

# Weber State University

## **EXPOSURE CONTROL PLAN (ECP)**

OSHA's Standard for Bloodborne Pathogens 29 CFR 1910.1030



**WEBER STATE UNIVERSITY**  
Environmental Health & Safety

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1) INTRODUCTION

This document serves as the Bloodborne Pathogens Exposure Control Plan (ECP) for Weber State University (WSU). These guidelines provide policy and safe practices to prevent the spread of disease resulting from handling blood or other potentially infectious materials (OPIM) during the course of work.

This ECP has been developed under the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030. The purposes of this ECP include eliminating or minimizing occupational exposure of employees to blood or certain other body fluids and complying with OSHA’s Bloodborne Pathogens Standard.

2) RESPONSIBILITIES

- 1. WSU’s Environmental Health and Safety Department, in partnership with the WSU Institutional Biosafety Committee (IBC), develops and maintains this ECP.
2. Deans, Directors, Department Chairs, and Administrators, provide the resources necessary to obtain the appropriate safety equipment to reduce the risk of exposure to

affected employees. Ensure that all employees with occupational exposure to Bloodborne Pathogens (BBP's) are offered Hepatitis B vaccinations. Make suggestions to EHS and the IBC during the annual review and audit of changes to the ECP.

3. **Departments/programs** ensure employees comply with this ECP and the OSHA Bloodborne Pathogen Standard provisions. At-risk employees may access copies of this ECP in their departments.
4. **Supervisors** are responsible for informing EHS when a new employee needs BBP training (see section 9). Identify tasks and procedures where occupational exposure may occur. Ensure the use of proper usage of PPE. Ensure that employees who may have occupational exposure to BBP's are offered Hepatitis B vaccinations.

### 3) CRITERIA FOR IDENTIFYING AT-RISK EMPLOYEES

Exposure determination is based on an employee's reasonable potential for exposure to blood or any other infectious materials they may contact during their job duties. Exposure determination shall be made without regard to personal protective equipment. OSHA requires exposure evaluations based on the potential for job-related tasks leading to exposure. The university program is designed to cover those at a higher risk of exposure by establishing high, moderate, or low-risk categories. The three categories and job classifications are as follows:

#### *Category 1-High Risk*

Procedures or jobs involving the inherent potential for contact with blood, body fluids, tissues, mucous membranes, or skin contact could transmit the HBV, HIV, or other bloodborne pathogens. Examples may include:

Physician, Registered Nurse, Clinical Aids, Research and Laboratory personnel working with human materials, Clinical Laboratory Sciences, Dental Hygiene, Athletic Trainers (student interns and coaches), Cadaver Lab personnel.

#### *Category 2-Moderate Risk*

This category has been established for those employees who do not work in situations that routinely (day to day) involve contact with infectious materials. There is, however, the potential for exposure to these mediums. Examples may include:

University Police Officers & Investigators, EHS Personnel, Custodians of High-Risk Areas, Emergency Care and Lifeguards, Microbiology, Zoology.

#### *Category 3-Minimal Risk*

This category involves no exposure to blood, body fluids, or tissues described in Category 1. Exposure is possible under certain circumstances. Examples may include:

Housing Personnel, all other Custodians, Criminal Justice, Chemistry.

## 4) WORK PRACTICE CONTROLS

The following work practice controls are used throughout campus and extensions to continually improve how tasks are performed and minimize the risk of exposure by the following:

### 1. *Hand Washing*

- a. Employees wash hands with soap and water and flush mucous membranes with water as soon as possible following contact with blood/OPIM.
- b. Employees will wash their hands with soap and water immediately after removing gloves or other PPE.
- c. Supervisors provide antiseptic hand cleansers and clean towels to workers when closed doors separate them from hand-washing facilities or when washing facilities are not within a reasonable distance from the worksite.

