
Athletic Training Education Program EXPOSURE CONTROL PLAN

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Exposure Control Plan

1. INTRODUCTION

1.1 Purpose

This plan is designed to eliminate employee/student exposure to bloodborne pathogens. All human blood and other potentially infectious materials (OPIM) are considered to be infectious for Human Immunodeficiency Virus (HIV), Hepatitis B virus (HBV), and other bloodborne pathogens, and will be treated as if infectious, i.e. with universal precautions. Since animal blood is not readily distinguished from human blood by appearance, this document's guidance for handling and disposal of human blood and sharps is recommended for all blood. Definitions relevant to this document are found in Appendix A.

1.2 Scope

This exposure plan is mandatory for all University of Utah employees or students in an Athletic Training Program who have a potential for occupational exposure to human blood and OPIM. This plan has been customized so that it provides specific provisions to identify and protect all personnel who may be at risk of exposure. This plan will be updated annually, and whenever there are changes in laboratory procedures that may change a worker's exposure. A copy of this plan will remain in the potential exposure areas, and will be accessible to personnel.

1.3 Policy

The Athletic Training Education Program (ATP) is committed to providing a safe and healthful environment. In pursuit of this endeavor, the following Exposure Control Plan (ECP) is provided in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

The ECP is a key document to assist in implementing and ensuring compliance with the standard, thereby protecting our employees/students. This ECP includes:

- Exposure determination
- Methods of control to prevent exposure
- Hepatitis B vaccination requirements
- Post-exposure evaluation & follow-up
- Employee training and hazard communication
- Recordkeeping
- Sharps Injury Log

Implementation of these elements of the ECP is discussed in the subsequent pages of this document.

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2. ROLES AND RESPONSIBILITIES

- 2.1 Josh Larson is responsible for the implementation of this ECP.
- 2.2 Josh Larson will maintain, review, and update this ECP at least annually, and whenever necessary to include new or modified tasks and procedures.
- 2.3 Those employees who have occupational exposure to blood or OPIM must comply with the procedures and work practices outlined in this ECP.
- 2.4 Josh Larson will maintain and provide all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard. This will include ensuring that adequate supplies of the aforementioned equipment are available in the appropriate sizes.
- 2.5 Josh Larson will be responsible for ensuring that all medical actions required are performed and that appropriate employee/student health and OSHA records are maintained.
- 2.6 Josh Larson will be responsible for training, documentation of training, and making the written ECP available to students, employees, OSHA, and NIOSH representatives.

3. EMPLOYEE EXPOSURE DETERMINATION

- 3.1 Following is a list of tasks or procedures where exposure to blood or OPIM may occur, and the names of those individuals who have real or potential exposure as a result of performing those tasks:

Task or Procedure	Employees with Real or Potential Exposure	Job Title(s)
In HPER E 203 there are minimal risks to exposure. Students may be exposed through clinical practice or education while working with other students		
Blood sugar, A1C, Cardiocheck (cholesterol)	All students and instructors	Student and Faculty

4. METHODS OF IMPLEMENTATION AND CONTROL

- 4.1 Universal Precautions

All employees will utilize universal precautions when handling blood and OPIM. For tasks in which differentiation between body fluid types is

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difficult or impossible, all body fluids will be considered potentially infectious materials.

4.2 Exposure Control Plan

Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees have an opportunity to review this plan at any time during regular hours. A copy of the plan will be located in HPER E 203 in the following location: taped to the cabinets in a folder at the back of the classroom.

4.3 Engineering Controls, Work Practices, and Personal Protective Equipment (PPE)

4.3.1 Engineering Controls. Personnel will use engineering controls whenever possible to prevent exposure. All aerosol-producing tasks (i.e. sonicating or vortex mixing), or tasks that may result in splashing or spraying, will be conducted in a certified biological safety cabinet. Other engineering controls such as sharps disposal containers, self-sheathing needles, and non-glass capillary tubes will be used as needed depending on the task being performed.

4.3.2 Work Practice Controls. Work practice controls include policies and procedures to minimize exposure, and should be used in conjunction with engineering controls. Work practice controls include hand washing, safe needle practices (no recapping), no eating or drinking in the lab, and no mouth pipetting.

4.3.3 Personal Protective Equipment. PPE will be used to prevent or minimize exposure to bloodborne pathogens, but should only be used when exposure remains after all reasonable engineering controls and work practice controls are in place. PPE includes such items as gloves and lab coats. For procedures where splashing may occur (spill cleanup), eye protection and face protection (masks) must be used to prevent exposure. Face shields may be used as an alternative to the safety glasses / mask combination.

