Bloodborne Pathogen Training

Training & Development
903-468-3021

Department of Risk Management
903-886-5862

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The Texas Health and Safety Code, Subtitle D: Chapter 81; SubChapter H and the Texas Administrative Code, Title 25: Part1: Chapter 96 are the regulations that require bloodborne pathogen training for all employees that work in an environment of potential exposure.

The OSHA Bloodborne Pathogen standard states:
- Anyone whose job requires exposure to bloodborne pathogens is required to complete training

The Texas A&M University Commerce Bloodborne Pathogen Control Plan

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What are Bloodborne Pathogens?

- Bloodborne pathogens are microorganisms that are carried in the blood that can cause disease in humans.
Common Bloodborne Pathogens Diseases

- **Malaria**
  Transmitted by female mosquitoes

- **Brucellosis**
  Transmitted from animals to humans. Animals include cattle, swine, goats, sheep and dogs.

- **Syphilis**
  Sexually transmitted disease

- **Hepatitis B (HBV)**
  Transmitted through blood and infected bodily fluids

- **Human Immunodeficiency Virus (HIV)**
  Transmitted by sexual contact or sharing needles with someone who is infected, or less commonly, through transfusions of infected blood.
Bloodborne pathogens can be transmitted when blood or bodily fluid from an infected person enters the body of another person. *Examples* of possible methods of transmission include needle-sticks, human bites, cuts, abrasions or through mucus membranes.

Any bodily fluid with visible blood is potentially infectious.

Semen, vaginal secretions and saliva are considered potentially infectious materials.

Other examples of potentially infectious materials include skin tissues, cell cultures, contaminated sharps, contaminated clean up materials and contaminated personal protective equipment (PPE).
Bloodborne Pathogens Are Not Transmitted By...

- Touching an infected person
- Coughing or sneezing
- Using the same equipment, materials, toilets, water fountains or showers as an infected person.

**Bloodborne pathogens are transmitted when contaminated blood or bodily fluids enter the body of another person.**

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Unbroken skin provides an impervious, or impenetrable, barrier against bloodborne pathogens.

Infected fluid can enter your system through

- Open sores
- Cuts
- Abrasions
- Acne
- Damaged or broken skin such as a sunburn or blister
Bloodborne pathogens may also be transmitted through the mucous membranes of the

- Eyes
- Nose
- Mouth

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You Might Be Exposed to a Bloodborne Pathogen as a Result of

- A workplace accident
- Administering first aid
- Custodial or maintenance work
- Post-accident cleanup
- Handling of biological waste products
Bloodborne Pathogens of Particular Concern

Hepatitis B Virus (HBV)

Human Immunodeficiency Virus (HIV)

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Hepatitis means “inflammation of the liver”

- Hepatitis B is a virus that causes infection and inflammation of the liver
- It is transmitted primarily through “blood to blood” contact
- It can lead to serious conditions such as cirrhosis and liver cancer.
- It can survive in dried blood for up to 7 days.
After exposure it can take 1-9 months before symptoms become noticeable.

- The symptoms of HBV are very much like a mild “flu”.

- Initially, there is a sense of fatigue, possible stomach pain, loss of appetite and even jaundice.

- As the disease progresses, jaundice (a distinct yellowing of the skin and eyes) and darkened urine will often occur.
Employees who have routine exposure to bloodborne pathogens shall be offered the Hepatitis B vaccine at no cost to themselves.

- Although your employer must offer the vaccine to you, you do not have to accept that offer. You may opt to decline the vaccination series, in which case you will be asked to sign a declination form.

- Even if you decline the initial offer, you may choose to receive the series at anytime during your employment thereafter.

*Click here to print a copy of the declination form.*
The vaccine itself is made from yeast cultures; there is no danger of contracting the disease from getting the shots, and once vaccinated, a person does not need to receive the series again. There are booster shots available, however, and in some instances these may be recommended (example: if there is an HBV outbreak)

- It is a series of 3 shots
- The second shot is given one month after the first shot.
- The third shot follows 5 months after the second shot.
- The series gradually builds up the body’s immunity to the Hepatitis B virus.
AIDS, or acquired immune deficiency syndrome, is caused by a virus called the human immunodeficiency virus.

- HIV may attacks the body’s immune system, weakening it so that it cannot fight other deadly diseases.
- AIDS is a fatal disease, and while treatment is improving, there is no known cure.
- Once a person has been infected with HIV, it may be many years before AIDS actually develops.
- Some estimates suggest that an average of 35,000 people are infected every year in the US.

