

**Prevention of Exposure to Human Blood
And Other Potentially Infectious Human Materials**

Departmental Exposure Control Plan

Department: _____

Date Prepared: _____

Review by Employee with direct work activity or patient care

Employee Name: _____

Date Reviewed: _____

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Introduction

Western Washington University is required to comply with the Washington Department of Labor and Industries bloodborne pathogen's regulations found in the Washington Administrative Code, Part 296-823.

The University's written bloodborne pathogens plan is in Section 12 of the Safety Information Book. It contains the University's policy and procedures

Exposure Control Plan Requirements

The bloodborne pathogens regulation requires that a written exposure control plan be prepared if employees have reasonably anticipated duties that may result in occupational exposure. Documentation of a solicited consultation with a non-managerial employee who is responsible for direct patient care (or direct laboratory work) shall be included in the exposure control plan. This is due to the potential of exposure to injuries from contaminated sharps during the identification, evaluation, and selection of effective engineering and work practice controls.

Each department head or center director shall be responsible to have an exposure control plan if one or more employees or a student under his or her authority has a potential for an occupational or academic-related exposure.

The exposure control plan shall be maintained in the department and shall be available to employees and students. A copy shall be in the Environmental Health and Safety office. It shall consist of three parts:

- (1) Exposure determination - identification and documentation of all job classifications with occupational exposure, without regard to the use of personal protective equipment, and
- (2) The schedule and method of implementation of each applicable part of the bloodborne pathogens regulations,
- (3) The procedure for evaluation of circumstances surrounding an exposure incident.

This document is a suggested format for preparation of a departmental exposure control plan. The plan shall be reviewed and updated at least annually by departments to reflect significant changes in tasks or procedures and new or revised employee positions which effect occupational exposure. The review and update of such plans shall also reflect the following:

1. The inclusion of changes in technology that can eliminate or reduce exposure to bloodborne pathogens; and
2. Annual documentation, consideration, and implementation of relevant commercially available medical devices designed to eliminate or minimize occupational exposure.

Human Immunodeficiency Virus (HIV) And Hepatitis B Virus (HBV) Research Laboratories And Production Facilities

HIV and HBV research laboratories and production facilities are regulated under the bloodborne pathogens standard more stringently than other uses of human blood and infectious human materials. No use of such facilities is permitted at the University. Contact the Environmental Health and Safety office prior to research or production work.

Universal Precautions

Universal precautions shall be observed to prevent contact with blood and other potentially infectious materials.

Universal precautions is a method of exposure control in which all human blood and other related human or human-derived materials shown on Table 12-1 are treated as if known to be infectious for human immunodeficiency virus (HIV), hepatitis B virus (HBV) and other bloodborne pathogens.

Schedule and Method of Implementation. Universal precautions shall be implemented immediately. The method of implementation shall be to follow the work practice controls for all work

involving infectious human materials, and to provide training and personal protective equipment as described in the exposure control plan. Any exceptions to the use of universal precautions are described later in this plan.

Work Practice Controls

The following summarizes the specific requirements for handling potentially infectious human materials:

- Hands shall be washed immediately or as soon as possible after removal of gloves or other personal protective equipment and after hand contact with blood or other potentially infectious materials. Flush all contacted mucous membranes thoroughly with water.
- All personal protective equipment shall be removed immediately upon leaving the work area or laboratory or as soon as possible if overtly contaminated. Such equipment shall be placed in an appropriately designated area or container for storage, washing, decontamination, or disposal.
- Used needles or other sharps shall not be sheared, bent, broken, recapped, or re-sheathed by hand. Used needles shall not be removed from disposable syringes.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is potential for occupational or student exposure.
- Food and drink shall not be stored in refrigerators, freezers, or cabinets where blood or other potentially infectious materials are stored or in areas of possible contamination.
- All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, and aerosolization of these substances.
- Mouth pipetting or mouth suctioning is prohibited.

Laboratories. Laboratory work involving potentially infectious human materials is to be performed in compliance with Biosafety Level 2 containment and practices as described in Biosafety in Microbiological and Biomedical Laboratories. (CDC/NIH). Refer to Appendix 12-A of Procedures for Exposure to Human Blood and Other Potentially Infectious Human Material.

