

UNIVERSITY OF TENNESSEE AT CHATTANOOGA
ATHLETIC TRAINING/ INTERCOLLEGIATE ATHLETICS

POLICY: BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

INTRODUCTION

The OSHA Bloodborne Pathogens Standard was issued to reduce the occupational transmission of infections caused by microorganisms sometimes found in human blood and certain other potentially infectious materials. Although a variety of harmful microorganisms may be transmitted through contact with infected human blood, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV) have been shown to be responsible for infecting health care providers who were exposed to human blood and certain other body fluids containing these viruses, through routes like needle stick injuries and by direct contact of mucous membranes and non-intact skin with contaminated blood/materials, in the course of their duties. Occupational transmission of HBV occurs much more often than transmission of HIV. Although HIV is rarely transmitted following occupational exposure incidents, the lethal nature of HIV requires that all possible measures be used to prevent exposure of health care providers.

This exposure control plan has been established by the University of Tennessee at Chattanooga's Athletic Training Department in order to minimize and/or prevent exposure of our employees and students to disease-causing microorganisms transmitted through human blood, and as a means of complying with the Bloodborne Pathogens Standard. All employees and students who are exposed to blood and other potentially infectious materials as a part of their job duties (employees and work study students) or clinical education (athletic training students) are included in this program. (See Part I, Exposure Determination, for a discussion of job categories/tasks and clinical experiences that have been identified as having exposure.)

This plan will be reviewed at least annually and updated as necessary by the OSHA Compliance Committee. Copies of this plan are available (for review by any employee or ATS) in the following locations: Athletic Training Policy and Procedure Manual, Athletic Training Education Program Operational Policies Manual; Intercollegiate Athletics Policy and Procedure Manual, Athletic Director's Office, McKenzie Arena Training Room, Parkridge Rehabilitation Room, Frost Stadium Athletic Training Room, Finley Stadium Athletic Room, and the Graduate Athletic Training Office.

Components of this exposure control plan include:

- I. Exposure Determination
- II. Hepatitis B Vaccination Policy
- III. Methods of Compliance
- IV. Procedures for Evaluation Follow-up of Exposure Incidents
- V. Employee and Student Training
- VI. Recordkeeping Procedures

I. EXPOSURE DETERMINATION

For the purposes of this document, exposure is defined as a needle stick or as any skin, eye, mucous membrane, or parenteral contact that an employee or student has with blood or any of the other potentially infectious materials (OPIM) listed below, during the course of their normal job duties or clinical experiences. Exposure determination is made without regard to the use of personal protective equipment (i.e. employees and students are considered to be exposed even if they wear personal protective equipment). Employee and student positions with anticipated or possible risk of exposure are outlined below in sections A-C.

Other Potentially Infectious Materials (OPIM)

Body Fluids

- semen
- vaginal secretions
- cerebrospinal fluid
- pleural fluid
- pericardial fluid
- peritoneal fluid
- amniotic fluid
- any body fluid visibly contaminated with blood
- saliva in dental procedures
- secretions from blisters

Other Materials

- any unfixed tissue or organ from a human (living or dead)
- cell or tissue cultures, organ cultures, and culture medium containing HIV/HBV
- blood, organs, or other tissues from experimental animals infected with HIV or HBV

A. EMPLOYEE POSITIONS WITH ANTICIPATED EXPOSURE

Positions listed here have an anticipated risk of exposure due to tasks or procedures occurring in the normal performance of duties.

<u>Position</u>	<u>Tasks/Procedures Causing Risk</u>
Athletic Trainer, Full-Time Staff	Clinical and emergency care of athletic injuries, cleaning of potentially contaminated equipment and/or surfaces, handling of contaminated materials
Athletic Trainer, Faculty/ACI	Clinical and emergency care of athletic injuries, cleaning of potentially contaminated equipment and/or surfaces, handling of contaminated materials

B. EMPLOYEE POSITIONS WITH POSSIBLE EXPOSURE

Positions in which employees may have occupational exposure are included on this list. Since not all the individuals in these categories are expected to incur exposure to blood or

other potentially infectious materials, the tasks or procedures that would cause these employees to have occupational exposure are listed.

