

# **TEXAS A&M INTERNATIONAL UNIVERSITY BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN**

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In accordance with Health and Safety Code, Chapter 81, Subchapter H, and analogous to OSHA Bloodborne Pathogens Standard, Texas A&M International University (TAMIU) uses the Exposure Control Plan to prevent or minimize the exposure of employees to bloodborne pathogens.

## **DEFINITIONS**

**BLOOD** - human blood, human blood components, and products made from human blood.

**BLOODBORNE PATHOGENS** – pathogenic microorganisms 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).

**EMPLOYER** – for the purposes of the TAMIU Bloodborne Pathogens Exposure Control Plan, an employer is considered to be the department or unit in which the employee is employed.

**OCCUPATIONAL EXPOSURE** – a reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infection materials that may result from the performance of an employee's duties.

**OTHER POTENTIALLY INFECTIOUS MATERIALS (OPIM)** – include the following:

- Human body fluids – semen, vaginal secretions, cerebrospinal fluid, synovial fluids, pleural fluids, pericardial fluids, peritoneal fluids, amniotic fluid, saliva in dental procedures, and 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.
- Any unfixed tissue or organ (other than intact skin) from a human, living or dead.
- HIV-containing cell or tissue cultures, organs cultures, and HIV- or HBV- containing culture medium or other solutions; and blood, organism or other tissues from experimental animals infected with HIV or HBV.

## **EXPOSURE DETERMINATION**

The Texas Department of Health (department) Bloodborne Pathogens Exposure Control Plan (plan) requires Texas A&M International University (TAMIU) 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. This exposure determination is required to list all job classifications in which employees have occupational exposure, regardless of frequency.

The TAMIU job titles/classifications in which employees in those positions have occupational exposure are listed in Appendix I.

## **IMPLEMENTATION SCHEDULE AND METHODOLOGY**

The department's plan outlines a schedule and method of implementation for the various elements of the exposure control plan.

### **Compliance Methods**

Universal precautions are observed to prevent contact with blood or OPIM. All blood or OPIM are considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls are used to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, personal protective equipment is used. Examples include safety design devices, sharps containers, needleless systems, sharps with engineered sharps injury protection for employees, autoclaves, disposable resuscitation equipment, passing instruments in a neutral zone, etc.

Supervisors and workers examine and maintain engineering and work practice controls within the work center on a regular schedule.

Handwashing facilities are also available to the employees who incur exposure to blood or OPIM. The department's plan requires that these facilities be readily accessible after incurring exposure.

If handwashing facilities are not feasible, TAMIU is required to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towels, antiseptic towelettes or waterless disinfectant. If these alternatives are used, then the hands are to be washed with soap and running water as soon as feasible.

After removal of personal protective gloves, employees wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water. If employees incur exposure to their skin or mucous membranes, then those areas are washed with soap and water or flushed with water as appropriate as soon as feasible following contact.

### **Needles**

Contaminated needles and other contaminated sharps are not bent, recapped, removed, sheared, or purposely broken. The department's plan allows an exception to this if no alternative is feasible and the action is required by a specific medical procedure. If such action is required, then the recapping or removal of the needle must be done by the use of a device or a one-handed technique.

## **Contaminated Sharps Discarding and Containment**

Contaminated sharps are discarded immediately or as soon as feasible in containers that are closable, puncture resistant, leakproof on sides and bottom, and biohazard labeled or color-coded.

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 (e.g., laundries); maintained upright throughout use; are not allowed to overfill; and replaced routinely.

## **Work Area Restrictions**

In work areas where there is a reasonable likelihood of exposure to blood or OPIM, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter/bench tops where blood or OPIM are present.

Mouth pipetting/suctioning of blood or OPIM is prohibited.

All procedures are conducted in a manner to minimize splashing, spraying, splattering, and generation of droplets of blood or OPIM.

## **Collection of Specimens**

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. The container used for this purpose 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.

Specimens of blood and other potentially infectious body substances or fluids are usually collected within a hospital, doctor's office, clinic, or laboratory setting. These specimens are appropriately labeled to indicate the contents and other pertinent information.

In facilities where specimen containers are sent to other facilities and/or universal precautions are not used throughout the procedure, a biohazard or color-coded label should be affixed to the outside of the container.

If outside contamination of the primary container occurs, the primary container is placed within a secondary container, which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen. The secondary container is labeled with a biohazard label or color-coded.

Any specimen, which could puncture a primary container, is placed within a secondary container, which is puncture proof.

TAMIU is not in the practice of collecting specimens at this time. However, should this process change, a more in depth procedure will be developed.