4.4 Following are the specific engineering controls and PPE that will be used by employees to minimize exposure to blood and OPIM for each task outlined in paragraph 3.1 above:

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Task # (See 3.1 Above)	Engineering Control Measures							
	Bench Top Splash Shield	Biohazard Waste Bags	Biosafety Cabinet	HEPA Vacuum Filters	Plastic Transport Containers	Self- Sheathing Needles	Non-Glass Capillary Tubes	Other (Please Specify)
Disposing of infected materials		X						
Treating a wound		X						
Finger stick					X		X	

Task # (See 3.1 Above)	Required Personal Protective Equipment									
	Lab Coat	Gloves	Safety Glasses with Side Shields	Surgical Mask	Solid Front Gown	Sleeve Covers	Booties	Respiratory Protection (Contact EHS)	Face Shield	Other (Please Specify)
All tasks	If Potential for Splash	X	If Potential for Splash							

4.5 Specific Control Measures

Sharps containers are provided in the classroom. Sharps containers must be used for all items used in the finger prick and all items that contain blood. Sharps disposal containers are inspected and maintained or replaced by Josh Larson whenever necessary to prevent overfilling.

This laboratory identifies the need for changes in engineering control and work practices through bi-weekly Athletic Training & Sports Medicine meetings.

If needles or syringes are used, we evaluate new procedures or new products regularly to improve safety by searching various vendors and asking for samples to try.

Both front line workers and management officials are involved in this process: Employees and students are involved through our bi-weekly meeting where there is an open forum to bring up any issues or potential issues in the lab.

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PPE is located in the cabinet above the sink in HPER E 203. It is labeled BSI.

All employees/students using PPE must observe the following precautions:

Wash hands immediately or as soon as feasible after removal of gloves or other PPE for at least 15 seconds.

Remove PPE after it becomes contaminated, and before leaving the work area.

Used PPE may be disposed of in the biohazard labeled trash can. If any other material is to be disposed of Josh Larson must be notified.

Wear appropriate gloves when it can be 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, contaminated, or if their ability to function as a barrier is compromised.

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. Appropriate face and eye protection consists of mask & goggles or a face shield.

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.

4.6 Housekeeping

Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see Labels), and closed prior to removal to prevent spillage or protrusion of contents during handling.

Sharps containers will be disposed of by filling out the on-line pick up request at www.ehs.utah.edu. EHS personnel will pick up full containers and replace them with empty containers.

Other regulated waste must be autoclaved before being disposed of in the municipal waste stream. Alternatively, EHS can dispose of biohazard waste for the lab. EHS can be contacted using the on-line pick up request.

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leakproof on sides and bottoms, and labeled or color-coded appropriately. Sharps disposal

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containers are available through the EHS on-line pick up request at www.ehs.utah.edu.

Bins and pails (e.g., wash or emesis basins), countertops and tables should be cleaned and decontaminated as soon as feasible after visible contamination with a freshly prepared bleach and water solution: 1 part bleach to 9 parts water (1:9 dilution of bleach) 1 part bleach to 9 parts water.

Soft tabletops should be sprayed with a disinfectant spray that is left standing for 20 minutes, and then wiped dry. If a barrier is used on the table, spray with disinfectant and wipe dry.

Broken glassware that may be contaminated is picked up using a mechanical device such as tongs, forceps, or a brush and dustpan.

If a spill occurs: stop work, change gloves. Contain the spill by covering with paper towels (to avoid splashes or aerosols). Saturate spill with 1:10 dilution of bleach. Let sit for 20 minute exposure time. Wipe up spill, disposing of towels in biohazard bag. Wipe spill area with 1:10 dilution of bleach. Wash hands.

4.7 Laundry

The following articles, if contaminated, will require laundering:

Towels, bags, hydroculator pads

The University of Utah Hospital Laundry will be used to clean contaminated clothing and other articles that require laundering.

The following laundering requirements must be met:

- Handle contaminated laundry as little as possible, with minimal agitation.
- Place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport to the University Hospital Laundry.

4.8 Labels

The universal biohazard symbol will be used to mark regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, specimen containers, and specimen transport containers. The universal biohazard symbol must be located at the entrance to all laboratory rooms where blood or OPIM is used. Red bags can be used as a substitute for bags marked with the universal biohazard symbol for regulated waste only.

Josh Larson will ensure warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into the facility.