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Human Immunodeficiency Virus (HIV)

The HIV virus is very fragile and does not survive very long outside of the human body.

- It is primarily of concern to employees providing first aid or medical care in situations involving fresh blood or other potentially infectious materials.
- Because HIV is such a devastating disease, all precautions must be taken to avoid exposure.
Symptoms of Human Immunodeficiency Virus (HIV)

Symptoms of HIV infection can vary, but often include:

- Weakness
- Fever
- Sore throat
- Nausea
- Headaches
- Diarrhea
- A white coating on the tongue
- Weight loss
- Swollen lymph glands
“Universal Precautions” is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are infectious, regardless of the perceived status of the source individual.

**ALWAYS**
- Treat all blood as if it is infected.
- Use personal protective equipment.
- Wash exposed skin following an exposure incident.
- Use proper cleanup and decontamination procedures.
- Dispose of all contaminated material in the proper manner.
To protect yourself, it is essential to have a barrier between you and the potentially infectious material.

Rules to Follow:

- Always wear personal protective equipment (PPE) in exposure situations.
- Remove and replace PPE that is torn or punctured, or has lost its ability to provide a barrier between you and the potentially infectious material.
- Remove PPE before leaving the work area.
- Properly disinfect or dispose of used PPE.
- Do not reuse disposable PPE.
One of the first things that you should probably do in any situation where you may be exposed to bloodborne pathogens is to ensure you are wearing the appropriate personal protective equipment (PPE).

Examples of PPE:
- Gloves
- Goggles
- Face Shields
- Aprons
- CPR mouth barrier

Using PPE and other precautions can prevent blood or other potentially infectious materials from coming in contact with the skin.

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Gloves

Always check your gloves for damage before using them

- Gloves should be made of latex, nitril, rubber, or other water impervious materials.
- Inspect your gloves for tears or punctures before using them.
- If the glove material is thin or flimsy, double gloving can provide an additional layer of protection.
- If you have cuts or sores on your hands, you should cover them with bandages as an additional precaution before putting on your gloves.
- When removing gloves, do not touch the outside of glove with bare skin.

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Anytime there is a risk of splashing or vaporization of contaminated fluids, goggles and/or other eye protection should be used to protect your eyes.

Face shields may be worn in addition to goggles to provide additional protection to the face. A face shield will protect the nose and mouth from splashes.

Aprons may be worn to protect your clothing and to keep blood or other contaminated materials from soaking through to your skin.

Again, bloodborne pathogens can be transmitted through the thin membranes of the eyes, nose and mouth.
Contaminated Clothing

• Normal clothing that becomes contaminated with blood should be removed as soon as possible because fluids can soak through the clothing and come in contact with the skin.

• Contaminated laundry should be handled as little as possible and universal precautions should be used.

• Contaminated laundry should be placed in an appropriate labeled bag or container until it is decontaminated, disposed of, or laundered.

Remember to use universal precautions and treat all blood or potentially infectious body fluids as if they are contaminated. Avoid contact whenever possible, and whenever it’s not, wear personal protective equipment.

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Handwashing is one of the most important and easiest practices used to prevent transmission of bloodborne pathogens.

• Your hands or other exposed areas should be washed immediately, or as soon as possible, after removal of gloves or other personal protective equipment following an exposure incident.

• You should familiarize yourself with the locations of handwashing facilities near you.

• If you are working in an area without access to handwashing facilities, you may use hand sanitizers, but you should wash hands with soap and water as soon as possible.
If you are working in an area where there is likelihood of exposure, you should never:

• Eat
• Drink
• Smoke
• Apply make up or lip balm
• Handle contact lenses

No food or drink should be kept in refrigerators, freezers, shelves, cabinets, or on counter tops where blood or potentially infectious materials are present.
All surfaces, tools, equipment and other objects that come in contact with blood or potentially infectious materials must be decontaminated and sterilized as soon as possible and before servicing or being put back to use.

• Decontamination should be accomplished by using the standard recommendation of at least a quarter cup of bleach per one gallon of water or by using Lysol or some other EPA-registered tuberculocidal disinfectant.
If you are cleaning up a spill of blood, you can carefully cover the spill with paper towels or rags, then gently pour the 10% bleach solution over the towels or rags and leave it for at least 10 minutes.