Schedule and Method of Implementation. Work practice controls shall be implemented immediately. The method of implementation will be: (1) evaluation of existing practices for compliance with the above procedures and (2) modification of non-complying procedures to ensure compliance.

Engineering Controls

Facilities and equipment, including biological safety cabinets, safety eyewashes, and safety showers are inspected.

Schedule and Method of Implementation. The chemical fume hoods used in containment of potentially infectious human materials are inspected by the Facilities Management Department on a regular schedule described in their departmental procedures. The Facilities Management Department also inspects chemical fume hood fan systems and ducts on a regular schedule provided in their departmental procedures.

If biological safety cabinets (tissue culture hoods) are used to contain potentially infectious human materials, they are certified when installed, whenever they are moved, and annually. Certification shall be the responsibility of the department head. Certification shall be in accordance with National Sanitation Foundation Standard Number 49.

Personal Protective Equipment

The department head shall ensure that appropriate personal protective equipment is provided to each affected employee or student whenever there is a potential for occupational or academic exposure to human blood or other potentially infectious materials.

This activity may be delegated to supervisors and faculty members. Examples of such equipment include

gloves, gowns, fluid-proof aprons, laboratory coats, head and foot coverings, face shields, masks, eye protection, resuscitation bags, pocket masks, or other ventilation devices.

The department head, either directly or through supervisors or faculty members, shall ensure that each employee or student **USES** personal protective equipment whenever warranted. Protective equipment shall be available in the work or laboratory area or shall be issued to employees or students in appropriate sizes. Hypoallergenic gloves shall be readily accessible to those allergic to the normal gloves provided.

The supervisor shall provide for the cleaning, laundering, or disposal of all personal protective equipment. He or she shall also repair or replace required personal protective equipment as needed to maintain its effectiveness.

Gloves. Gloves shall be worn when direct skin contact with blood or other potentially infectious materials, with mucous membranes, or with non-intact skin is possible. They shall also be worn when handling items or surfaces soiled with blood. Disposable (single use) gloves shall be replaced as soon as possible when soiled, torn, punctured, or their ability to function as a barrier is compromised. They shall not be washed or disinfected for reuse.

Utility gloves may be disinfected for re-use only if the integrity of the glove is not compromised. They must be discarded if they are cracked, peeling, discolored, torn, punctured, or show any deterioration.

Masks, Eye Protection, Face Protection. Masks and eye protection or chin-length face shields shall be worn if blood or potentially infectious material use may result in a splash, spray, or spatter, or may form droplets or aerosols. They must also be worn if there is a potential for eye, nose, or mouth contamination.

Protective Body Clothing. Protective clothing, such as gowns, laboratory coats, aprons, or other clothing shall be worn when there is a potential for soiling clothes with blood or other potentially infectious human material. Fluid-resistant clothing shall be worn if there is a potential for spraying or splashing with such materials; however, if the materials may soak clothing, fluid-proof clothing shall be worn. Caps and boots shall be used if the head or shoes may become contaminated.

Schedule and Method of Implementation. The department head shall initiate the procurement and use of personal protective equipment immediately. Personal protective equipment use is described later in this document. The method of implementation shall be:

- (1) Making equipment available;
- (2) Ensuring its use through periodic checks by the supervisors, faculty members, or other departmental personnel;
- (3) Ensuring that personal protective equipment is cleaned regularly or disposed of properly; and
- (4) Ensuring that equipment is repaired or replaced as needed.

Housekeeping

The work or laboratory area shall be maintained in a clean and sanitary condition. All equipment, environmental surfaces, and work surfaces shall be properly cleaned and disinfected after contact with blood or other potentially infectious material. Work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures, when surfaces are overtly contaminated, immediately after a spill of blood, and at the end of the work shift.

Protective coverings such as plastic wrap, aluminum foil, or plastic-backed absorbent paper, may be used to cover equipment and surfaces. The covering shall be removed and replaced at the end of a work shift or if overtly contaminated.

Equipment, which may become contaminated with blood or other potentially infectious human material, shall be checked routinely and shall be decontaminated prior to servicing or shipping.

All receptacles which may become contaminated with blood or other potentially infectious materials and which are intended for reuse such as bins, cans, and pails, shall be inspected, cleaned, and disinfected on a regularly scheduled basis. They shall also be cleaned and disinfected as soon as possible after visible contamination. Other contaminated, reusable items shall be decontaminated prior to washing or reprocessing.