### 2. *Sharps*

- a. Employees discard contaminated sharps immediately after use into appropriate disposal containers located as close as possible to use areas. Contaminated sharps are not to be reused in any way.
- b. Supervisors do not permit unsafe operations on contaminated sharps, including recapping, removing, bending, or breaking needles.

### 3. *Food and Drink*

- a. Food, drink, applying cosmetics, lip balm, or handling contact lenses in locations where there is any risk of exposure is prohibited. (Application of hand cream is permitted.)
- b. Do not store food or drink in freezers, refrigerators, shelves, cabinets, or on the counter or benchtops where blood/OPIM are used or stored.
- c. Refrigerators should be labeled as to the appropriate use according to the following
  - i. "NO FOOD ALLOWED IN THIS REFRIGERATOR."
  - ii. "FOOD IS ALLOWED IN THE REFRIGERATOR."

### 4. *Pipetting Safety*

- a. No one performs mouth pipetting (suctioning) of blood/OPIM.

## 5) ENGINEERING CONTROLS

The following engineering controls are used in all biohazard areas:

### 1. *Blood Collection and Storage*

- a. Specimens of blood/OPIM are kept in leak-proof containers during collection, storage, and transport.
- b. Contaminated sharps are discarded immediately into bio waste containers.

- c. Sharps are not reused. There are *no* exceptions to this policy.
- d. Promotion and use of needle-less health care delivery systems are used where available. Sharps containers are located in areas of use, easily accessible, kept upright throughout use, and replaced when full. Containers are not overfilled.
- e. Supervisors or their designated personnel routinely inspect and decontaminate, if necessary, equipment that could become contaminated by blood/OPIM.
- f. Equipment is inspected and decontaminated prior to repair or shipment. If it cannot be decontaminated, the equipment is labeled to indicate which portions remain contaminated. This information is conveyed to employees, servicing personnel, and/or the manufacturer to take appropriate precautions.

### 6) **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Employees use PPE when engineering and work practice controls do not eliminate occupational exposure. Supervisors make PPE available to employees and enforce its use whenever needed.

This equipment includes, but is not limited to:

#### 1. *Protective eyewear.*

- a. Safety Glasses.
- b. Goggles.
- c. Mask.
- d. Face Shields.

Protective eyewear is required during laboratory operations that have the potential for generating splashes or aerosol droplets. Departments will ensure that all PPE is appropriate and that all needed sizes are available.

#### 2. *Lab coats and uniforms.*

Laboratory coats, gowns, smocks, or uniforms must be worn while manipulating specimens, including BBP or OPIM. In addition, long pants and closed-toed shoes are required when in the laboratory.

#### 3. *Gloves.*

- a. Gloves must be worn by all personnel engaged in activities that may involve skin contact with BBP or OPIM.
- b. Gloves are required for laboratory workers with dermatitis or other lesions on the hands who may have direct or indirect contact with potentially infectious materials.
- c. Gloves should be removed before touching common equipment (phone, computer, door handles, etc.).

## 4. *Masks*

- a. Masks are to be worn whenever the risk of splashes, spray, splatter, or droplets of blood may be generated and can be reasonably anticipated

## 5. *PPE Care*

- a. The following procedures will ensure that all PPE is not contaminated and is in an appropriate condition to protect employees from potential exposure.
- b. All PPE is inspected regularly and repaired or replaced to maintain its effectiveness.
- c. Reusable PPE is cleaned and decontaminated as needed.
- d. Single-use PPE (or equipment that cannot be decontaminated) is disposed of properly.

## 7) **WORK AREA DECONTAMINATION AND REGULATED WASTE HANDLING**

To keep all worksites in potentially contaminated areas clean and sanitary, the supervisor develops and implements a decontamination schedule that includes appropriate methods of decontamination, tasks, procedures to be performed, and the names of personnel assigned to perform them. Decontamination schedules are posted in work areas.