### **Contaminated Equipment**

Equipment which may become contaminated with blood or OPIM is examined prior to servicing or shipping and decontaminated as necessary unless the decontamination of the equipment is not feasible. TAMIU will place a biohazard label on all portions of contaminated equipment that remain to inform employees, service representatives, and/or the manufacturer, as appropriate.

### **Personal Protective Equipment**

When occupational exposure remains after institution of engineering controls and work practice controls, proper personal protective equipment is used.

All personal protective equipment used is provided without cost to employees. Personal protective equipment is chosen based on the anticipated exposure to blood or OPIM. The protective equipment is considered appropriate only if it does not permit blood or OPIM to pass through or reach the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of the time which the protective equipment is used. Examples of personal protective equipment include gloves, eyewear with side shields, gowns, lab coats, aprons, shoe covers, face shields, mouthpieces and masks. All personal protective equipment is fluid resistant.

All personal protective equipment is cleaned, laundered, and disposed of by TAMIU at no cost to employees. All repairs and replacements are made by TAMIU at no cost to employees.

All garments penetrated by blood are removed immediately or as soon as feasible and placed in the appropriate container. All personal protective equipment is removed prior to leaving the work area and placed in the designated receptacle.

Gloves are worn where it is reasonably anticipated that employees will have hand contact with blood, OPIM, non-intact skin, and mucous membranes. Latex sensitive employees are provided with suitable alternative personal protective equipment.

Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

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

Masks in combination with eye protection devices, such as goggles, glasses with solid side shield, or chin length face shields, are required to be worn whenever splashes, spray, splatter, or droplets of blood or OPIM may be generated and eye, nose, or mouth contamination can reasonably be anticipated.

Surgical caps or hoods and/or fluid resistant shoe covers or boots are worn in instances when gross contamination can reasonably be anticipated.

All garments that are penetrated by blood are removed immediately or as soon as feasible.

Personal protective equipment is removed before leaving the work area and after a garment becomes contaminated.

Used protective equipment is placed in appropriately designated areas or containers when being stored, washed, decontaminated or discarded.

### **Housekeeping**

TAMIU shall ensure that the worksite is maintained in a clean and sanitary condition. TAMIU is cleaned through a contract with an outside contractor. TAMIU 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. This information shall be contained within the contract supplied to the outside custodial contractor.

All contaminated work surfaces are decontaminated after completion of procedures, immediately or as soon as feasible after any spill of blood or OPIM, and at the end of the work shift.

Protective coverings (e.g., plastic wrap, aluminum foil, etc.) used to cover equipment and environmental surfaces are removed and replaced as soon as feasible when they become contaminated or at the end of the work shift.

All bins, pails, cans, and similar receptacles are inspected and decontaminated on a regularly scheduled basis.

Any broken glassware that may be contaminated is not picked up directly with the hands. Tools such as forceps are used to pick up the glass fragments.

### **Regulated Waste Disposal**

All contaminated sharps are discarded as soon as feasible in sharps containers located as close to the point of use as feasible in each work area.

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 the regulated waste container occurs, it is placed in a second container that is also closable, leak proof, labeled with a biohazard label or color-coded, and closed prior to removal.

All regulated waste is properly disposed of in accordance with federal, state, county, and local requirements.

## **Laundry Procedures**

Although soiled linen may be contaminated with pathogenic microorganisms, the risk of disease transmission is negligible if it is handled, transported, and laundered in a manner that avoids transfer of microorganisms to patients, personnel, and environments. Rather than rigid rules and regulations, hygienic and commonsense storage and processing of clean and soiled linen is recommended. Laundry contaminated with blood/bloody body fluids or OPIM is placed in a biohazard bag or color-coded laundry bag. Contaminated laundry that is decontaminated at the work site is done by autoclaving, washing with hot soapy water and bleach, or other acceptable method of treatment.

## **Hepatitis B Vaccine**

All employees who have been identified as having occupational exposure to blood or OPIM are offered the hepatitis B vaccine, at no cost to the employee, under the supervision of a licensed physician or licensed healthcare professional. The vaccine is offered after bloodborne pathogens training and within 10 working days of their initial assignment to work unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or that the vaccine is contraindicated for medical reasons. TAMIU employees may receive the vaccine at TAMIU Student Health Services.

Employees who decline the Hepatitis B vaccine sign a declination statement (See Appendix II of this exposure control plan).

Employees who initially decline the vaccine but who later elect to receive it may then have the vaccine provided at no cost.

