

# The University of Texas at El Paso



## EXPOSURE CONTROL PLAN

2009

In accordance with Health and Safety Code, Chapter 81, Subchapter H, Texas Department of State Health Services, and analogous to Occupational Health and Safety Administration (OSHA) Bloodborne Pathogens Standard, The University of Texas at El Paso uses this Exposure Control Plan to prevent or minimize the exposure of its employees to bloodborne pathogens or other potentially infectious material.

**DEFINITIONS:**

- A. **BLOOD**- human blood, human blood components, and products made from human blood.
- B. **BLOODBORNE PATHOGENS**- pathogenic organisms that are present in human blood and that can cause diseases in humans, including Hepatitis B virus (HBV), Hepatitis C virus (HCV), and Human Immunodeficiency Virus (HIV).
- C. **EMPLOYER**- for the purposes of this Exposure Control Plan, an employer is considered to be the University of Texas at El Paso.
- D. **OCCUPATIONAL EXPOSURE**- a reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of the employees' duties.
- E. **OTHER POTENTIALLY INFECTIOUS MATERIALS (OPIM)**- include the following:
  - 1. human body fluids: semen vaginal secretions, cerebral spinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids and blood.
  - 2. Any unfixed tissue or organ (other than intact skin) from a human living or dead.
  - 3. 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.
  - 4. Human primary cell lines or tissue cultures.

**EXPOSURE DETERMINATION**

The Texas State Department of Health Services Bloodborne Pathogens Rule requires employers to perform an exposure determination for employees who have occupational exposure to blood or other potentially infectious materials (OPIM). The exposure determination is made without regard to the use of personal protective equipment. The following individuals, fall under the scope of the Exposure Protection Plan:

- Plumbers
- Custodians
- Lab personnel working in the following academic departments:
  - Biological Sciences
  - Kinesiology
  - Clinical Laboratory Sciences
  - Chemistry
  - Mechanical Engineering
  - Psychology
- UTEP Student Health Center Nurse, Nurse Practitioners, phlebotomists
- Environmental Health and Safety employees

**METHODS OF COMPLIANCE**

- A. **Universal Precautions or Standard Precautions** are observed to prevent contact with blood, body fluids, or OPIM. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious.

- B. Engineering Controls are important in eliminating or minimizing employee exposure to bloodborne pathogens, and reduce employee exposure in the workplace by either removing or isolating the hazard or isolating the worker from exposure. Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.
1. Engineering control equipment includes:
    - a. Sharps disposal containers
    - b. Autoclave
    - c. Biological safety cabinet
    - d. Needleless systems
    - e. Sharps with engineered sharps injury protection
  2. Additional engineering controls used throughout the facility include:
    - a. Hand washing sinks
- C. Work Practice Controls establish standard practices by which a task is performed.
1. Employees wash hands and any other potentially contaminated skin area immediately after glove removal. Employees wash their hands as soon as possible with soap and water when waterless disinfectants have been used first.
  2. Whenever an employee's skin or mucous membranes have been exposed to blood or OPIM, the affected area is washed with soap and water or flushed with water as appropriate as soon as possible.
  3. Contaminated needles and sharps are not bent, broken, recapped, removed, sheared, or purposefully broken. They are discarded immediately in a container that is closable, leak-proof, puncture resistant, and biohazard labeled or color-coded.
  4. During use, containers for contaminated sharps are easily accessible to personnel; located as close as is feasible to the immediate area where sharps are being used or can be reasonably anticipated to be found; maintained upright throughout use; are not to be overfilled; and must be replaced routinely.
  5. Eating, drinking, applying cosmetics or lip balm, smoking or handling contact lenses is prohibited.
  6. Mouth pipetting/suctioning is prohibited.
  7. Food and drink are not allowed in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or OPIM are present.
  8. All procedures in which blood or OPIM are present are performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these materials.
- D. Collection of Specimens
1. Specimens of blood or OPIM are placed in a container, which prevents leakage during the collection, handling, processing, storage, transport or shipping of the specimens.
  2. The container used to collect specimens is labeled with a biohazard label or color-coded unless universal precautions are used throughout the procedure and the specimens and containers remain in the facility. If the specimen containers are sent to another facility, a biohazard or color-coded label is affixed to the outside of the container.
  3. Specimens of blood and other potentially infectious body substances or fluids are usually collected within a clinic, doctor's office, or laboratory setting. These specimens are appropriately labeled to indicate the contents and other pertinent information.
  4. If outside contamination of the primary container occurs, the primary container is placed within a secondary container, which prevents leakage during handling, processing, transport, or shipping of the specimen. The secondary container is labeled with a biohazard label, or color-coded.
  5. Any specimen that could puncture a primary container is placed within a secondary container that is puncture proof.