Only trained personnel perform routine or special decontamination tasks. Therefore, members of the regular custodial staff that are not trained for such tasks do not perform decontamination tasks.

### 1. *Decontamination Procedures:*

- a. Blood and other potentially infectious materials must be handled in an area that can be readily decontaminated, such as a biosafety cabinet.
- b. The work area must be disinfected before and after handling blood, OPIM, or pathogenic microorganisms. In addition, all equipment used to contain, inoculate, or transfer hazardous organisms (droppers, media, plates, etc.) must be decontaminated.
- c. Non-laboratory personnel should not handle equipment until it has been decontaminated.
- d. All disinfectants must be Hepatitis B virucidal and prepared at an effective concentration with the appropriate contact time (1:10 solution of bleach and water for 10 minutes).

### 2. *Regulated Waste Handling*

- a. Biowaste must be placed in containers constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, and shipping.
- b. All containers must be labeled with the contents and a biohazard symbol.
- c. Before removal from the use area, waste containers must be closed to prevent spillage or protrusion.
- d. If a secondary container is used to prevent spillage, it must also be closeable, labeled, and closed prior to removal.

## 8) LABELING

- a. A biohazard warning sign incorporating the universal biohazard symbol must be posted on the access door to the laboratory work area.
- b. All human tissue, body fluid, or other potentially infectious materials must be stored in a container labeled with a biohazard symbol.
- c. Refrigerators, freezers, incubators, or other pieces of equipment where potentially infectious materials are stored or handled must also be labeled with the biohazard symbol.

## 9) TRAINING AND INFORMATION

### 1. *Initial Bloodborne Pathogen training*

- a. Initial Bloodborne Pathogen training is required at the initial assignment to tasks where occupational exposure to blood and other potentially infectious materials may occur, and a refresher is required annually.
- b. Employee training can be taken through EHS online or in person.
- c. Students in at-risk programs must also be trained. The department in which the student is at-risk is responsible for providing that training.
- d. Training must include, per OSHA Bloodborne Pathogen Standard:
  - i. Epidemiology and symptoms of bloodborne diseases.
  - ii. Modes of transmission of bloodborne pathogens.
  - iii. Weber State University Bloodborne Pathogen ECP and how to obtain a copy.
  - iv. Recognition of tasks that may involve exposure.
  - v. Use and limitations of methods to reduce exposure (engineering controls, work practices, and personal protective equipment).
  - vi. Basis of PPE selection, types, use, location, removal, handling, decontamination, and disposal of PPE.
  - vii. Hepatitis B vaccination-efficacy, safety, method of administration, benefits- (At no cost to employees with a significant risk of exposure).
  - viii. Appropriate actions to take and persons to contact in emergencies involving blood or OPIM.
  - ix. Procedures to follow when an exposure incident occurs (reporting and medical follow-up).
  - x. Evaluation and follow-up are required after an exposure incident.
  - xi. Signs, labels, and color-coding systems.

### 2. *Training records of all at-risk employees are maintained by their respective departments.*

3. *Training records include training dates and certificates of completions are available in Convergence*

Training records are kept for three years from the training session date. At-risk employees/students or their representatives may request their training records. Training records are also available to the U.S. Assistant Secretary of Labor for Occupational Safety and Health and the Administrator, Division of Occupational Safety and Health, Industrial Commission of Utah.

## 10) EXPOSURE RECORD KEEPING

1. *WSU's HR record-keeping procedures:*
  - a. Medical records are kept confidential in the Human Resources Office (HR) and are disclosed only with the employee's written consent. They are maintained for at least 30 years after the person leaves WSU employment.
  - b. WSU's HR maintains all confidential medical records of occupational exposure.
2. *Medical records include:*
  - a. Employee's name and social security number.
  - b. Employee's Hepatitis B vaccination status, including Vaccination dates.
  - c. Bloodborne Exposure Incident Information Form/Supervisor's Report of Incident.
  - d. Signed Refusal of Post-Exposure Medical Evaluation for Bloodborne Pathogen Exposure Incident if employee selects this option.
  - e. Post-exposure evaluation.
  - f. Follow-up procedures.
  - g. Copies of health care professionals' written opinions.

