

# THE UNIVERSITY OF THE INCARNATE WORD

## Exposure Control Plan for Bloodborne Pathogens

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## **1.0 Purpose**

The University of the Incarnate Word is committed to providing a safe and healthy university community environment. In pursuit of this goal, 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.” The ECP is a key document to assist our organization in implementing and ensuring compliance with the standard, thereby protecting our employees.

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President

The University of the Incarnate Word

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## 2.0 Program Administration

Environmental Health Safety and Risk Management will be responsible for:

- Updating ECP annually or when institutional, state and/or federal guidelines are enforced.
- Ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained.
- Training, documentation of training, and have the written ECP available to employees, OSHA, and NIOSH representatives.
- Ensuring adequate supplies of regulated medical waste boxes and red liners are maintained and distributed.

UIW employees 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 the ECP.
- Be provided personal protective equipment (e.g. gloves, lab coats) and engineering controls (e.g. sharps containers).

## 3.0 Employee Exposure Determination

Exposure risk to employees is determined by reviewing employee positions for the anticipated risk of occupational exposure to human blood or other potentially infectious materials (OPIM).

All UIW employees will be assessed to determine if they meet the exposure risk determination by OSHA by reviewing the following:

1. Processing or handling of human blood, body fluids, tissues or organs.
2. Processing or handling equipment which may or have been contaminated with human blood, body fluids, tissues or organs.
3. Processing or handling human cell lines
4. Administration of first aid.

The following is a list of all job classifications at UIW which employees have occupational exposure

<b><i>Job Title</i></b>	<b><i>Department/Location</i></b>
Police Officer	Police office
Nursing staff	Nursing building
Athletic trainer	Field house, campus

The following is a list of job classifications which some employees at UIW have occupational exposure. Included is a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these individuals:

<i>Job Title</i>	<i>Department/Location</i>
Director of EHSRM and staff	EHSRM
High school Teacher	IWHS, SAHS
Pharmacy students	Pharmacy building
Optometry staff	Datapoint Clinic
Nursing students	Nursing Building
Physical therapy students	PT school/Guilbeau Rd
School of Medicine Staff	Brooks Campus

## **4.0 Methods of Implementation and Control**

### **4.1 Universal Precautions**

All employees will utilize universal precautions.

### **4.2 Exposure Control Plan**

Employees covered by the bloodborne pathogens standard receive an explanation of the ECP during their initial training session. It will also be reviewed annually. All employees may review the ECP at any time.

EHSRM office is responsible for reviewing and updating the ECP annually or more frequently if necessary to reflect any new or modified tasks and procedures that affect occupational exposure and to reflect new or revised UIW employee positions with occupational exposure.

### **4.3 Engineering Controls and Work Practices**

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering controls and work practice controls used are listed below:

Sharps containers are inspected and maintained or replaced by your department whenever necessary to prevent overfilling. Once container is full, place inside regulated medical waste box in accordance with UIW institutional policies.

Disposable syringes, scalpel blades, needles, slides must be discarded in appropriate puncture resistant containers after use.

Needles shall not be recapped.

Hands and other skin surfaces shall be washed immediately after contact with blood or OPIM even if a glove or other PPE has been used.

All laboratory guidelines shall be applied (i.e. no eating, drinking, applying cosmetics, wearing appropriate PPE, etc.).

#### **4.4 Personal Protective Equipment (PPE)**

PPE is provided to our employees at no cost. Training in the use of the appropriate PPE for specific tasks or procedures is provided by EHSRM or your departmental supervisor. The types of PPE available to employees are:

- Laboratory Coats
- Safety goggles/glasses

All employees using PPE must observe the following precautions:

- Wash hands immediately or as soon as feasible after removing gloves or other PPE.
- Remove PPE after it becomes contaminated and before leaving the work area.
- Used PPE may be disposed of in an appropriate biological waste container.
- Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
- Never wash or decontaminate disposable gloves for reuse.
- Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
- Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.
- Place all used PPE in appropriate biomedical waste containers to be disposed of by our biomedical waste contractor.

## **5.0 Housekeeping**

Regulated Medical Waste (RMW) is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see the following section “Labels”), and closed prior to removal to prevent spillage or protrusion of contents during handling. Only RMW boxes supplied by EHSRM will be used for disposal of biohazard waste.

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled or color coded. Sharps disposal containers are available at by contacting your immediate supervisor. Bins and pails (e.g., wash or emesis basins) are cleaned and decontaminated as soon as feasible after visible contamination. Broken glassware that may be contaminated is only picked up using mechanical means, such as a brush and dustpan.