E. Contaminated Equipment

1. Equipment is decontaminated prior to handling or servicing, unless the decontamination of the equipment is not feasible.
2. Contaminated equipment is labeled with a biohazard label

F. Personal Protective Equipment is used where there is an anticipated exposure to blood or other potentially infectious materials.

1. The employer provides Personal Protective Equipment (PPE) without cost to the employee.
2. PPE is considered appropriate only if it is fluid resistant and does not permit blood or OPIM to pass through to reach the employees clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the PPE is used.
3. Examples of PPE include:
  - a. Gloves
  - b. Gowns, scrubs or lab coats
  - c. Masks or face shields
  - d. Eyewear with side shields
  - e. Mouthpieces, pocket masks, resuscitation bags or other ventilation devices
  - f. Shoe covers or booties.
4. All PPE is cleaned, laundered or disposed of by the employer at no cost to the employee. All replacements and repairs are made by the employer at no cost to the employee.
5. PPE shall be utilized whenever contact with blood or OPIM may occur.
6. If the employee is allergic to certain kinds of gloves, hypoallergenic gloves or other alternatives will be provided at no cost.
7. Disposable gloves will not be re-used and will be replaced as soon as practical when they become contaminated or as soon as is feasible if they are torn, punctured, or compromised.
8. Utility gloves can be decontaminated for re-use only if the gloves do not have any punctures, cracks or tears.
9. Masks in combination with eye protection devices are worn whenever splashes, spray, splatter, or droplets of blood or OPIM may be generated and eye, nose or mouth contamination can be reasonably anticipated.
10. Appropriate protective body coverings such as gowns, aprons, caps, and/or shoe covers are worn when gross contamination can be reasonably anticipated.
11. PPE is removed before leaving the work area and as soon as feasible after a garment becomes contaminated.
12. Used PPE is placed in appropriately designated areas or containers when being stored, washed, decontaminated or discarded.

G. Housekeeping

1. Employers shall ensure that the work site is maintained in a clean and sanitary condition.
2. The employer shall determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, the type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.
3. All contaminated work surfaces are decontaminated after completion of procedures, immediately or as soon as possible after any spill of blood or OPIM, and at the end of the work shift.
4. Protective coverings (e.g., plastic wrap, aluminum foil, etc) used to cover equipment and work surfaces are removed and replaced when they become contaminated or at the end of every work shift.
5. Bins, pails, cans and similar receptacles are inspected and decontaminated on a regularly scheduled basis.

6. Any broken glass that may be contaminated is not picked up directly with the hands. Tools such as a small broom and dust pan or forceps can be used to pick up the glass fragments.

#### H. Decontamination

1. Contaminated or soiled lab equipment, can be decontaminated by diluting a fresh solution of household bleach to a 10% solution and sprayed onto the contaminated equipment and allowed at least 15 minutes of contact time.
2. Contaminated equipment that can be degraded by bleach is to be decontaminated by utilizing Ready to use Wex-cide Germicidal Detergent. This disinfectant is sprayed onto the contaminated equipment and allowed at least 10 minutes of contact time.
3. Custodians are to use Wex-cide 128 to decontaminate all surfaces.

#### I. Regulated Waste Disposal

1. Contaminated broken glass is disposed in sharps containers as soon as feasible.
2. All used sharps are discarded as soon as feasible in sharps containers located close to the point of use in all affected work centers.
3. Regulated waste other than sharps is placed in appropriate containers that are closable, leak resistant, labeled with a biohazard label or color-coded, and closed prior to removal. If outside contamination of regulated waste containers occurs, it is decontaminated or placed in a second container that is also closable, leak proof, labeled, and closed prior to removal.
4. All regulated waste is properly disposed of in accordance with federal, state, county and local requirements.