## 11) HEPATITIS B VACCINE

WSU makes Hepatitis B vaccinations available to all employees whose job assignments involve significant exposure risk. Prior to the offer of vaccination, WSU gives the employee information on the vaccine's efficacy, safety, method of administration, and benefits.

1. *The vaccine is given free of charge to all employees at moderate or significant risk.*
2. *The vaccine is offered within ten working days of the employee's initial assignment to an at-risk position unless the employee:*
  - a. Has previously received the series.
  - b. Is, as indicated by medical testing, immune.
  - c. Employees who initially decline the hepatitis B vaccine must sign waiver of vaccination section of the WSU's Vaccine Acceptance/Waiver form. A copy of the form is included in the employee's confidential record.
  - d. The employee's confidential record includes the dates of all Hepatitis B vaccinations.
  - e. WSU offers booster doses of the Hepatitis B vaccine, titer, or a complete re-vaccination series-when recommended by CDC/NIH.



## 12) POST-EXPOSURE EVALUATION AND FOLLOW-UP

The OSHA standard requires medical follow-up of personnel after exposure. At no cost to the employee, the employer provides confidential medical evaluation and treatment by a health care professional.

### 1. *The Health Care Professional (HCP) Role—in Evaluating and Treating Blood Exposure Incidents:*

- a. At WSU's expense, licensed physicians or other licensed HCPs evaluate and follow up with exposed individuals.
- b. CDC recommends that medical evaluation and treatment by a licensed HCP take place within two (2) hours after exposure.
- c. The exposed employee has the right to refuse to test. However, if the employee consents to blood collection but not HIV testing, the blood is kept for 90 calendar days. During the 90 days that the lab is holding onto the blood, the employee may elect to have that blood tested.
- d. The exposed employee is informed of the source individual's blood test results and applicable disclosure laws and regulations concerning the source's identity and infectious status.
- e. Collection/testing of the employee's blood may be repeated later-with the employee's consent-when the medical authority advises this procedure.
- f. At no charge to the exposed employee, the HCP provides counseling and evaluation of any reported symptoms.

### 2. *Information Provided to The Health Care Professional:*

- a. WSU provides the HCP with the following information when requested: A copy of the OSHA Bloodborne Pathogen Standard if the HCP does not have a copy.
- b. Results of the source's blood tests, if available.
- c. All relevant medical records, including vaccination status.
- d. Current copies of the State of Utah Risk Management Guidelines for Post-Exposure Prophylaxis and Medical Follow-up Procedures, if the HCP does not have post-exposure follow-up procedures that comply with CDC guidelines.

### 3. *Health Care Professional's Written Opinion*

Within 15 days after receiving the HCP's written opinion, WSU provides the employee with a copy of the opinion unless the employee's signature is on the report and the HCP has confirmed that the employee has already received a copy. The opinion, maintained in the employee's confidential medical record, includes only the following:

- a. Documentation determining whether the Hepatitis B vaccination is recommended for the exposed employee and whether vaccination was administered by HCP.
- b. A statement that the exposed employee was informed of the evaluation results.

- c. A statement the employee was informed of any exposure-related medical conditions requiring further evaluation and treatment. The written opinion does *not* include findings or diagnoses, which remain confidential.

#### *4. Exposure Incident Evaluation Plan.*

The WSU IBC reviews exposure incidents biannually and recommends methods to the Departmental Responsible Person to prevent future similar incidents. The committee also reviews past recommendations to ensure that previous recommendations were implemented.

- a. Supervisors of exposed employees perform the following tasks:
  - i. Completes Supervisors Report of Incident.
  - ii. Suggests procedural changes to avoid future incidents.
  - iii. Documents on how such changes should be implemented.

