPATITIS B

In the United States, hepatitis B is more common in certain risk groups than in the general population. Among the higher risk groups are health care workers (doctors, nurses, dentists, lab technicians) who come in close contact with infected patients or specimens. Also, paramedics who give emergency care to infected people, ethnic groups with a high incidence of hepatitis B in their native countries—Asians, Alaskan Eskimos, Hispanics, people who have a history of repeatedly contracting sexually transmitted diseases, intravenous drug abusers, patients who receive certain blood products, household and sexual contacts with hepatitis B carriers, and patients who receive hemodialysis.

RECOMMENDED HEPATITIS B SCREENING

To identify pregnant hepatitis B carriers in time to protect their babies, the U.S. Centers for Disease Control and Prevention (CDC) recommend routine screening of all pregnant women, plus women who have histories of:

- Acute or chronic liver disease
- Work or receive treatment in a kidney dialysis unit
- Work or reside in an institution for the mentally challenged
- Rejection as a blood donor
- Blood transfusions
- Frequent occupational exposure to blood
- Household contact with a hepatitis B carrier or any patient undergoing kidney dialysis
- Multiple episodes of venereal disease
- Intravenous drug abuse

BABIES BORN TO CARRIER MOTHERS ARE AT RISK

In general, the baby does not contract hepatitis B in the womb. The placenta usually bars the virus. Transmission does occur through the placenta in about 6% of the cases.

During delivery

The baby usually first encounters the virus upon entering the birth canal. Virus in the blood and vaginal fluids of the mother readily exposes the baby to disease.

Following birth

All close contact with the mother following birth exposes the baby to the virus in the mother's body fluids: saliva, blood, and in the case of nursing infants, breast milk.

Breaking the chain

Prompt administration of hepatitis B immune globulin and hepatitis B vaccine has been shown to effectively protect most babies of hepatitis B carrier mothers.

BREAKING THE CYCLE OF INFECTION FROM CARRIER MOTHER TO NEWBORN

Estimated number of hepatitis B carriers in U.S. pregnant population

- Each year in the U.S., an estimated 3,500,000 women give birth. About 250,000 of them are in high risk groups. Experts estimate that up to 22,000 women who give birth each year are carriers of hepatitis B. Thousands of these women don't know they are carriers. Up to 90% could transmit the virus to their children. Vaccination of the newborns would prevent them from being carriers.
- The CDC currently recommends routine hepatitis B screening of pregnant women, along with the routine screening for German measles and syphilis.

EXPERIENCE IN ASIA AND AFRICA SHOWS IMPORTANCE OF PROTECTING NEWBORNS

In many parts of the Far East, Africa, the Pacific Islands, and the Amazon Basin, between 5% and 15% of the population carry the hepatitis B virus, and most acquire the infection at birth or during childhood. Those who acquire hepatitis B infection early in life are more likely to become chronic carriers of the virus and go on to develop complications such as cirrhosis or liver cancer later in life.

HEPATITIS B—AND ITS LONG TERM RISK—OFTEN GO UNRECOGNIZED

Onset of hepatitis B is generally insidious. In 2/3 of cases there are no symptoms recognized as being related to hepatitis B. Symptoms are often mistaken for those of influenza — fever, fatigue, joint or muscle pain, loss of appetite, nausea, and vomiting. Jaundice, usually a sign of liver damage, may not occur.

- Carriers of hepatitis B face a long-term risk of cirrhosis or of liver cancer.

HEPATITIS B AND THE CANCER CONNECTION

Infants who become hepatitis B carriers seem to be at high risk of later developing hepatocellular carcinoma (liver cancer), which accounts for 80% to 90% of all primary liver cancer cases. In countries where hepatitis B is highly endemic, liver cancer is one of the 10 most common cancers. In the Far East, it is the single most common cancer. And the most important factor in its development appears to be active infection with the hepatitis B virus.

VACCINE AVAILABILITY

Hepatitis B vaccines produce protective levels of antibodies against hepatitis B virus in most healthy adults, children and infants. Only a physician can determine whether vaccination is right for an individual. However, immediate immunization of newborns of carrier mothers with hepatitis B immune globulin and the vaccines now available, has been shown to effectively break the carrier cycle for most newborns. Vaccinated newborns have protection for at least five years.

TIPS FOR WOMEN

If you're pregnant: Ask your doctor to test you for hepatitis B. You may be infected and not know it.

If you're infected with the hepatitis B virus: You can pass the virus to your baby at the time of delivery. Your baby can be vaccinated and in most cases protected against the virus. Don't take a chance on infecting your baby with hepatitis B.

For more information:

American Liver Foundation,
75 Maiden Lane, Suite 603
New York, NY 10038-4810
1-888-4HEP-ABC
1-888-443-7222

The American Liver Foundation is the only voluntary health organization dedicated to preventing, treating, and curing hepatitis and other liver and gallbladder diseases through research and education.

© Copyright 1996. American Liver Foundation

The information contained in this sheet is provided for information only. This information does not constitute medical advice and it should not be relied upon as such. The American Liver Foundation (ALF) does not engage in the practice of medicine. ALF, under no circumstances, recommends particular treatments for specific individuals, and in all cases recommends that you consult your physician before pursuing any course of treatment.