



TRINITY UNIVERSITY

BLOODBORNE PATHOGENS &  
EXPOSURE CONTROL PLAN

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## **Purpose**

Trinity University is committed to providing a safe and healthful work environment for faculty, staff, and students. In pursuit of this endeavor, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

## **Scope**

The ECP is a key document to assist our university in implementing and ensuring compliance with the standard, thereby protecting our faculty, staff, and students. Those individuals who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.

This ECP includes:

- Determination of exposure.
- Implementation of various methods of exposure control, including:
  - Universal precautions,
  - Engineering and work practice controls, and
  - Personal protective equipment (PPE).
- Housekeeping.
- Hepatitis B vaccination.
- Post-exposure evaluation and follow-up.
- Communication of hazards and training.
- Recordkeeping.
- Procedures for evaluating circumstances surrounding an exposure incident.

**The methods of implementation of these elements of the standard are discussed in the subsequent pages of this program.**

## **References**

- 29 CFR 1910.1030 Bloodborne Pathogens
- 29 CFR 1910.1020 Access to Staff Exposure and Medical Records 29 CFR 1910.151 Medical and First Aid
- 49 CFR 172.700 Hazardous Materials Subpart H - Training
- CPL 2-2.44C Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens Standard
- STP 2-1.166 Occupational Exposure to Bloodborne Pathogens - Final Rule

## **Definitions**

Bloodborne Pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

HBV means hepatitis B virus.

HCV means hepatitis C virus.

HIV means human immunodeficiency virus.

Occupational Exposure is where staff may have reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of staff duties.

Other Potentially Infectious Materials The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Regulated Medical Waste is liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Universal Precautions is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

Work Practice Controls are controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

## **Responsibilities**

### Environmental Health and Safety (EHS):

- Provides a written Exposure Control Plan designed to eliminate or minimize faculty, staff, and student exposure.
- Reviews the Exposure Control Plan and updates it at least annually or whenever necessary.

- Ensures that the bloodborne pathogen shipping information (as covered in the Department of Transportation, Hazardous Materials Training) is conveyed to all affected personnel and the servicing representative, as appropriate, prior to handling, servicing, or shipping including hazard communication information.
- Establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps.

University Departments:

- Provides, at no cost to faculty, staff, and students, appropriate PPE.
- Ensures that individuals use appropriate PPE.
- Ensures that hand-washing facilities or antiseptic towelettes are readily accessible.
- Ensures that PPE is repaired or replaced as needed.
- Ensures that all personnel with occupational exposure participate in a training program provided by EHS.
- Ensures that personnel wash their hands immediately after removal of gloves or other personal protective equipment.
- Ensures that personnel wash hands and any other skin with soap and water, or flush mucous membranes with water immediately following contact of such body areas with blood or other potentially infectious materials.
- Ensures that a copy of this program is kept and is accessible to faculty, staff, and students at all times.
- Assures that faculty, staff, and students who decline to accept Hepatitis B vaccination offered by Trinity University Health Services sign the Hepatitis B vaccine declination statement.

**Methods of Implementation and Control**

Universal Precautions

Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials, under circumstances in which differentiation between body fluid types is difficult or impossible.

**All body fluids shall be considered potentially infectious.**

The review and update of the ECP must:

- Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens.
- Document annually, consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize

occupational exposure.

EHS requests input from faculty and staff with occupational exposure to bloodborne pathogens or other potentially infectious materials in the identification, evaluation, and selection of effective engineering and work practice controls. Your input can provide us with helpful information as it relates to safety audits, evaluations, investigations, analysis of data, and safety committees.

### Engineering and Work Practice Controls

- Engineering and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. When occupational exposure remains after institution of these controls, personal protective equipment must also be used.
- Engineering and work practice controls must be established by each department's supervisor.
- It is the responsibility of each department/office to examine and maintain or replace engineering or work practice controls on a regular schedule to ensure their effectiveness.
- Hand washing facilities must be provided by each department, and be readily accessible.
- Individuals must wash their hands and other exposed skin with soap and water immediately after removal of gloves or other personal protective equipment. Mucous membranes will be flushed with water, if they have been exposed to blood or other potentially infectious materials.
- Eating, drinking, smoking, handling contact lenses, applying cosmetics or lip balm, are prohibited in work areas where blood is a reasonable likelihood of occupational exposure.
- Food and drink must not be kept in refrigerators, freezers, shelves, and cabinets or on countertops or bench tops where blood or other potentially infectious materials are present.
- All procedures involving blood or other potentially infectious materials must be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these materials.
- Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.
- The university identifies the need for changes in engineering control and work practices through: review of OSHA records and Security, Safety and Health Committee recommendations. Trinity evaluates the need for new procedures or new products by Safety, Security, and Health Committee recommendations.

