# To The Point About Bloodborne Pathogens Awareness for Construction Workers
# FACT SHEET

**LENGTH: 12 MINUTES**

**PROGRAM SYNOPSIS:**
A construction site is an ever-changing workplace, a workplace full of hazards that can hurt us, make us ill, or kill us. Controlling these hazards and keeping construction workers safe is the point of your safety and health program. One such hazard is the one presented by bloodborne pathogens. These tiny microorganisms may be present in blood and bodily fluids and can cause diseases in humans. This program discusses the dangers of bloodborne pathogens and how to control our exposure to them in order to prevent disease and possibly save a life.

**PROGRAM OBJECTIVES:**
After watching the program, the participant should be able to explain the following:
- The dangers of bloodborne pathogens;
- Occupational exposure;
- Routes of entry for bloodborne pathogens;
- Universal precautions and barrier devices;
- The proper disposal of sharp objects;
- Cleaning and decontamination after a bloodborne pathogens event.

***INSTRUCTIONAL CONTENT:***

**INTRODUCTION**
- A construction site is an ever-changing workplace, a workplace full of hazards that can hurt us, make us ill, or kill us. Controlling these hazards and keeping construction workers safe is the point of your safety and health program. One such hazard is the one presented by bloodborne pathogens.
- Bloodborne pathogens are tiny microorganisms found in human blood or other bodily fluids that can cause diseases in humans.
- Controlling our exposure to bloodborne pathogens can prevent these diseases and save lives.

**DANGERS OF BLOODBORNE PATHOGENS**
- A worker needs first aid. A used needle is improperly discarded in a restroom. After an incident, a work area is contaminated with blood. Each of these scenarios represents a potential workplace exposure to bloodborne pathogens.
- Bloodborne pathogens can cause serious diseases such as Hepatitis and HIV, the virus that causes AIDS.
- HIV attacks the body's immune system, leaving it vulnerable to other infections. The symptoms of HIV include weakness, fever, sore throat, diarrhea, and nausea.
- Hepatitis is a disease that attacks the liver and can be fatal. There are various types of Hepatitis. Each different strain carries a unique letter designation. The strains most likely transmitted by bloodborne pathogens include type B, C, and D.
- The symptoms of Hepatitis include fatigue, stomach pain, jaundice, darkening of the urine, and loss of appetite. However, victims of Hepatitis C often show no symptoms until later stages of the disease.

**OCCUPATIONAL EXPOSURE**
- Most construction workers will not be exposed to bloodborne pathogens as part of their job. This means that construction workers do not typically have an occupational exposure to bloodborne pathogens.

- The term “Occupational Exposure” means jobs where workers may reasonably be expected to handle or contact blood or other bodily fluids.
- Some examples of jobs with occupational exposure include custodial staff who may be exposed to broken glass, soiled bandages, or other contaminated items, company authorized first responders who offer first aid to injured workers, occupational health nurses or other health care providers who are exposed to bodily fluids or used needles, and laundry personnel who may contact contaminated uniforms, linens, or other materials.
- Workers who have occupational exposure to bloodborne pathogens will receive more specific training on how to avoid exposure and may be eligible to receive the Hepatitis B vaccine.
- However, all workers, even those without occupational exposure, should be aware of the hazards presented by bloodborne pathogens and understand how to protect themselves from exposure.

**ROUTES OF ENTRY**

- Bloodborne pathogens awareness begins with an understanding of the various routes of entry. Routes of entry are the means by which bloodborne pathogens can enter the body of an unprotected person. Sexual contact is one route of entry for bloodborne pathogens.
- Other routes of entry include: ingestion, which occurs when infected material is eaten or swallowed; absorption, which occurs when infectious material is absorbed into the body through contact with open cuts, sores, or contact with mucus membranes; and injection, which occurs when a contaminated sharp object punctures the skin.
- Understanding these routes of entry is the first step towards controlling exposure to bloodborne pathogens.