Broken glass, which may be contaminated, shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dustpan, a vacuum cleaner, tongs, cotton swabs, or forceps.

Schedule and Method of Implementation. Custodial staff routinely cleans environmental surfaces. The schedule and method of implementation are presented in the Facilities Management or Housing and Dining departmental procedures.

The routine cleaning of work surfaces and equipment is under the purview of the department head, as is cleaning and disinfection of equipment, environmental surfaces, and work surfaces which have been in contact with human blood or other potentially infectious materials.

Chemical disinfectants are summarized in Table 12-2 with their use parameters, applications, and the organisms for which they are effective. Any of the disinfectants listed are effective for bloodborne pathogens. Purchased disinfectants are recommended for use if their parameters meet those described. If other materials are used, they are to be listed in the attached specific departmental information.

Storage and Transportation of Potentially Infectious Human Materials

Specimens of blood or other potentially infectious materials shall be placed in a closeable, leak-proof container. The container shall be labeled with the biohazard symbol or color-coded red (orange) as an infectious hazard prior to being stored or transported.

If contamination of the outside of the container is likely, a second, leak-proof container (also labeled or color-coded) shall be placed over the outside of the first and closed to prevent leakage during handling, storage, or transport. Any materials, which may puncture a container, must be placed in a puncture-resistant container, which also conforms to the above specifications.

Schedule and Method of Implementation. Storage and transportation safety controls shall be implemented immediately. The method of implementation will be: (1) evaluation of existing practices for compliance with the above procedures and (2) modification of non-complying procedures to ensure compliance.

Disposal of Potentially Infectious Human Materials

All wastes contaminated with human infectious materials destined for disposal shall be placed in closable, leak-proof containers or bags that are labeled with the biohazard symbol or are red (orange). If contamination of the outside of the container is likely, it shall be over-bagged as described above under transportation. Disposal shall be in accordance with applicable federal, state, and municipal regulations.

Sharps Disposal. Sharps contaminated with blood shall be disposed of immediately after use in closable, puncture resistant, disposable containers that are leak-proof on the sides and bottom. The containers shall be red or labeled with the biohazard symbol. They shall be easily accessible to personnel and located in the immediate area of use. They must not be allowed to overfill, and must be replaced routinely.

Schedule and Method of Implementation. Human infectious waste disposal and sharps disposal safety controls shall be implemented immediately. The method of implementation will be: (1) evaluation of existing practices for compliance with the above procedures and (2) modification of non-complying procedures to ensure compliance.

Laundry

Laundry that is contaminated shall be handled as little as possible and with a minimum of agitation. Contaminated laundry shall be bagged at the location where it was used. It shall not be sorted or rinsed in any patient-care area. Bags for contaminated laundry shall contain the biohazard symbol or be red (orange). If the laundry is wet or may soak through the bag, the bag shall be leak-proof.

Overtly contaminated laundry is not provided directly to a laundry service. It is disinfected or sterilized in or near the work area prior to submission for cleaning. Contaminated sharps shall never be included with laundry. Contaminated laundry is NEVER washed with an individual's personal belongings or sent to a laundry service not aware of the hazards.

Schedule and Method of Implementation. For departments with laundry limited to contaminated personal protective equipment, the laundry implementation is described in the department-specific procedures for personal protective equipment.

If a department has other laundry, it is described in the departmental-specific section for laundry, other than personal protective equipment. Laundry safety controls shall be implemented immediately. The method of implementation will be: (1) evaluation of existing practices for compliance with the above procedures and (2) modification of non-complying procedures to ensure compliance.

Hepatitis B Virus (HBV) Vaccination

HBV vaccination shall be offered to all employees or students (except as described in the policy) who may be occupationally or academically exposed to blood. Exceptions are if the employee or student has had a previous HBV vaccination or if antibody testing indicates that the employee or student is immune. The employee or student may initially decline the vaccination by signing the declination section in Table 12-3. This does not preclude the employee from accepting the vaccination at a later time. If booster dose(s) are recommended in the future, they shall be provided according to standard medical practices.

HBV antibody testing shall be made available to an employee or student who desires such testing prior to deciding whether or not to receive HBV vaccination. If the employee or student is immune to HBV because of an adequate antibody titer, then the University is not required to offer vaccine.

