

## **OVERVIEW**

Potential exposure to blood and airborne pathogens is an obvious risk in the healthcare industry, with emergency responders being one of the most at-risk groups. It is not uncommon for EMS personnel to be unaware of a patient's infectious disease status. It is mandatory that every medic consider every patient a potential carrier of infectious disease and take appropriate measures to protect themselves from exposure.

## **SECTION A**

### **Bloodborne Pathogen Exposure**

The objective of the Bloodborne Pathogen Exposure Control Plan is to comply with the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens Standard, 29 CFR 1910.1030.

### **Hepatitis**

"Hepatitis" means inflammation of the liver. Toxins, certain drugs, some diseases, heavy alcohol use, and bacterial and viral infections can all cause hepatitis. Hepatitis is also the name of a family of viral infections that affect the liver; the most common types are Hepatitis A, Hepatitis B, and Hepatitis C.

Hepatitis A, Hepatitis B, and Hepatitis C are diseases caused by three different viruses. Although each can cause similar symptoms, they have different modes of transmission and can affect the liver differently. Hepatitis A appears only as an acute or newly occurring infection and does not become chronic. People with Hepatitis A usually improve without treatment. Hepatitis B and Hepatitis C can also begin as acute infections, but in some people, the virus remains in the body, resulting in chronic disease and long-term liver problems. There are vaccines to prevent Hepatitis A and B; however, there is not one for Hepatitis C. If a person has had one type of viral hepatitis in the past, it is still possible to get the other types.

### **Hepatitis B (HBV)**

HBV is a contagious liver disease that ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness. It results from infection with the Hepatitis B virus and can be either "acute" or "chronic."

Acute HBV infection is a short-term illness that occurs within the first 6 months after someone is exposed to the Hepatitis B virus. Acute infection can — but does not always — lead to chronic infection.

Chronic Hepatitis B virus infection is a long-term illness that occurs when the HBV remains in a person's body. Many people don't know they are infected or may not have symptoms and therefore never seek the attention of medical or public health officials.

### **Exposure Risks**

HBV is not spread by sharing eating utensils, breast feeding, hugging, kissing, holding hands, coughing, or sneezing. It is spread when blood, semen, or other body fluid infected with the HBV enters the body of a person who is not infected.

HBV can survive outside the body at least 7 days, during which time, the virus can still cause infection if it enters the body of a person who is not infected.

All blood spills — including those that have already dried — should be cleaned and disinfected with a mixture of bleach and water (one part household bleach to 10 parts water). Gloves should always be used when cleaning up any blood spills. Even dried blood can present a risk to others.

Symptoms of acute Hepatitis B:

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine
- Clay-colored bowel movements
- Joint pain
- Jaundice (yellow color in the skin or the eyes)

On average, symptoms appear 90 days (or 3 months) after exposure, but they can appear any time between 6 weeks and 6 months after exposure. Since many people with HBV do not have symptoms, doctors diagnose the disease by one or more blood tests. These tests look for the presence of antibodies or antigens and can help determine whether you:

- have acute or chronic infection
- have recovered from infection
- are immune to Hepatitis B
- could benefit from vaccination

### **Hepatitis B Vaccine Series**

The best way to prevent HBV is by getting the Hepatitis B vaccine. It is safe and effective and is usually given as 3-4 shots over a 6-month period. It is a sequence of shots that stimulate a person's natural immune system to protect against HBV. After the vaccine is given, the body makes antibodies that protect a person against the virus.

Hepatitis B vaccination is available for associates who have not previously received the series due to the risk of occupational exposure. Newly hired associates must complete a statement during onboarding to provide documentation of previously receiving the Hepatitis B vaccine series, requests vaccination for Hepatitis B or sign a declination to accept vaccination.

## **SECTION B**

### **Needle Stick Protocols**

In an effort to avoid needle sticks, needleless systems will be used during patient care to the extent possible. Needles should not be recapped and should be disposed of in appropriate containers designed to hold biohazard contaminated sharps. If there is a needle stick or sharp-related injury to an associate, it must be immediately reported to the shift commander and post-exposure protocols will be initiated. Wash the affected area and flush well as soon as possible.

## **SECTION C**

### **Airborne Pathogen Exposure**

Airborne transmission of infectious disease is public health concern. EMS personnel are at high risk due to close proximity of patient during transport. Appropriate respiratory precautions, to include the use of N95 respirators, should be maintained in addition to mechanical controls such as continuous exhaust fan use during transport and separation from the cab of the unit when possible. Any exposures to infected patients without proper protective equipment should be reported to the shift commander promptly.

Associates may be allowed a one (1) month "grace period" from their anniversary month of hire to complete the required TB test and/or Employee Tuberculin Screening or chest x-ray. However, management reserves the right to hold any associated pay raises until negative test results have been documented and received by management.