**The Director of EHS will ensure effective implementation of these recommendations.**

## Personal Protective Equipment (PPE)

Where there is occupational exposure, the university must provide at no cost to faculty, staff, and students appropriate PPE such as, but not limited to: gloves, gowns, face shields or masks and eye protection. PPE will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

All PPE must be removed prior to leaving the work area. When PPE is removed, it will be placed in an appropriately designated area or container for storage, washing, decontamination, or disposal.

## Use

Each department shall ensure faculty, staff, and students use appropriate PPE.

## Accessibility

The department supervisor must ensure that appropriate PPE is readily available at the worksite or is issued to individuals.

## Repair and Replacement

The department must repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the individual.

If a garment is penetrated by blood or other potentially infectious materials, the garment must be removed immediately.

## Gloves

Gloves must be worn when it can be reasonably anticipated that the individual may have had contact with:

- Biohazard box,
- Blood,
- Other potentially infectious material (OPIM),
- Mucous membranes,
- Non-intact skin, and
- Handling or touching contaminated items or surfaces.

Disposable gloves (one-time-use only), such as surgical or examination gloves must be replaced as soon as practical when contaminated, if they are torn, punctured, or when their ability to function as a barrier is compromised.

Disposable gloves must not be washed or decontaminated for re-use.

Utility gloves may be decontaminated for re-use if the integrity of the gloves is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

### Masks, Eye Protection, and Face Shields

Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields must be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eyes, nose, or mouth contamination can be reasonably anticipated.

**Exposures to bloodborne pathogens must be reported to Trinity University Police Department, then seen by Health Services.**

### Housekeeping

- Departments will ensure the worksite is maintained in a clean and sanitary condition.
- Contaminated work surfaces are decontaminated with a **10% chlorine bleach solution** (minimum concentration) after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials.
- Broken glassware which may be contaminated must not be picked up directly with the hands. It is cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.

### Contaminated Sharps: Discarding and Containers

- Contaminated sharps must be discarded immediately, or as soon as possible in containers that are closeable, puncture resistant, leak proof and properly labeled or color-coded.
- Contaminated sharps must not be bent, recapped, or removed unless it can be shown that no other alternative is possible. Shearing or breaking contaminated needles is also prohibited.
- Sharps containers must be puncture resistant, leak proof, and labeled or color-coded in accordance with the OSHA standard.



- During use, containers for contaminated sharps must be easily accessible and located as close as possible to the immediate area where sharps are used or can be reasonably anticipated to be found. Sharps will also be maintained upright throughout their use, replaced routinely, and not be allowed to over fill.
- When moving containers of contaminated sharps from the area of use, the containers must be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during storage, transport, or shipping.
- Reusable sharps that are contaminated with blood or other potentially infectious materials are not stored or processed in a manner that requires individuals to reach by hand into the containers where these sharps have been placed.
- Containers must be placed in a secondary container if leakage is possible. The secondary container must be closable and labeled or color-coded as required.
- Disposable containers must not be opened, cleaned manually, or in another manner that would expose individuals to the risk of injury.

### Waste

- Regulated medical waste (RMW) is placed in containers which are:
  - Closable;
  - Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;
  - Properly labeled or color-coded; and
  - Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.
- If outside contamination of the RMW container occurs, it is placed in a second container. The second container is: closable; constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping; properly labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.
- Disposal of all RMW is done in accordance with applicable federal, state, and local regulations.

## **Communications of Hazards to Personnel**

### Labels

EHS will ensure that worksites affix warning labels or use proper bags as required if RMW or contaminated equipment is brought into the university. Personnel are to notify EHS if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc. without proper labels.

#### Bio-Hazard Labels

- Warning labels are affixed to 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 predominately fluorescent orange or orange-red with lettering and symbols in a contrasting color.
- Labels are affixed to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.
- Red bags or red containers may be substituted for labels.
- Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

## **Training**

The bloodborne pathogens standard requires employers to maintain and keep accurate training records for three years.

EHS provides training as follows for those with occupational exposure:

- At the time of initial assignment to tasks where occupational exposure may take place and annually thereafter.
- EHS provides additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect personnel occupational exposure. The additional training may be limited to addressing the new exposures created.

The training program contains the following elements:

- An accessible copy of the regulatory text of this standard and an explanation of its contents.
- An explanation of the modes of transmission of bloodborne pathogens.
- An explanation of Trinity University's exposure control plan and the means by which the faculty and staff can obtain a copy of the written plan.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment.
- Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.
- An explanation of the basis for selection of PPE.