#### J. Laundry Procedures

UTEP does not use medical linen. All sheets, towels are disposable. Lab coats and jackets used by laboratory personnel will be laundered at UTEP using laundry services provided by Veterinary Services. For further information regarding the laundering of lab coats and jackets contact the Department of Environmental Health and Safety at 747-7124 or the Veterinary Services Department at 747-6823. In the event of contamination of personal clothing, the contaminated clothes can be decontaminated at the work site by autoclaving, washing with bleach followed by hot soapy water.

### **HEPATITIS B VACCINATION PROGRAM**

- A. All employees at risk for exposure are offered the Hepatitis B Vaccine (HBV). The vaccine will be administered at the Student Health Center at no cost to the employee. Any required booster of the vaccine will also be provided at no cost to the employee.
- B. The vaccination program is administered under the supervision of a licensed physician or licensed health care provider.
- C. The HBV is offered after bloodborne pathogen training and within ten working days of their initial assignment to work unless one of the following conditions exist; 1.) The employee has previously received the complete HBV series, 2.) Antibody testing has revealed that the employee is immune, 3.) The vaccine is contraindicated for medical reasons.
- D. If an employee declines vaccination, they must sign Appendix A, declination statement. If, at a later time the employee decides to receive the vaccine, it will be provided at no cost to the employee.

### **POST EXPOSURE EVALUATION AND FOLLOW-UP**

- A. If an employee suffers an occupational exposure, the employer must report the incident to his/her supervisor and complete a First Report of Injury form.
- B. The employee is offered a confidential medical examination and follow-up that includes:
  1. Documentation of the route(s) of exposure and the circumstances related to the incident.

2. Identification and documentation of the source individual, unless the employer can establish that identification is unlikely or prohibited by state or local law. After obtaining consent, the blood of the source individual will be tested for HIV/HBV.
3. The results of testing the source individual are made available to the exposed employee with the employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.
4. The employee is offered the option of having his/her blood collected for testing of the employee's HIV/HBV status. Once employee decides to do testing it will be performed as soon as possible.
5. The employee is offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service.
6. 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. The employee is informed about what potential illnesses can develop and to seek early medical evaluation and subsequent treatment.
7. The unit head or supervisor of an employee with occupational exposure is designated to assure that the exposure control plan is followed and maintains records required by the plan.

### **INTERACTION WITH HEALTHCARE PROFESSIONALS**

A. A written opinion is obtained from the healthcare professional who evaluates employees after an exposure incident. In order for the healthcare professional to adequately evaluate the employee, the healthcare professional is provided with:

1. A copy of UTEP's Exposure Control Plan;
2. A description of the exposed employee's duties as they relate to the exposure incident;
3. Documentation of the route(s) of exposure and circumstances under which the exposure occurred;
4. Results of the source individual's blood tests (if available); and,
5. Medical records relevant to the appropriate treatment of the employee.

B. Written opinions are obtained from the healthcare professional in the following instances:

1. When the employee is sent to obtain the Hepatitis B vaccine, or
2. Whenever the employee is sent to a healthcare professional following an exposure incident.

C. Healthcare professionals are instructed to limit their written opinions to:

1. Whether the Hepatitis B vaccine is indicated;
2. Whether the employee has received the vaccine;
3. The evaluation following an exposure incident;
4. Whether the employee has been informed of the results of the evaluation;
5. Whether the employee has been informed about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment (all findings or diagnosis shall remain confidential and shall not be included in the written report); and,
6. Whether the healthcare professional's written opinion is provided to the employee within 15 days of completion of the evaluation.

### **USE OF BIOHAZARD LABELS**

Biohazard warning labels and/or color-coding are used to identify any work area or object that has the potential to be exposed to blood or other infectious materials. Labels are placed on such objects as: sharps containers; specimen containers; contaminated equipment; regulated waste

containers; contaminated laundry bags; refrigerators and freezers containing blood or OPIM; and containers used to store, transport or ship blood or OPIM.