Contaminated work surfaces or equipment shall be periodically decontaminated with an appropriate, Environmental Protection Agency (EPA) registered anti-microbial product (i.e. Lysol, Amphyl, Wex-Cide, etc.), or a 1:100 to 1:10 dilution of household bleach (5.25% – 6.00% sodium hypochlorite), as recommended by the Centers for Disease Control and Prevention (CDC). OSHA requires that an EPA-registered tuberculocidal product

(<http://www.epa.gov/oppad001/chemregindex.htm>), or 1:100 to 1:10 dilution of household bleach, made fresh daily, be used to disinfect any blood spills. In general, a 1:100 dilution of household bleach (500 ppm Chlorine) is used for general cleaning of non-porous environmental surfaces and a 1:10 dilution (5000 ppm Chlorine) is used for decontamination when a spill of blood or OPIM occurs.

## 6.0 Labels

Each department is responsible for ensuring warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into the facility. Employees are to notify the EHSRM office if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc., without proper labels.

Example:



## 7.0 Hepatitis B Vaccination

The EHSRM office will provide training to employees on hepatitis B vaccinations, addressing safety, benefits, efficacy, methods of administration, and availability. The hepatitis B vaccination series is available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of this plan. Vaccination is encouraged unless: 1) documentation exists that the employee has previously received the series; 2) antibody testing reveals that the employee is immune; or 3) medical evaluation shows that vaccination is contraindicated. However, if an employee declines the vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept at Human Resources. Vaccination will be provided by (List health care professional responsible for this part of the plan) at (location). Following the medical evaluation, a copy of the health care professional's written opinion will be obtained and provided to the employee within 15 days of the completion of the evaluation. It will be limited to whether the employee requires the hepatitis vaccine and whether the vaccine was administered.

### 7.1 Declination Form

If you choose to decline the Hepatitis B Vaccine, contact the EHSRM office for a declination form.

## **8.0 Guidelines for Needlestick and Body-Fluid Exposures**

Immediately after an occupational exposure to a possible Bloodborne Pathogens (BBP), it is recommended that you receive medical treatment. The U.S Centers for Disease Control and Prevention state that if treatment is given within two hours of exposure it can substantially reduce the risk of acquiring HIV infection (but may be initiated up to 72 hours post exposure).

For Any Exposure to a BBP Please immediately follow these steps:

- 1) Should an exposure incident occur, the exposed student or employee should contact all the following:
  - a. Departmental Preceptor (if applicable)
  - b. Lab Manager/Principal Investigator (if applicable)
  - c. UIW Clinical Site Faculty or Supervisor
  - d. Environmental Health Safety and Risk Management Director at 210-829-6035
- 2) Perform initial first aid by cleaning the wound and flushing eyes or other mucous membrane.
- 3) A confidential medical evaluation and follow-up is recommended within two hours of a contaminated needlestick or body-fluid exposure. Follow the clinical sites Blood Borne Pathogens Post Exposure Policy if applicable. Seek care from the nearest emergency room or health care facility.
- 4) Document the routes of exposure and how the exposure occurred on an Employee or Student Injury Report.
- 5) Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law). The UIW Supervisor or Faculty is responsible for aiding the exposed individual in communication with the clinical site and source individual.
- 6) Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
- 7) Assure that the exposed employee or student is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
- 8) After obtaining consent, the student or employee's blood should be collected as soon as feasible after exposure incident, and test blood for HBV, HCV and HIV serological status. This should be done at the closest ER, Urgent Care, provider of choice, or UIW Health Services where post exposure prophylaxis is available.

## **9.0 Post-Exposure Evaluation and Follow-Up**



- 1) The Environmental Health Safety and Risk Management Director will maintain a log of all occupational exposures to blood borne pathogens.
- 2) Student injury reports will be forwarded to Environmental Health Safety and Risk Management Director.
- 3) Employee injury reports will be forwarded to Human Resources.
- 4) Students will complete the UIW Student Needlestick Policy Claim Form found at: [http://www.sas-mn.com/pdf/claim/clm3\(18\).pdf](http://www.sas-mn.com/pdf/claim/clm3(18).pdf)
- 5) Employees and students will schedule a follow-up visit with their health care provider to review the results of baseline testing, provide additional counseling and support, assess medication side effects and adherence, and provide additional medication if appropriate (with an altered regimen if indicated by side effects or laboratory test results). If the source-patient's HIV status is determined to be **negative**, prophylaxis will be discontinued and no follow up lab for HIV is necessary.
- 6) Additional follow up visits are determined by the results of the initial baseline lab work drawn on the source of the occupational exposure.
  - a. Source is known HIV positive: obtain HIV antibody at 6 weeks, 3 months, and 6 months
  - b. Source is known HCV positive: obtain HCV antibody at 6 weeks, 3 months, and 6 months
  - c. Unknown source: obtain HIV and HCV antibody at 3 months and 6 months

## 10.0 Employee Training

All employees who have an occupational exposure to bloodborne pathogens receive initial and annual training conducted by the EHSRM office

All employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

- a copy and explanation of the OSHA bloodborne pathogen standard
- an explanation of our ECP and how to obtain a copy
- an explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
- an explanation of the use and limitations of engineering controls, work practices, and PPE
- an explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
- an explanation of the basis for PPE selection

- information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge
- information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
- 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
- information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- an explanation of the signs and labels and/or color coding required by the standard and used at this facility
- an opportunity for interactive questions and answers with the person conducting the training session.

