WHAT ARE BLOODBORNE PATHOGENS?
Infectious materials carried in the blood that cause diseases are referred to as bloodborne pathogens. When workers are exposed, they are at risk of serious illness or even death. Exposure to Hepatitis is a major concern, as is the Human Immunodeficiency Virus.

WHAT IS HEPATITIS?
Hepatitis is an inflammation of the liver that can be acute or chronic. In acute cases, symptoms appear a short time after infection. In chronic cases, the liver inflammation continues for more than six months. There are 5 varieties of Hepatitis: A, B, C, D, and E. Hepatitis B & C are of most concern to responders exposed to bloodborne pathogens.

Hepatitis B – Can lead to life-long infection, cirrhosis of the liver, increased risk of liver cancer in some people, and death. Found in the blood and bodily fluids of infected people, it can live outside the body for several days, even in the form of dried blood. Many infected with Hepatitis B have either no symptoms or mild flu-like symptoms. 95% of adults with Hepatitis B will recover within six months and develop immunity. If within six months the virus has not been cleared from the body, the infected person will become chronically infected and a carrier of the virus. There is a successful vaccine for Hepatitis B.

Hepatitis C – Caused by a virus that has no symptoms, Hepatitis C is communicable through contact with blood or other bodily fluids. It can cause cirrhosis of the liver and is the leading cause of liver transplants in America. The disease progresses slowly and may take 20 – 30 years to cause serious liver damage in some people. About 80% of Hepatitis C infections become chronic. If symptoms do appear, they are flu-like and mild. Jaundice, fatigue, weight loss, loss of appetite, nausea, vomiting, weakness, abdominal muscle pain, muscle aches, and low grade fever can occur. The earlier Hepatitis C is detected and treated, the more likely treatment will be successful. There is no vaccine for Hepatitis C, so prevention is key.

Human Immunodeficiency Virus (HIV) – This is the virus that leads to Acquired Immunodeficiency Syndrome (AIDS). HIV is transmitted through bodily fluids. Infection is most likely to occur with exposure to HIV-contaminated blood, blood components, or blood products through:

- Injection through the skin
- Unprotected mucus membranes
- An open skin wound

Casual contact does not result in transmission of the virus. HIV is not an airborne virus. It cannot be transmitted through mosquito bites, fleas, ticks, or other bloodsucking vermin. The only way to determine if an individual has HIV is through a blood test. No vaccine is available at this time for HIV and there is no cure for AIDS.

PREVENTING EXPOSURE
There are four strategies outlined by OSHA to reduce occupational exposure to bloodborne pathogens:

1. Engineering controls – needleless systems, eye washing stations, hand washing facilities, biohazard labels, etc.
2. Work practice controls – hand washing; decontamination and sterilization; proper handling of sharps; regulated waste handling and disposal; and work area restrictions.
3. Personal protective equipment – gloves; protective clothing; goggles and eye shields; face shields and masks; and caps and booties.
4. Universal precautions – use PPE and follow safe work practice controls. Assume all body fluids are infected.

Implementing safe practices can help you avoid exposure to bloodborne pathogens. Remember, you need to protect yourself and those around you from possible contamination. If exposed, have a coworker take over your patient care and seek medical evaluation immediately.