## **Post Exposure Evaluation and Follow up**

When the employee incurs an occupational exposure incident, the employee must report the incident to their immediate supervisor and complete a TWCC-1 First Report of Injury or Illness Form. Human Resource personnel and the Safety Coordinator should also be notified. All employees who incur an exposure incident are offered a confidential medical evaluation and follow up as follows:

- Documentation of the route(s) of exposure and the circumstances related to the incident.
- Identification and documentation of the source individual, unless TAMIU can establish that identification is infeasible or prohibited by state or local law. After obtaining consent, unless law allows testing without consent, the blood of the source individual should be tested for HIV/HBV infectivity, unless TAMIU can establish that testing of the source is infeasible or prohibited by state or local law.
- The results of testing of 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.
- The employee is offered the option of having his/her blood collected for testing of the employee's HIV/HBV serological status. The blood sample is preserved for at least 90 days to allow the employee to decide if the blood should be tested for HIV

serological status. If the employee decides prior to that time that the testing will be conducted, then testing is done as soon as feasible. (NOTE: In order for medical expenses associated with future development of disease resulting from this exposure to be compensable as a Worker's Compensation Insurance Claim, the employee must have his/her blood tested within 10 days of the exposure to demonstrate absence of disease at the time of the exposure)

- 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. The employee is informed about what potential illnesses can develop and to seek early medical evaluation and subsequent treatment.
- TAMIU President or his designee is designated to assure that the policy outlined here is effectively carried out and maintains records related to this policy.

### **Interaction with Healthcare Professionals**

A written opinion is obtained from the healthcare professional who evaluates employees of this facility 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 TAMIU'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.

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.

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 told about any medical conditions resulting from exposure to blood or OPIM which require further evaluation or treatment (all other findings or diagnosis shall remain confidential and shall not be included in the written report supplied to TAMIU); 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; containers of regulated waste; contaminated laundry bags; refrigerators and freezers containing blood or OPIM, and containers used to store, transport, or ship blood or OPIM.

## **Training**

Training for all employees is conducted prior to initial assignment to tasks where occupational exposure may occur. All employees also receive annual refresher training. This training is to be conducted within one year of the employee's previous training.

Training for employees is conducted by a person knowledgeable in the subject matter and includes an explanation of the following:

1. Title 25 Health Services, Part I Texas Department of Health, Chapter 96 Bloodborne Pathogen Control
2. OSHA Bloodborne Pathogen Final Rule;
3. epidemiology and symptomatology of bloodborne diseases;
4. modes of transmission of bloodborne pathogens;
5. TAMIU's exposure control plan (i.e., points of the plan, lines of responsibility, how the plan will be implemented, where to access plan, etc.);
6. procedures which might cause exposure to blood or OPIM at this facility;
7. control methods which are used at the facility to control exposure to blood or OPIM;
8. personal protective equipment available at TAMIU (types, use, location, etc.);
9. hepatitis B vaccine program at the facility;
10. procedures to follow in an emergency involving blood or OPIM;
11. procedures to follow if an exposure incident occurs, to include U.S. Public Health Service Post Exposure Prophylaxis Guidelines;
12. post exposure evaluation and follow up;
13. signs and labels used at the facility; and
14. opportunity to ask questions with the individual conducting the training.

## **Recordkeeping**

Employee medical records shall include the following:

- Employees name and social security number;
- Hepatitis B Vaccination status, including the dates of all the HBV vaccinations;
- A copy of all results of examinations, medical testing, and follow-up procedures related to an occupational exposure;
- The employer's copy of the healthcare professional's written opinion;
- A description of the employee's duties as they related to the exposure incident;
- A description of the route of exposure and the circumstances under which exposure occurred;
- Results of the source individuals blood testing, if available.

Confidentiality of medical records is maintained.

According to OSHA's Bloodborne Pathogens Standard, medical records are maintained by TAMIU Student Health Department for a minimum of 30 years after employment.

According to OSHA's Bloodborne Pathogens Standard, training records are maintained by TAMIU Safety Coordinator for a minimum of 3 years. These training records include:

- The dates of the training sessions
- The contents or a summary of the sessions
- Name and qualifications of the person conducting the training
- Names and job titles of those in attendance.

### **CONTAMINATED SHARPS INJURY LOG**

In accordance with the requirements of the Texas Bloodborne Pathogens Rule, TAMIU maintains a log and reports injuries from contaminated sharps to the Texas Department of Health (TDH). A contaminated sharp includes, but is not limited to, a needle, scalpel, lancet, broken glass, broken capillary tube used or encountered in a healthcare setting that is contaminated with human blood or body fluids.