**UNIVERSAL PRECAUTIONS**

- You must also understand that infected blood looks identical to non-infected blood, and that a contaminated needle looks identical to a non-contaminated needle.
- In other words, you cannot determine simply by looking whether something is contaminated with bloodborne pathogens. This is why all workers must understand the concept of “Universal Precautions.” Universal precautions means treating all blood, bodily fluids, and potentially infectious material as if they are infected with bloodborne pathogens.
- Those workers with occupational exposure to bloodborne pathogens will receive specific training in the universal precautions specifically related to their job function. However, all workers should understand and follow the basic concepts of universal precautions.
- The first rule of universal precautions is to avoid contact or exposure altogether. Recalling the routes of entry we discussed earlier, preventing exposure means not allowing contaminated material access to these routes of entry.
- Exposure due to ingestion can be prevented by thoroughly washing your hands prior to eating, by not eating, drinking, or applying makeup in areas containing potentially infectious materials, and by not storing food or drinks in areas containing potentially infectious materials.
- The most effective way to prevent exposure due to absorption or injection is to avoid any direct contact with potentially infected bodily fluids, materials, or sharp objects such as used needles, broken glass, or contaminated sharp tools or work materials. For most employees, this simply means not touching these items and reporting them to the proper authority instead.
- This also means avoiding any direct contact with an injured or bleeding co-worker while immediately summoning properly trained first aid responders.
- Avoiding contact and reporting the situation is the best course of action because it allows properly trained personnel to respond quickly, render assistance, properly dispose of the contaminated materials, and decontaminate the area.

**BARRIER DEVICES**

- If avoiding contact is not possible or your job duties require contact, then following universal precautions requires that a barrier device be used.
- A barrier device is a piece of protective equipment designed to reduce or prevent direct contact with contaminated items, blood, or other bodily fluids. Latex or rubber gloves are a common example of a barrier device. Other examples of barrier devices include goggles, masks, face shields, and lab coats. The type of barrier device required will depend on the potential for exposure and the job being performed.
- Situations which involve a greater risk of exposure will require more protection, while simple exposure situations require less protection.
- Gloves and all other barrier devices must be inspected for cracks, holes, or tears before use.

**DISPOSAL OF SHARPS**

- Using these types of barrier devices provides protection from the absorption of bloodborne pathogens; however, sharp objects still present an injection hazard or may cut through the barrier device, making it ineffective while also leaving an open wound.
- This is why following universal precautions requires never directly contacting needles, broken glass, or similar sharp objects. Use tongs, a broom and dustpan, or similar objects to avoid contact with “sharps.”
- In addition to following universal precautions, the proper disposal of potentially contaminated items and disinfecting any contaminated work area or tools is also essential to controlling worker exposure to bloodborne pathogens.
- All potentially infectious material should be placed into approved biohazard containers.
- Approved biohazard containers are usually red in color and labeled with a biohazard symbol.
- Some potentially infected materials that must be disposed of properly include disposable gloves, dressings, bandages, or any similar items.
- Potentially contaminated sharp objects such as needles or broken glass present an increased hazard and must be disposed of in an approved biohazard "sharps" container. These rugged containers allow handling without the risk of being cut or punctured.
- Tossing contaminated sharps into the regular trash places other workers at risk of exposure.

**CLEANING AND DECONTAMINATING**

- Any potentially contaminated work areas, tools, and non-disposable protective equipment should be thoroughly cleaned and decontaminated before being put back into service.
- Simply cleaning contaminated objects with soap and water is not sufficient against bloodborne pathogens. A 10% solution of bleach and water or an EPA-approved disinfectant must be used to kill any infectious materials that may be present.
- In the event you come into direct contact with blood or other bodily fluids, immediately wash the affected area thoroughly with warm water and an anti-bacterial soap.

**CONCLUSION**

- Recall that construction workers who do not have occupational exposure to bloodborne pathogens have a low risk of coming into contact with blood or other potentially infected materials. However, all workers must still be aware of the hazard and prepared in the event they are unexpectedly confronted with an exposure situation.
- In this program, we have provided an awareness-level overview of bloodborne pathogens and preventing exposure. Understanding and following this important information can prevent illnesses and save lives. After all, preventing injuries and fatalities is the point of your safety and health program, which is why you must always make it a point to be safe.