- Information on the Hepatitis B vaccine, and that the vaccine and vaccination will be offered free of charge.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- An explanation of the signs and labels and/or color coding.
- An opportunity for interactive questions and answers with the person conducting the training session.

The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address (including the additional DOT Hazmat training requirements).

## **Recordkeeping and Follow-Up**

Responsibilities by department as they relate to medical or injury reports.

### Health Services

- Facilitates access to treatment through the report of an on-the-job (OTJ) injury.
- Immunization and antibody testing.
- Hepatitis B vaccination administration.
- Stores records of only vaccines and titers administered in Health Services.

### Office of Risk Management and Insurance

- Confidential post exposure Workers' Compensation records for insurance purposes.

### Environmental Health and Safety

- Report of injury forms.
- Sharps injury logs.

Employees who are referred for evaluation for exposure to bloodborne pathogens are managed by the clinic where they are referred and the records reside in that clinic.

Post exposure and evaluation and follow up is performed by a clinic that manages workers comp injuries.

## **Training Record Elements**

Training record elements include:

- The dates of the training sessions.
- The contents or a summary of the training sessions.
- The names of all persons attending the training sessions.
- Training records are maintained for 3 years from the date on which the training occurred.

## **Sharps Injury Log**

The information in the sharps injury log is recorded and maintained in such a manner as to protect the confidentiality of the injured staff. The sharps injury log contains:

- The type and brand of device involved in the incident.
- The department or work area where the exposure incident occurred.
- An explanation of how the incident occurred.

## **Contact Information**

### Environmental Health and Safety

Oswaldo Crespo III

Director of Environmental Health and Safety

Office number: 210-999-7004

### Health Services

John Meyer

Coordinator of Health Services

Office number: 210-999-8111

### Office of Risk Management and Insurance

Jennifer Adamo

Director of Risk Management and Insurance

Office number: 210-999-7486

**For questions regarding this policy, contact the  
Department of Environmental Health and Safety at  
210-999-7004.**

**TRINITY UNIVERSITY**  
**Confidential Hepatitis B Vaccine Form For Employees**

Name \_\_\_\_\_ SS # \_\_\_\_\_

**CONSENT TO HEPATITIS B VACCINATION**

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. This is to certify that I have been informed about the symptoms and hazards associated with this virus, as well as the modes of transmission of bloodborne pathogens. I hereby give consent to receive the Hepatitis B vaccination series. In addition, one to two months after finishing the vaccination series I will be offered, at no cost to me, a blood test to determine if I have developed a protective antibody titer for Hepatitis B. If this titer shows no or low response I will be offered a repeat series of three doses.

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Date of the first injection: \_\_\_\_\_  
Name/Title of Practitioner

Date of the Second Injection: \_\_\_\_\_  
Name/Title of Practitioner

Date of the Third Injection: \_\_\_\_\_  
Name/Title of Practitioner

Titer: \_\_\_\_\_ Date: \_\_\_\_\_

Repeat Series Indicated: Yes \_\_\_\_\_ No \_\_\_\_\_ RN Signature \_\_\_\_\_ Date: \_\_\_\_\_

**DECLINE OF HEPATITIS B VACCINATION**

I understand that due to my occupational exposure to blood or other potentially infectious materials (OPIM) I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or OPIM and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

I am declining the opportunity to receive the Hepatitis B vaccination for the following reason (please mark one of the following)

\_\_\_\_\_ I have previously received the complete Hepatitis B Vaccination Series

\_\_\_\_\_ Antibody testing has revealed that I am immune to Hepatitis B (if so, When was the test date?) Test Date \_\_\_\_\_

\_\_\_\_\_ Personal reasons

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Witness: \_\_\_\_\_

Title: \_\_\_\_\_ Title \_\_\_\_\_

**DECLINE OF HEPATITIS B ANTIBODY TITER TEST**

I am declining the opportunity to receive Hepatitis B antibody titer testing to determine if I have developed a protective antibody titer against Hepatitis B.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Witness: \_\_\_\_\_

Title: \_\_\_\_\_ Title \_\_\_\_\_

I understand that all protected health information possessed by Health Services is confidential and will not be disclosed or released without my specific written permission except when used for treatment, payment or other health care operations or as required by law.

12/14/2022

**Confidential Hepatitis B Vaccine Form For Employees (Bring this form and your immunization records, if needed, to your appointment at Health Services. Please Call 210-999-8111)**