

Dangers of Bloodborne Pathogens

Safety Talk

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WHAT'S AT STAKE?

Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needlesticks and other sharps-related injuries may expose workers to bloodborne pathogens. Workers in many occupations, including first responders, housekeeping personnel in some industries, nurses and other healthcare personnel, all may be at risk for exposure to bloodborne pathogens. Bloodborne pathogens are infectious agents that can cause illness and death.

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WHAT'S THE DANGER?

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Complications:

- Cirrhosis (scarring) of the liver
- Liver cancer
- Liver failure

Cure: no known cure for the hepatitis B virus. Symptoms of HBV infection include, but are not limited to:

- Loss of appetite
- Fatigue
- Fever
- Nausea, vomiting and/or abdominal pain

- Joint pain
- Jaundice seen in the eyes

Jaundice is a yellowing of the skin or eyes and occurs in the more serious phase of Hepatitis B virus.

Hepatitis B can damage the liver, resulting in decreased liver function.

Even without symptoms, HBV-infected individuals are still infectious to others.

An exposure that might place a worker at risk for HBV, HCV, or HIV infection is defined as:

- A percutaneous injury
- Contact of mucous membrane or non-intact skin with blood, tissue, or other body fluids that are potentially infectious.
- Indirect exposure from contaminated objects is a risk, because hepatitis B virus can remain infectious on environmental surfaces for up to a week (7 days) in the form of dried blood.

This means you must always treat blood, wet or dry, as infectious!

What are the Symptoms of Hepatitis B?

After the virus enters the body, there is an incubation period lasting 1.5 to 6 months (average 4 months) until illness begins. During the acute phase (first 6 months after infection) most persons have no symptoms or might experience a mild illness. Symptoms of acute HBV infection, when present, may include:

- Jaundice (yellowing of the skin and eyes)
- Dark-colored urine, light-colored stools
- Fatigue
- Abdominal pain
- Loss of appetite
- Nausea
- Diarrhea
- Fever

Example

You may be in a hurry and run down a flight of stairs, or walk a corridor while reading instructions. You might slip on a slick surface and suddenly your feet go out from under you. Falls can also be caused by tripping on an obstacle – your feet get caught but your body keeps on going.

HOW TO PROTECT YOURSELF

Workers and employers should take advantage of available engineering controls and work practices to prevent exposure to blood and other body fluids.

If you experienced a needlestick or sharps injury or were exposed to the blood or other body fluid of a patient during the course of your work, **immediately follow these steps:**

- Wash needlesticks and cuts with soap and water
- Flush splashes to the nose, mouth, or skin with water
- Irrigate eyes with clean water, saline, or sterile irrigates
- Report the incident to your supervisor
- Immediately seek medical treatment

The [hepatitis B vaccine](#) offers excellent protection against HBV. The vaccine is safe and highly effective. Vaccination consists of 3 doses of vaccine (shots) over the course of 6 months. Protection lasts for 20 years to life.

The American Academy of Pediatrics recommends that all children should receive hepatitis B vaccine starting at birth. ([AAP Policy](#)).

The CDC recommends hepatitis B vaccine for persons traveling to countries where HBV is common.

- If you have one or more risk factors for hepatitis B infection, you should get a simple HBV blood test. The blood test will determine whether you are:
 - **immune** to hepatitis B; or
 - **susceptible** to hepatitis B and need vaccination;

or

- **infected** with hepatitis B and need further evaluation by a physician
- The basic test for acute HBV infection is called the “Hepatitis B Core IgM Antibody test.” People who have acute hepatitis B show positive IgM antibodies on this test.

After Exposure to Hepatitis B

- Hepatitis B infection can be prevented by getting vaccine and HBIG (hepatitis B immune globulin) soon after coming into contact with the virus.
- Persons who have recently been exposed to HBV should get HBIG and vaccine as soon as possible and preferably within 24 hours, but not more than 2 weeks after the exposure.
- If you have recently been exposed to hepatitis B, you should immediately contact your doctor.

FINAL WORD

Bloodborne pathogens are infectious microorganisms in human blood that cause disease in humans. These are infectious agents that can cause illness and death.