

What is hepatitis B?

Hepatitis B is a viral infection of the liver caused by the hepatitis B virus. Hepatitis B can lead to lifelong (chronic) infection and can cause serious liver damage (cirrhosis or liver cancer) and death. More than 90 percent of infants infected perinatally or in the first year of life will develop chronic hepatitis B infection whereas 5 to 10 percent of acutely infected older children and adults will develop chronic, lifelong infection.

Who is at risk for hepatitis B?

Anyone can get hepatitis B, but those at greater risk include:

- People with multiple sex partners or sexually transmitted disease(s).
- Men who have sex with men.
- Sexual or household contacts of infected people.
- Injection drug users.
- Infants born to infected mothers.
- Health-care and public safety workers who have contact with infected blood.
- Hemodialysis patients.

What are the symptoms of hepatitis B?

Adults and teens are more likely to have symptoms than children. About 30 to 50 percent of people older than 5 years of age have signs or symptoms. Less than one percent of infants younger than one year of age and 5 to 15 percent of children 1 through 5 years of age will have symptoms. Symptoms may include tiredness, loss of appetite, nausea, abdominal discomfort, vomiting, joint pain, rash, dark urine or jaundice (i.e., yellowing of skin or whites of eyes).

How soon do symptoms appear?

Symptoms may appear six weeks to six months after exposure, but usually appear within 90 days.

How is hepatitis B spread?

Hepatitis B virus can be found in the blood serum, semen, vaginal secretions, amniotic fluids and other body fluids of an infected person. Human milk and saliva are minimally infectious. Hepatitis B virus is spread by direct contact with infected body fluids, usually by needle stick injury, sharing needles or sexual contact. Hepatitis B can also be spread from mother to child during labor and delivery. Hepatitis B virus is not spread by casual contact or by respiratory secretions.

When and for how long is a person able to spread the disease?

The virus can be found in blood and other body fluids weeks before symptoms appear and generally persist for several months afterward. Individuals who develop chronic infection are contagious for their lifetime.

How is a person diagnosed?

A health-care professional can diagnosis infected individuals using several blood tests.

What is the treatment?

There are no special medicines or antibiotics that can be used to cure a person once the symptoms appear. For people with lifelong, chronic infection, treatment is available to stop viral replication and prevent progression of liver disease.

Does past infection make a person immune?

Yes. However, the person is still at risk for other hepatitis infections including hepatitis A and C.

Should children or others be excluded from child care, school, work or other activities if they have hepatitis B?

A child with known hepatitis B should be excluded if he or she exhibits any of the following:

- Weeping sores that cannot be covered
- Biting or scratching behavior
- A bleeding problem
- Generalized dermatitis that may produce wounds or weepy tissue fluids
- Unable to participate in routine activities, needs more care than can be provided by staff, or meets other exclusion criteria, such as fever with behavioral change

The child can be readmitted to a group setting when skin sores are dry or covered, when the child is cleared to return by a health professional, or when the child is able to participate in activities.

What can be done to prevent the spread of Hepatitis B?

A vaccine to prevent hepatitis B has been available for several years. It is safe and effective and is recommended for infants, children and adolescents. Hepatitis B vaccine is required for both child care and school attendance in North Dakota. Three doses of hepatitis B vaccine are recommended with a dose at birth, a second dose at one to two months and a third dose at six to 18 months of age. Adolescents and adults can also be vaccinated at any time. Adults at increased risk of infection who have not already been infected also should be immunized. Hepatitis B immune globulin (HBIG) is also available for people who are exposed to the virus. In the event of exposure to hepatitis B, consult a doctor or the local health department.

Additional Information:

Additional information is available at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

American Academy of Pediatrics. [Hepatitis B]. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2015: [400-422]