<u>Position</u>	<u>Tasks/Procedures Causing Risk</u>
Head Equipment Manager	Potentially contaminated laundry
Assistant Equipment Manager	Potentially contaminated laundry

C. STUDENT POSITIONS WITH ANTICIPATED/POSSIBLE EXPOSURE

Positions filled by students that have a risk of exposure to potentially infectious materials. Tasks or procedures that may cause exposure are listed, and an explanation of the student positions follow.

<u>Position</u>	<u>Tasks/Procedures Causing Risk</u>
Athletic Trainer, Graduate Assistants	Clinical and emergency care of athletic injuries, cleaning of potentially contaminated equipment and/or surfaces, handling of contaminated materials
Athletic Training Students	Clinical and emergency care of athletic injuries, cleaning of potentially contaminated equipment and/or surfaces, handling of contaminated materials
Work Study Students	Cleaning of potentially contaminated equipment and/or surfaces
Team Manager- Full/Part-time Students	Potentially contaminated laundry

C.1. Graduate Assistant Athletic Trainers

Graduate assistant athletic trainers will function in the same clinical capacity as staff athletic trainers. Exposure to blood or other potentially infectious materials in the course of normal job duties is to be anticipated.

C.2. Athletic Training Students and Work Study Students

Athletic Training Students are required to obtain clinical experience under the supervision of a certified athletic trainer, ACI or CI in a clinical setting, as part of the Athletic Training Education Program requirements. These experiences include the evaluation and management of athletic injuries and/or conditions involving the intercollegiate athletes. The administering of first aid and/or managing injuries and conditions, may potentially expose students to blood or other potentially infectious materials.

Work Study students who are assigned to the Athletic Training Room do not provide care of athletic injuries. However, due to the proximity of athletic injuries and assistance

with daily cleaning, these students may be exposed to bloodborne pathogens and other infectious material.

Students will receive blood-borne pathogen training annually. HBV vaccination will be required, but not reimbursed, and records of both will be kept. Exposure counseling will take place in the event of an exposure incident, in accordance with the University's policy and procedures. Documentation of annual training will be kept in the Students Clinical Folder in the ATEP administrative office. Verification of HBV vaccination or, for students who refuse to receive the HBV vaccination, the Hepatitis Waiver Form (Appendix A) will be housed in the UTC Student Health Center.

C.3. Student Equipment Managers/Team Managers

The student equipment managers assigned to intercollegiate athletic teams, under the supervision of the Head Equipment Manager, Mike Royster, are responsible for the management of team laundry, therefore, exposing them to the same potential risks as an employee.

These students will be trained, HBV vaccination will be required but not reimbursed, and records of both will be kept. Exposure counseling will take place in the event of an exposure incident, in accordance with the University's policy and procedures. Records for the students will be housed in a secure place in the McKenzie Arena Athletic Equipment Office, and in accordance with the recordkeeping procedure established by the University. Students who refuse to receive the HBV vaccination will be required to sign the Hepatitis Waiver Form (Appendix A)

II. VACCINATION POLICY

Employees and Students will be informed during the annual OSHA training about the HBV Vaccination policy (including epidemiology, modes of transmission, signs and symptoms, and policies for personal protection against HBV). Employees will have the opportunity to have the vaccination at no expense to them, but students (graduate assistants and athletic training students) must pay for the vaccination themselves. The HBV vaccine must be re-administered every ten years to remain effective. Records of employee vaccination will be kept in the office of the Head Athletic Trainer. It is the responsibility of both the employer (UTC) and the employee to make certain vaccination is current. If either the employee or student refuses to get the HBV Vaccination, he/she must sign and date the Hepatitis B Vaccine Declination (Appendix A), along with a witness.

Employees and students must also have been vaccinated against Tetanus and Varicella Zoster (Chicken Pox). In cases where the individual has already had Chicken Pox, only the Tetanus vaccine will be required. If either the employee or student refuses to get the Tetanus or Varicella Zoster Vaccination, he/she must sign and date the Tetanus and/or Varicella Zoster Vaccine Declination (Appendix A), along with a witness.