This will help ensure that the bloodborne pathogens are killed before you actually begin cleaning or wiping the material up.

By covering the spill with paper towels or rags, you decrease the chances of causing a splash when you pour the bleach on the spill of blood.
• If you are decontaminating tools like scalpels, microscope slides, broken glass, saw blades, tweezers, mechanical equipment, first aid boxes, or any thing that has been exposed to blood, you should leave the disinfectant in place for at least 10 minutes before continuing the cleaning process.

• Any materials that you used to clean up a spill of blood or potentially infectious materials must be decontaminated immediately as well. This could include mops, sponges, re-usable gloves, buckets, pails, and etc.
Sharps are objects that have a sharp edge that can cut or damage the skin.

Some examples of sharps include:
- Needles
- Broken glass
- Scalpels

It is especially important to handle and dispose of all sharps carefully in order to avoid injury to yourself and others.
Needles

If you come across a needle in your daily work and you have not been trained to work with needles, please contact the Department of Risk Management & Safety to have them safely handle the needle.

If you have been trained to work with needles, please follow the following guidelines:

• Needles should never be recapped.
• Needles should be moved by using a mechanical device or tool like forceps, pliers or a broom and dust pan.
• Never break or shear needles.
• **Needles must be disposed of in labeled sharps containers.**
Pre Cautions with Sharps

Broken Glassware

Broken glassware that has been visibly contaminated with blood must be sterilized prior to clean up.

After the glassware has been decontaminated with an approved disinfectant, it may be disposed of in an appropriate and labeled sharps container. Broken glassware *should not be handled with your hands*. You must sweep or brush the material into a dustpan.
Warning labels need to be placed on all containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport, or ship blood or other potentially infectious materials.

These labels are orange, red, or red orange, and are available in the Department of Risk Management & Safety.

Bags used to dispose of regulated waste must have the biohazard symbol and must be red or orange red. They are available in the Department of Risk Management & Safety.

**Contact the Department of Risk Management & Safety to properly dispose of labeled wastes.**
In an emergency situation involving blood or other potentially infectious materials, you should *always use Universal Precautions* to try and minimize your exposure by wearing

- Gloves
- Splash goggles
- Pocket mouth-to-mouth resuscitation masks
- Other barrier devices
If You Are Exposed...

• Wash the area thoroughly with soap and running water using non-abrasive, antibacterial soap if possible.

• If blood or other potentially infectious material is splashed into the eyes or mucus membranes, flush the affected area with running water for at least 15 minutes.

• Report the exposure your to your supervisor and HR as soon as possible.

• Complete an exposure report form.

• You may also request blood testing or the Hepatitis B vaccination if you have not already received it.

An exposure incident is a specific incident of contact with potentially infectious body fluid.

If there are no infiltrations of mucous membranes or open skin surfaces, it is not considered an occupational exposure.
Post-Exposure Evaluations

All employees who incur an exposure incident are offered a confidential medical evaluation and follow up with a physician of their choice, who accepts workers compensation, as follows:

- The health care provider will document the route(s) of exposure and the circumstances under which the exposure incident occurred.
- Identify and document the source individual unless such documentation is impossible or prohibited by law.
- Test the source individual’s blood for HBV and HIV as soon as possible after consent is obtained.
- The employee is offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service.
- The employee is given appropriate counseling concerning infection status, results and interpretations of tests and precautions to take during the period after the exposure incident.
Employee medical records are maintained by the Human Resources Department.

- An employee’s medical records include a copy of the employee’s Hepatitis B vaccinations or a copy of their signed declination form. They also include post-exposure evaluation and follow-up results.

- Employee training records are kept for five years in the department of Training & Development.
Assume that all blood is infectious and use Universal Precautions to protect yourself and others.

Always use proper personal protective equipment in situations that might involve bloodborne pathogens.

Report all suspected exposures to your supervisor and HR.

Don’t handle sharps or broken glass with your hands.

Properly dispose of pathogen waste, personal protective equipment, and sharps.
If you have any additional questions, need clarification on any point of this training, or you would just like to speak to someone regarding bloodborne pathogens, you may

- contact the Department of Risk Management & Safety at 903-468-8781
  or
- contact the Department of Training & Development at 903-468-3021.

Please proceed to the next slide to begin the exam.
Where can you go to get more information about Bloodborne Pathogens?

- The Department of Risk Management
- The Texas A&M University - Commerce website
- All of the Above
- The Department of Training and Development