The sharps Injury Log includes the following information:

- Name and address of the facility where the injury occurred
- Name and address of the reporting official
- Date and time of the injury
- Age and sex of the injured employee
- Type and brand of sharp involved
- Original intended use of the sharp
- Whether the injury occurred before, during or after the sharp was used for its original intended purpose
- Whether the 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.
- Whether the injured person was wearing gloves at the time of injury.
- Whether the injured person had completed a hepatitis B vaccination series
- Whether a sharps container was readily available for disposal of the sharp
- Whether the injured person received training on the exposure control plan during the 12 months prior to the incident
- The involved body part
- The job classification of the injured person
- The employment status of the injured person
- The location and the work area where the sharps injury occurred
- A listing of the implemented needleless systems and sharps with engineered sharps injury protection for employees provided by the employer.

Most of the information listed above will be included on the TWCC-1 First Report of Injury or Illness form that is filed by the employer of the injured employee. The employer must attach an

addendum to the TWCC-1 form with the remainder of the required data. The employer must provide all required information to TAMIU Human Resource Department, who will then forward on to the WCI division of the TAMUS Office of Risk Management and Safety.

ORMS reports to TDH an incident in which a TAMIU employee sustains a contaminated sharps injury.

The required information is reported to TDH not later than ten working days after the end of the calendar month in which the contaminated sharps injury occurred.

**ANNUAL REVIEW**

Signature _____	Date _____
Signature _____	Date _____
Signature _____	Date _____
Signature _____	Date _____

**APPENDIX I**

**JOB TITLES OF TAMU EMPLOYEES WITH OCCUPATIONAL  
EXPOSURE TO BLOODBORNE PATHOGENS**

<u>DEPARTMENT</u>	<u>JOB TITLE</u>
Athletic Department	Director Associate Director Athletic Trainer Coach
College of Education	Physical Education Instructor
Physical Plant	Director Associate Director Building Maintenance Mechanic Building Maintenance Supervisor Building Maintenance Technician Custodian Electrician HV/AC Operations Specialist Plumber Procurement Assistant Safety Coordinator Service Worker Utilities Supervisor
School of Nursing	Director Assistant Professor Associate Professor Visiting Assistant Professor
Student Health Services	Director Nurse (LVN) Staff Assistant
University Police Department	Director Police Cadet Police Sergeant Police Officer

**APPENDIX II**

**HEPATITIS B VACCINE DECLINATION STATEMENT**

I understand that due to my occupational exposure to blood or OPIM I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis A & B vaccine, at no charge to myself. However, I decline hepatitis A & 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 myself.

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

**APPENDIX III**  
**ASSESSMENT TOOL**

	YES	NO
1. The exposure control plan is located in each work center		
2. Employees at occupational risk for bloodborne pathogens exposure are identified		
3. Employees comply with universal precautions when performing duties		
4. Employees appropriately use engineering controls in the work center		
5. Employees employ safe work practices in performance of duties		
6. Handwashing facilities are readily accessible in the work centers		
7. Employees regularly wash their hands, especially after glove removal		
8. Employees deposit contaminated sharps in biohazard containers immediately after use		
9. Employees change filled biohazard containers when full		
10. Employees do not eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses in the work area		
11. Food and beverages are not kept in close proximity to blood or bodily fluids		
12. Employees do not mouth pipette/suction blood or bodily fluids		
13. Employees place specimens in leak resistant containers after collection		
14. Employees place specimens in biohazard leakproof containers for shipment		
15. Employees properly decontaminate equipment before servicing or shipping for repairs or place a biohazard label to inform others the equipment remains contaminated		
16. Employees wear the designated fluid resistant personal protective equipment/attire appropriate for the task at hand		
17. Employees place the contaminated personal protective equipment in the appropriate receptacles		
18. Employees maintain a clean environment at all times		
19. Custodial Contractors and TAMU employees use an EPA approved germicide properly to decontaminate and clean the facility and equipment		
20. Employees know the safe procedure for contaminated, broken glass clean up		
21. Employees demonstrate knowledge of the agency's policies regarding disposal and transport of regulated waste by placing regular waste, special waste, and/or biohazard waste in appropriate containers and transporting the waste according to policy		
22. Employees place wet laundry in leak resistant bags or containers		

and transport used laundry in biohazard leakproof containers		
23. Each employee knows his documented hepatitis B vaccine status		
24. Employees know where and to whom to report exposure incidents		
25. An employee occupational exposure protocol is practiced in accordance with U.S. Public Health Service		
26. Employees are oriented and receive annual training to the exposure control plan		
27. Recording and reporting occupational exposures are conducted in accordance with OSHA's Bloodborne Pathogens Standard		
28. Medical and training records are maintained in accordance with OSHA's Bloodborne Pathogens Standard		