Training materials for this facility are available in the EHSRM office.

## 11.0 Recordkeeping

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years in the EHSRM department.

The training records include:

- the dates of the training sessions
- the contents or a summary of the training sessions
- the names and qualifications of persons conducting the training
- the names and job titles of all persons attending the training sessions

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to the EHSRM Director.

### 11.1 Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records." (Name of Responsible person or department) is responsible for maintenance of the required medical records. These confidential records are kept in (List location) for at least the duration of employment plus 30 years.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to (Name of responsible person or department and address)

### 11.2 OSHA Recordkeeping

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 *CFR* 1904). This determination and the recording activities are done by the EHSRM Director.

## 12.0 Sharps Injury Log

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in a Sharps Injury Log. All incidences must include at least:

- date of the injury
- type and brand of the device involved (syringe, suture needle)
- department or work area where the incident occurred
- explanation of how the incident occurred. This log is reviewed as part of the annual program evaluation and maintained for at least five years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

## 13.0 Needlestick Checklist

### Occupational Blood Borne Pathogen Exposure/Needle Stick CHECKLIST:

- Wash exposed area immediately.
- Notify each of the following as soon as possible:
  - Your Clinical Site Supervisor/Preceptor
  - Your UIW Faculty or Supervisor (Responsible for assisting with facility and source coordination) **Name of UIW Faculty or Supervisor** \_\_\_\_\_
  - Environmental Health Safety and Risk Management Director (Sam McDaniel) at 210-829-6035
  - Exposure source has been notified of the incident and contact information has been obtained
- Complete the UIW Student Injury Report or UIW Employee Injury Report
- Complete the UIW Student Needlestick Policy Claim Form found at: (students only)  
[http://www.sas-mn.com/pdf/claim/clm3\(18\).pdf](http://www.sas-mn.com/pdf/claim/clm3(18).pdf)
- Seek post-exposure care:
  - While you are on your clinical rotations, needle stick injuries will be initially addressed at the facility where the injury occurs per the facilities policy. For most hospitals, you should contact the nursing supervisor for specific instructions and **go to the ER, Urgent Care, provider of your choice, or UIW Health Services** for occupational exposure management within 2 hours.
  - Prophylactic treatment should ideally be started within two (2) hours for high risk HIV exposure** (but may be initiated up to 72 hours post exposure). The most up-to-date procedure, recommended by the Centers for Disease Control and Prevention (CDC), should be followed for management of this exposure.
- After an exposure, your blood should be collected for testing for HIV, HBV and HCV serological status.
- HBV vaccine should be offered if source is known to be positive for hepatitis B or is high risk for hepatitis B, and exposed person has not been vaccinated against HBV. The exposed person should be offered HBIG if they did not develop antibodies after prior HBV vaccination.

- Tetanus/diphtheria booster for percutaneous injury if none within last 10 years.
- A follow-up visit should be scheduled to review the results of baseline testing, provide additional counseling and support, assess medication side effects and adherence, and provide additional medication if appropriate (with an altered regimen if indicated by side effects or laboratory test results). If the source-patient's HIV status is determined to be **negative**, prophylaxis will be discontinued and no follow up lab for HIV is necessary.
- Additional follow up visits are determined by the results of the initial baseline lab work drawn on the source of the occupational exposure.
  - Source is known HIV positive: obtain HIV antibody at 6 weeks, 3 months, and 6 months
  - Source is known HCV positive: obtain HCV antibody at 6 weeks, 3 months, and 6 months
  - Unknown source: obtain HIV and HCV antibody at 3 months and 6 months

**University of the Incarnate Word  
Environmental Health Safety and Risk Management  
Quantitative Fit Test**

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**OSHA 1910.134(a)(1)** states,

*In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section.*

I have been medically cleared and an OSHA Respirator Medical Evaluation Questionnaire has been completed by UIW Health Services to wear a respirator. YES\_\_\_ NO\_\_\_

I have not experienced any medical signs or symptoms since my last medical evaluation which would prevent me from wearing a respirator. YES\_\_\_ NO\_\_\_

I understand I must be fit tested annually as required by **OSHA 1910.134(f)(2)**. YES\_\_\_ NO\_\_\_

***If you answered NO to any of the questions above, you cannot proceed to be fit tested.***

-----  
**Date:** \_\_\_\_\_

**Name:** \_\_\_\_\_ **UIW I.D. Number:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Job Title:** \_\_\_\_\_

**Respirator Type:** Full \_\_\_ Half \_\_\_

**Respirator Brand:** \_\_\_\_\_ **Model:** \_\_\_\_\_ **Size:** \_\_\_\_\_

-----  
Signing this form indicates you have been fit tested for the respirator type, brand, model and size notated. I understand, if a different respirator is required I must notify EHSRM immediately to be fit tested for a new respirator.

**Employee Signature:** \_\_\_\_\_

**EHSRM Signature:** \_\_\_\_\_