5. Hepatitis B Vaccination

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Information on hepatitis B vaccinations, including safety, benefits, efficacy, methods of administration, and availability, will be provided to employees during annual Bloodborne Pathogens Training.

The entire hepatitis B vaccination series is required prior to being admitted in to the Athletic Training Education Program. If a health care provider requires/requests a different timeline for vaccination, this recommendation will be followed and will not prevent admittance to the program. Employees may receive the Hepatitis B vaccination series at no cost after training and within 10 days of initial assignment to employees identified in the exposure determination section of this plan (section 3.1). 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 chooses to decline vaccination, the employee must sign a declination form (see Appendix B). Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept in HPER E 208, the ATP Manager's office.

Vaccination will be coordinated and paid for through EHS, as provided by the Student Health Clinic.

Following the medical evaluation, a copy of the health care professional's written opinion will be obtained and provided to the employee. It will be limited to whether the employee requires the hepatitis vaccine, and whether the vaccine was administered.

6. Post-Exposure Evaluation and Follow-Up

Should an exposure incident occur, do the following:

Immediately wash affected areas with soap and water. If eye exposure occurred, immediately flush eyes with water for 10-15 minutes.

Notify Josh Larson and/or Lee Dibble immediately.

Go directly to any University clinic for medical evaluation and follow-up. Source blood testing will be determined by the physician.

7. Incident Reporting

A student or employee who was exposed to a blood borne pathogen or other OPIM must complete paperwork required by E-1 form for employee (www.ehs.utah.edu) and the Incident/Accident form found on the Risk Management and Insurance web page and submit to Lee Dibble or Josh Larson within 24 hours of reporting the incident. It must include the information below, and may include additional requirements:

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Identify and document the source individual (unless it is established that the source is unknown).

After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.

If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

8. Training

All employees and students with ATP will receive training annually by Josh Larson.

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 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 through Josh Larson or EHS (bldg. 605).

9. Recordkeeping

9.1 Training Records

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Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at in the ATP office and in the student's file.

The training records include: Dates of the training sessions, content of the training sessions, the name of the person(s) conducting the training, and names of all persons attending the training sessions.

Training records are provided upon request within 15 working days. Such requests should be made to Josh Larson, HPER E 208.

9.2 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." Medical records, under most circumstances, will be maintained with student/employees physician.

ATP maintains the application physical, clearance for physical activity, and vaccination record of HEP B. Other vaccination records for MMR are maintained by the University of Utah.

9.3 OSHA Recordkeeping

Human resources will evaluate all incident reports to determine if cases meet OSHA's Recordkeeping Requirements (29 CFR 1904). All percutaneous injuries from contaminated sharps are also recorded in the Sharps Injury Log (Appendix C).

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APPENDIX A

Glossary of Terms

Blood means human or non-human primate blood, blood components, and blood-based products.

Bloodborne Pathogens means pathogenic microorganisms that are present in human or non-human primate blood and can cause disease in humans. Examples include, but are not limited to, hepatitis B virus (HBV), and human immunodeficiency virus (HIV).

Clinical Laboratory means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

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

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

Contaminated Sharps means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, and broken capillary tubes.

Decontamination means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure Incident means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of job duties.

Handwashing Facilities means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

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Licensed Healthcare Professional is a person whose legally permitted scope of practice allows him or her to independently perform the activities required for Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

HBV means hepatitis B virus.

HIV means human immunodeficiency virus.

Needleless systems means a device that does not use needles for:

(1) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (2) The administration of medication or fluids; or (3) Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Occupational Exposure means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of job duties.

Other Potentially Infectious Materials means (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV; (4) All primary human and non-human primate cell explants from tissues and subsequent in vitro passages of human or primate tissue explant cultures, unless characterized by documented, reasonable laboratory testing to be free of HIV, HBV, HCV, and other bloodborne pathogens.

Parenteral means piercing mucous membranes or the skin barrier through such events as needlesticks, human/non-human primate bites, cuts, and abrasions.

Personal Protective Equipment is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

Production Facility means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

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Regulated Waste means 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.

Research Laboratory means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

Sharps with engineered sharps injury protections means a nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Source Individual means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, research participants; hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

Sterilize means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Universal Precautions refers to a method of infection control in which all human blood and other potentially infectious materials are treated as if known to be infectious for HIV and HBV. It does not apply to feces, nasal secretions, sputum, sweat, tears, urine or vomitus unless they contain visible blood.

Work Practice Controls means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