#### *5. Supervisors may request assistance with post-exposure evaluations from WSU's EHS or IBC.*

- a. Employees must give specific written consent for EHS to allow another individual to see the record.

#### *6. Exposure incident evaluation procedures*

- a. WSU requires departmental responsible persons to document every exposure using the Supervisor's Report of Incident.
- b. Documentation includes:
  - i. Name of the exposed individual.
  - ii. Name of the source individual.
  - iii. Description of how the exposure occurred.
  - iv. Date and time of the incident.
  - v. Recommendations for preventing similar exposures
- c. The supervisor forwards a copy of the Supervisor's Report of Incident to HR to be filed in the exposed employee's medical record.

### 13) APPENDIX A: Definitions

Appropriate Containers: Red bags, labeled boxes, and red sharps containers.

Blood: Human Components, and products made from humans.

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

CDC/NIH: Acronym for the U.S. Department of Health's Center for Disease Control and Prevention and National Institutes of Health, federal authors of standard practices and policies related to the prevention of bloodborne diseases.

Contaminated: The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Laundry: Laundry that has been soiled with blood or other potentially infectious materials or may contain sharps.

Contaminated Sharps: Any contaminated object that can penetrate the skin, including but not limited to needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination: The use of physical or chemical means to remove, inactivate or destroy bloodborne pathogens so a surface or item is rendered safe for handling, use, or disposal.

Departmental Responsible Person: The person designated by the department chair or director to annually update department-specific information in Appendix A of this ECP and ensure compliance with the ECP and standard within the department or campus unit.

Engineering Control: Container or implements (equipment) that isolates or removes the bloodborne pathogens hazard from the workplace (e.g., sharps disposal containers, self-sheathing needles).

EHS: Environmental Health and Safety Office, under the direction of the Department of Public Safety. The mission of EHS is to support and promote a culture of safety, environmental protection, and compliance at Weber State University by providing leadership in the identification and management of safety, health, and environmental risk.

Exposure Incident: A specific contact of the eye, mucous membrane, or non-intact skin or parenteral contact with blood/OPIM during the performance of assigned duty.

Hepatitis B Virus (HBV): A virus that causes hepatitis (inflammation of the liver). It is carried and passed to others through blood and other body fluids.

Health Care Professional (HCP): Refers to all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including body substances (e.g., blood, tissue, and specific body fluids); contaminated medical supplies, devices, and equipment; contaminated environmental surfaces; or contaminated air.

Human Immunodeficiency Virus (HIV): is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome).

Infectious Waste: Any waste which has the potential to cause an infectious disease.

Occupational Exposure: Reasonably anticipated job-related skin, eye, mucous membrane, or parenteral contact with blood/OPIM.

Other Potentially Infectious Materials (OPIM): Human body fluids, which include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva, and body fluid that is visibly contaminated with blood, and all body fluid in situations where it is difficult or impossible to differentiate between body fluids. It also includes 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-of HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV and HBV

Parenteral: Piercing mucous membranes or the skin barrier through needle sticks, human bites, cuts, and abrasions.

Personal Protective Equipment: Specialized clothing or equipment worn by an employee for protection against a hazard. Street clothes are not adequate alone to protect against hazards and are not considered personal protective equipment.

Regulated Waste: 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.

Sharps: Any object that can penetrate the skin, including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, etc.

Source Individual: Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the faculty or student.

Sterilization: The use of a physical or chemical procedure to destroy all microbial life, including highly resistant bacterial endospores.

Supervisor: Any WSU employee responsible for assigning and directing another employee's work and assessing work performance.

Universal Precautions: A concept promulgated by CDC/NIH, whereby *all* human blood/OPIM—*regardless of source*—and items contaminated by or derived from blood/OPIM must be handled as though they were infectious.

Work Practice Control: Controls that reduce the likelihood of exposure by altering how a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).