Schedule and Method of Implementation. A vaccination program shall be implemented immediately. The method of implementation will be:

- (1) Evaluation of existing personnel with reasonably anticipated occupational exposure for vaccination status;
- (2) Offering of vaccination to applicable personnel; and
- (3) Maintaining appropriate medical records (refer to Table 12-3, vaccination form).

Post-Exposure Evaluation and Follow-Up

Following a report of an occupational exposure incident, the University shall provide a confidential medical evaluation and follow-up through the workers' compensation program. Students will receive medical follow-up at Student Health Services.

The department head shall ensure that the route(s) of exposure for the incident are documented, along with the HBV and HIV status of the source material(s) if known, and the circumstances under which the exposure occurred. If the source of the material can be determined and permission obtained, the source person's blood shall be collected and tested to determine the presence of HBV and HIV infection.

Blood samples should be collected from the exposed employee or student as soon as possible after the incident for determination of HIV and/or HBV status, although actual testing may be performed at a later date at the employee's or student's request. The medical follow-up program for the exposed employee or student shall include antibody or antigen testing, counseling, illness reporting, and safe and effective post-exposure prophylaxis according to standard medical practice.

The Environmental Health and Safety office is notified regarding workers' compensation. All incidents are monitored by the Health and Safety Committee; however, in keeping with confidentiality issues, the names of persons involved in the incident are omitted from the report.

The department head shall ensure that the following information is supplied to the evaluating physician:

- (1) A copy of the bloodborne pathogens regulations; and
- (2) A description of the affected employee's or student's duties as they relate to the exposure. The department head shall obtain and provide the affected employee or student with copy of the evaluating physician's written opinion within 15 working days of the completion of the evaluation.

The physician's opinion shall be limited to the following information:

- (1) The physician's recommended limitations upon the employee's or student's ability to receive hepatitis B vaccination;
- (2) A statement that the employee or student has been informed of the results of the medical evaluation and that the individual has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation and treatment; and
- (3) Specific findings or diagnoses, which are related to the individual's ability to receive HBV vaccination. Any other finding shall remain confidential. Refer to Tables 12-4 and 12-5 for forms relating to this information.

Schedule and Method of Implementation. The department head shall implement the protocols described above for any incident involving exposure to human blood or other human infectious materials.

Medical Records

Medical records for each employee shall be kept for the duration of employment plus 30 years in the Environmental Health and Safety office. They shall remain confidential. They shall include the hepatitis B vaccination records, physical examinations, medical testing, and follow-up procedures relating to the employee's ability to receive vaccination or to post-exposure evaluation following an incident. They shall include the information in Tables 12-4 and 12-5.

Schedule and Method of Implementation. The department head shall ensure that any medical records for any individual shall be sent to the Environmental Health and Safety office for permanent filing.

Signs and Labels

Labels displaying the biohazard symbol (in orange) are required on containers of blood-related wastes which are not placed in red (orange) bags, refrigerators and freezers containing blood, and other containers used to store or transport blood or other potentially infectious human materials.

Schedule and Method of Implementation. The department head shall ensure, either through inspection or by direction of supervisory staff that appropriate labels are in place. The Environmental Health and Safety office has biohazard labels available.

Training

Training for compliance with the bloodborne pathogens regulations is required at the time of initial employment, classroom assignment, or research assignment and at least annually thereafter. Training shall include all items shown in the Bloodborne Pathogens part (Section 12) of the Safety Information Book.

Training records shall include the date of each session, the content or a summary of the session, the names of persons conducting the training session, and the names of all persons attending the training session. The records shall be kept for five years. They shall be provided on request for examination and copying to employees/affected students and their representatives.

Exposure Determination

This departmental exposure control plan shall include identification and documentation of all job classifications, classroom assignments, and research assignments within the department with occupational exposure to human blood or other infectious materials, which are regulated under the bloodborne pathogens program. The exposure determination shall be made without consideration of personal protective equipment.

Schedule and Method of Implementation. The department head shall provide a list of all job classifications, classroom assignments, and research assignments within the department with occupational exposure as follows:

1. Job classifications in which all employees have occupational exposure
2. Job classifications in which some employees have occupational exposure. In conjunction with these classifications, a list of tasks and procedures or groups of tasks in which occupational exposure might occur shall be prepared.

