



# Hepatitis B



## What Is It?

Hepatitis B is a viral infection of the liver. This virus is completely different from hepatitis A.

## What Are the Symptoms?

Only about 10 percent of children who become infected with hepatitis B virus show any symptoms. When children do have symptoms, they may be similar to those of hepatitis A: fatigue, loss of appetite, jaundice (yellowing of the skin and whites of eyes), dark urine, light stools, nausea, vomiting and abdominal pain. However, hepatitis B is a much more serious infection.

As with hepatitis A infection, young children are less likely to be jaundiced or show symptoms of illness. Unlike hepatitis A infection, hepatitis B can cause chronic infection in up to 10 percent of those infected, with persistent “shedding” of the virus into body discharges and blood. Persons with such chronic infections are called virus carriers. These persons can develop chronic liver disease, cirrhosis with liver failure, and liver cancer years after infection. An infected mother can transmit the infection to her newborn infant. Although these infants often show no obvious symptoms of hepatitis B, they have a high likelihood of becoming carriers.

## Who Gets It and How?

Hepatitis B infections are more difficult to transmit than hepatitis A infections (which are spread via infected stool). Hepatitis B infections occur most frequently in persons who have contact with other people’s blood (such as laboratory technicians or health care providers who may accidentally puncture their skin with blood-contaminated needles, or intravenous drug users who may share needles). It is most commonly spread by infected mothers to newborn infants through blood exposure at birth, sharing contaminated needles during intravenous drug abuse, sexual intercourse, and exposure of cuts or mucous membranes to contaminated blood.

This infection can also be transmitted if infected blood or bodily fluids come in contact with the broken

skin of a healthy person, such as by biting. However, this is rare.

Although hepatitis B viruses have been found in almost all bodily fluids, only blood, genital fluids and saliva have been found infectious (or able to spread the disease). Transmission in child care facilities is unusual. If an infected person at a facility has behavioral or medical problems such as biting behavior or oozing skin sores, the risk may be higher.

## When Should People with this Illness Be Excluded?

A staff person ill with hepatitis B should stay home until she/he feels well, and fever and jaundice are gone. A child or staff person with chronic hepatitis B infection who has open sores that cannot be covered should not attend child care until the sores are healed. Hepatitis B is usually contagious from about one month before until one month after the start of jaundice.

You do not have to exclude a child who is a carrier of the hepatitis B virus as long as she/he does not have uncontrolled biting or oozing skin lesions that cannot be covered.

## How Can I Limit the Spread of Hepatitis B?

Hepatitis B is vaccine-preventable. All infants should be vaccinated with three doses of hepatitis B vaccine during the first 18 months of life. Children not previously vaccinated should receive three doses of vaccine by the age of 11 or 12 years. Child care providers should discuss with their doctor whether it is appropriate for them to receive hepatitis B vaccine.

To reduce the spread of hepatitis B:

- Assure that all children and staff in your facility are immunized.
- Follow the universal precautions and make sure that all children and adults use proper hand washing practices.
- Clean up blood spills immediately.
- Wear gloves when cleaning up blood spills unless the spill is so small it can be contained in the cloth or towel being used to clean it up. Wash your hands well afterwards.

- Wear gloves when changing a diaper soiled with bloody stools and wash your hands well afterwards.
- Disinfect any surfaces on which blood has been spilled, using freshly prepared bleach solution.
- If a child care provider has open sores, cuts or other abrasions on the hands, the provider should wear gloves when changing diapers or cleaning up blood spills.
- Do not allow sharing of personal items which may become contaminated with infectious blood or body fluids, such as toothbrushes, food or any object that may be mouthed.
- Place disposable items contaminated with blood or bodily fluids in sealed plastic bags in covered containers.
- Store clothing or other personal items stained with blood and/or discharges separately in a sealed plastic bag to be sent home with the child for appropriate cleaning. Ask parents to wash and then bleach these articles.
- Discourage aggressive behavior (biting, scratching) at the facility.
- If a person at your facility receives a specific infectious exposure (such as a bite that causes bleeding) to a person with known hepatitis B, contact your local health department and the exposed person's health care provider for advice. The exposed person will need to receive a preventive immune globulin injection and the vaccine series.

### **Where Should I Report It?**

- Licensing requires that child care providers report to their local health department and to Licensing if there are two or more known or suspected cases of hepatitis B in a child care program. However, the American Academy of Pediatrics strongly recommends that child care providers report even if there is only a single case, to ensure that the local Public Health Department is aware that this serious illness is present in a child care setting.
- If your facility has one or more known carriers of hepatitis B, inform all staff of this fact and carefully train them about measures to prevent its spread. Inform them of the availability of the vaccine.