### **TRAINING**

- A. Training for all employees is conducted prior to initial assignment to tasks where occupational exposure may occur.
- B. Annual refresher training is provided within one year of the employee's previous training.
- C. Training is conducted by a person knowledgeable in the subject matter and includes an explanation of the following:
  1. Title 25 Health Services, Part 1 Texas Department of Health, Chapter 96 Bloodborne Pathogen Control
  2. OSHA Bloodborne Pathogen Final Rule
  3. Epidemiology and symptoms of bloodborne diseases
  4. Modes of transmission of bloodborne pathogens
  5. The UTEP Exposure Control Plan
  6. How to recognize tasks and activities that may place employees at risk of exposure to blood or OPIM
  7. The use and limitations of work practices, engineering controls, and PPE
  8. Information about the Hepatitis Vaccine Program at UTEP
  9. Procedures to follow in an emergency involving blood or OPIM
  10. Procedures to follow if an exposure incident occurs to include U.S. Public Health Service Post Exposure Prophylaxis Guidelines
  11. Post-exposure evaluation and follow-up
  12. Warning labels and signs, where applicable, and color-coding
  13. An opportunity to ask questions with the person conducting the training

### **RECORD KEEPING**

- A. The UTEP Student Health Center will maintain limited medical records on its employees. The medical record will include:
  1. employee's name and social security number
  2. Hepatitis B Vaccination status and dates of vaccines
  3. a copy of all results of examinations, medical testing, and follow-up procedures related to occupational exposure
  4. a description of the employee's duties as they related to the exposure incident
  5. a description of the route of exposure and the circumstances under which exposure occurred
  6. Results of the source individual's blood testing, if available.
- B. Confidentiality of medical records is maintained.
- C. Bloodborne Pathogen Training records are maintained by Environmental Health & Safety for at least 3 years from the date on which the training occurred. Training records include:
  1. dates of the training sessions
  2. name and job title of those in attendance.

### **CONTAMINATED SHARPS INJURY LOG**

- A. In accordance with the requirements of the Texas Blood borne Pathogens Rule, UTEP maintains a log and reports injuries from contaminated sharps to the Texas State Department of Health Services
- B. The sharps injury log includes the following information:
  1. name and address of the facility where the injury occurred
  2. name and address of the reporting official
  3. date and time of injury
  4. age and sex of the injured employee
  5. type and brand of sharp involved


- 5. type and brand of sharp involved
  - 6. original intended use of sharp
  - 7. whether the injury occurred before, during, or after the sharp was used for its original intended purpose
  - 8. whether the exposure was during or after sharp was used
  - 9. whether a device had engineered sharps injury protection, and if yes, was the protective mechanisms activated and did the exposure incident occur before, during or after activation of the protective mechanism
  - 10. whether the injured person was wearing gloves at the time of the injury
  - 11. whether the injured person had completed the Hepatitis B vaccination series
  - 12. whether a sharps container was readily available for disposal of the sharp
  - 13. whether the injured person received training on the exposure control plan during the twelve months preceding the incident
  - 14. the involved body part
  - 15. the job classification of the injured person
  - 16. the employment status of the injured person
  - 17. the location/facility/agency and the work area where the sharps injury occurred
  - 18. a listing of the implemented needleless systems and sharps with engineered sharps injury protection for employees provided by the employer
- C. This information is included in the Texas State Department of Health Services Contaminated Sharps injury report which UTEP EH&S submits to the department for the injured employee.
- D. The required information is reported to the Texas State Department of Health Services no later than ten working days after the contaminated sharps injury occurred.

**REVIEW**

The University of Texas at El Paso EH&S department will review the exposure control plan annually and update when necessary.

  
\_\_\_\_\_  
Biological Safety Officer

4/20/09  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Assistant Vice President, Environmental Health & Safety

4/20/09  
\_\_\_\_\_  
Date

**Appendix A**

**Hepatitis B Vaccine Declination Statement**

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. 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 series disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to myself.

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date