The exposure determination shall be performed immediately. The format for listing is provided later in this text. In keeping with University policy, students are included in this listing.

Sharps Injury Log

The supervisor or faculty member shall establish and maintain a Sharps Injury Log. All percutaneous injuries from contaminated sharps are to be recorded in the log. The log shall be designed and maintained in a manner such that the confidentiality of the injured employee is retained. At a minimum the sharps log shall contain:

- 1) The type and brand of the device involved in the incident.
- 2) The department or work area where the incident occurred.

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Department _____ Department Safety Representative _____

INSTRUCTIONS: Use this form or provide information requested separately.

Universal Precautions

- Universal Precautions are ALWAYS used.
 Exception(s) to Universal Precautions are as follows:

Departmental Engineering Controls

- No engineering controls are used when handling infectious human materials
 Chemical fume hood(s) is (are) present and used in the following rooms:

- Special engineering controls are present.

Provide the schedule of inspection and method of implementation for them:

Departmental Cleaning/Disinfecting Agents

List cleaning/disinfecting agents:

- No cleaning or disinfecting agents are used

Departmental Laundry Not Applicable

List types of laundry (laboratory coats, gowns, sheets) cleaned by the Department

Cleaning Of Laundry. Laundry is cleaned by the _____ laundry service. Overtly contaminated clothing is never placed in the normal laundry, but is disinfected or sterilized in the work area or placed in a red (orange) bag and handled separately.

Describe the procedure for laundry overtly contaminated with human blood or if contaminated sharps are present and the schedule and method of protecting from exposure. Not Applicable

Departmental Personal Protective Equipment

Instructions: Prepare information for each separate area, laboratory, or group of employees covered by the bloodborne pathogens regulations. If protective equipment is identical, multiple areas may be grouped together.

Identifier _____ Location (Building and Room, as possible) _____

Describe Category(ies) or List Employees/Students _____

Check personal protective equipment provided:

- Disposable gloves: Vinyl Latex Nitrile
 Reusable gloves: Type _____
 Hypoallergenic gloves
 Gowns: Disposable Reusable

- Laboratory Coats Disposable Reusable
- Fluid-proof aprons Disposable Reusable
- Head covers Disposable Reusable
- Foot covers Disposable Reusable
- Face shield
- Safety glasses
- Safety goggles
- Face masks
- Protective mouthpieces for emergency first aid
- Protective resuscitation bags for emergency first aid
- Protective pocket masks for emergency first aid
- Other protective ventilation devices for emergency first aid
- Other protective equipment describe: _____

Describe Use Of Personal Protective Equipment Listed Above:

- Worn when handling infectious human materials. List specifics below or attach a separate sheet.

Departmental Equipment/Material Cleaning And Disposal

Identifier _____

Describe cleaning and disinfecting of re-usable personal protective equipment, other than laundry.

Describe procedures for discarding disposable gloves, masks, aprons, and other personal protective equipment.

- In red or orange bag or bag with biohazard symbol, transported in secondary containment, and autoclaved at the following building/room _____.
- Records of sterilizer performance are maintained in the department.
- In labeled waste container. Disposal through _____ medical waste service.
- Records of each service call are maintained in the department.

List other procedure:

Departmental Sharps Disposal Not Applicable

- Sharps are disposed of in a rigid, impermeable, labeled sharps container. The container is disposed of: _____ by autoclaving as above or _____ by _____ disposal company
- Other procedure: _____

Biological Safety Cabinet & Certification Information

- Not Applicable. Biological Safety Cabinets ARE NOT PRESENT.
- Biological Safety Cabinets are present. *Circle* Class I II III
 Location(s): Building(s)/room(s) _____
 Biological safety cabinets are to be certified when installed, moved, and annually if biosafety level 2 organisms are used.

Departmental Exposure Determination

Document all job classifications in the department with occupational exposure to human blood or other infectious human materials, without regard to personal protective equipment. Include students, faculty, and staff. Class lists may be appended.

List of Department Job Classifications or Academic Assignments For Which All Individuals Have Occupational or Academic Exposure To Blood:

Department Job Classifications or Academic Assignments For Which Some Individuals Have Occupational or Academic Exposure To Blood:

List **Each** task, procedures, or group of closely related tasks with the potential for occupational exposure, which are performed by employees in the above list, **Some Individuals With Occupational Exposure**.
