

FACT SHEET

Hepatitis B: Vaccination and Other Preventive Measures



This WorkCare Fact Sheet discusses hepatitis B exposure risks, symptoms, treatment and prevention.

Hepatitis B is inflammation of the liver caused by the hepatitis B virus (HBV).

Hepatitis B is a contagious disease that ranges in severity from an acute, mild illness lasting a few weeks to a serious, chronic health condition.

Exposure Risk

HBV is spread when infected blood, semen or other body fluid enters the body of a person who is not infected.

In the workplace, health care, public safety and emergency response personnel are among those at increased risk of occupational exposure to the virus.



Likely routes of transmission include:

- Needlesticks or cuts by sharp instruments
- Bites
- Splashes

- Direct contact with the blood or open sores of an infected person

Other routes of infection include:

- Birth (spread from an infected mother to her baby during birth)
- Unprotected sex with an infected partner
- Sharing needles, syringes or other drug-injection equipment
- Sharing items such as razors or toothbrushes with an infected person

HBV is not spread by sharing eating utensils, breastfeeding, hugging, kissing, coughing or sneezing.

Chronic hepatitis B affects approximately 240 million people and contributes to an estimated 786,000 deaths worldwide each year.

In the U.S., an estimated 700,000 to 1.4 million persons have chronic HBV infection. There were an estimated 19,764 new hepatitis B virus infections in 2013. However, the reported number of cases is much lower because many people do not experience symptoms, according to public health officials with the Centers for Disease Control and Prevention.

Worldwide, most people with chronic hepatitis B were infected at birth or during early childhood. The rate of acute HBV in the U.S. has declined approximately 82 percent since 1991. This dramatic decline is largely attributed to the introduction of routine childhood vaccination.

Symptoms

Unlike young children who often do not have symptoms, about 70 percent of adults will

develop symptoms from the infection. Symptoms of acute HBV include:

Fever	Clay-colored bowel movements
Fatigue	Abdominal pain
Loss of appetite	Joint pain
Nausea or vomiting	Yellowing of the skin and eyes (jaundice)
Dark urine	



On average, acute symptoms appear 90 days after exposure. Symptoms usually last a few weeks, but some people can be ill for as long as six months, with significant related social and economic impacts.

Some people with chronic hepatitis B experience acute symptoms, but the majority remain symptom free for many years. Up to 25 percent of people with chronic hepatitis B eventually develop potentially fatal liver conditions such as cirrhosis (scarring of the liver) or liver cancer.

Diagnosis and Treatment

Blood tests are used to diagnose the disease. There are number of different blood tests available. A medical professional should be consulted if exposure is suspected.

There is no medication available to treat acute hepatitis B. Physicians usually recommend rest,

adequate nutrition and fluids; some people with acute illness are hospitalized.

People with chronic HBV infection are referred for ongoing evaluation and care by specialists. Medication may be prescribed.

People with HBV infection are advised to avoid alcohol and seek professional advice before taking any prescription medications, supplements or over-the-counter remedies that can potentially damage the liver.

Prevention—Vaccination and Other Precautions

The hepatitis B vaccine is widely recommended by medical professionals and public health officials to help prevent the spread of infection. The hepatitis B vaccine is considered safe and effective.

Any adult who is at risk for hepatitis B virus infection or who wants to be vaccinated should consult a medical professional about getting the vaccine series, which is usually administered as three or four shots over a six-month period.

If the series is interrupted or not completed, a TravelCare® expert at WorkCare or other medical professional can provide direction on how to proceed. The series usually is not restarted if a person misses the third injection.

Persons allergic to yeast should not receive the hepatitis B vaccine. It also is contraindicated for anyone who has a serious allergic reaction to a first dose or a component of the vaccine.

Bloodborne Pathogens Standard

The federal Occupational Safety and Health Administration (OSHA) requires employers to make the hepatitis B vaccine available to workers who have "reasonably anticipated

contact with blood or other potentially infectious materials (OPIM)" as defined in its bloodborne pathogens standard, [29 CFR 1910.1030](#).

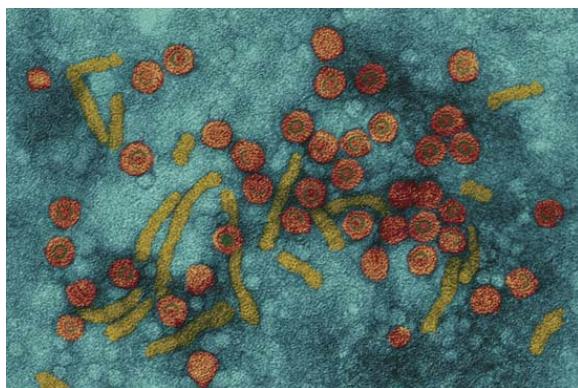
Covered employers also must develop an exposure control plan and implement use of universal precautions and control measures, such as engineering controls, work practice controls and personal protective equipment to protect all workers at risk of occupational exposure.

Travelers' Health

The risk for hepatitis B virus infection in international travelers is generally low. However, travelers to [regions with moderate or high rates of hepatitis B](#) are advised to consult with a travel health professional and get vaccinated prior to their journey. Prevalence is highest in sub-Saharan Africa and East Asia.

Other Precautions

People with known HBV infection are advised to take precautions to prevent exposing others. This may include using condoms, not sharing needles and exclusive use of personal hygiene products such as razor blades.



Resources

1. Centers for Disease Control and Prevention
[Viral Hepatitis—Hepatitis B Information](#)
2. Occupational Safety and Health Administration
[Hepatitis B Vaccination Protection](#)
3. World Health Organization
[Hepatitis B Fact Sheet No. 204](#)
4. [WorkCare Inc. TravelCare®](#)