III. METHODS OF COMPLIANCE

A. UNIVERSAL PRECAUTIONS

All blood or other potentially infectious materials as described in section I, Exposure Determination, shall be handled as if contaminated by a bloodborne pathogen. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

The Intercollegiate Athletic Department will follow Universal Precautions, as described by the Centers for Disease Control. NCAA Policy No. 20: Aids and Intercollegiate Athletics will also be made available for review.

B. ENGINEERING AND CLINICAL PRACTICE CONTROLS

Engineering and clinical practice controls shall be used to eliminate or minimize employee and student exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used. The following engineering controls will be utilized:

1. Hand Washing Techniques
2. Regulated Waste - Non-Sharps
3. Regulated Waste - Sharps
4. Precautions in Handling Specimens
5. Management of Contaminated Instruments/Equipment
6. Whirlpool Cleaning
7. Personal Protective Equipment
8. Housekeeping (Environmental and Working Surfaces)
9. Laundry
10. Communication of Hazards to Employees, Students, Managers, and Athletes

The above controls will be maintained or replaced on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows:

Supervisors will report inadequacies to the OSHA Compliance Committee consisting of MacKenzie McDonald, Assistant Athletic Trainer, Robert Baudier, Coordinator of Clinical Placement, and Todd Bullard, Head Athletic Trainer, who will review, correct and/or up-date as necessary. The entire policy and procedures will be reviewed annually by the OSHA Compliance Committee.

1. Hand Washing and Other General Hygiene Measures

Hand washing is a primary infection control measure, protecting both the employee and the patient. Employees and students will wash their hands using soap and water whenever they have become contaminated and as soon as possible after removing gloves or other personal protective equipment. If soap and water are not available, a waterless cleanser may be used. When other skin areas or mucous membranes come in contact with blood or other potentially infectious materials, the skin will be washed with soap and water, and the mucous membranes shall be flushed with water, as soon as possible.

Hand washing facilities are located inside the McKenzie Arena Athletic Training Room, Parkridge Rehabilitation Room, Finley Stadium Athletic Training Room, and McKenzie Arena Athletic Equipment Room. Hand washing facilities for Maclellan Gymnasium and Frost Stadium are located inside the restrooms and near the locker rooms, respectively.

Employees and students should wash hands between patients, before and after contact with open wounds or lesions, after removing gloves, or in any other instance where contact has occurred/may have occurred with any potentially infectious materials.

Employees and students should observe the following rules for proper hand washing:

- Vigorously lather hands using soap and rub together for at least 15 seconds under a moderate stream of water at a comfortable temperature.
- Rinse hands well with finger tips down and dry hands with paper towel.
- Use paper towel to turn faucets off. (will help prevent contamination of "clean" areas)

A waterless cleaner will be available to all employees and students for use when functioning in areas where a hand washing facility is not available.

Eating, drinking, tobacco use, applying cosmetics or lip balm, and handling contact lenses are prohibited in the UTC Athletic Training Room or other clinical areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials.

Food and drink will not be kept in refrigerators, freezers, shelves, cabinets or on countertops or bench tops where blood or other potentially infectious materials are present.

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

2. Regulated Waste (Non-sharps)

The substances listed below must be placed in containers which are: closable, constructed to contain all contents, and able to prevent leakage of fluids during handling, storage, transport or shipping.

- liquid or semi-liquid blood or other potentially infectious materials;
- gloves that have come into contact with blood or OPIM
- contaminated items that would release blood or OPIM in a liquid or semi- liquid state if compressed; (band-aids, steri-strips, telpha pads, gauze, etc.)
- items that are capable of releasing these materials during handling;
- pathological and microbiological wastes containing blood or other potentially infectious materials.

In the athletic training rooms and the physician's office, red biohazard bags will be placed in trash receptacles with a foot controlled lid and red biohazard bags will be placed in each field kit so as to accommodate non-sharp regulated waste on the playing fields and courts. Regulated waste that has been decontaminated need not be labeled or color-coded.

3. Regulated Waste - Sharps

Contaminated needles shall not be bent, recapped, or removed. Shearing or breaking of contaminated needles is prohibited. Syringes will not be bent, broken, or disassembled before disposal. Contaminated needles, scalpels, and syringes are to be disposed of in an approved sharps container.

Contaminated broken glass is also to be placed in disposable sharps containers. When cleaning up broken glass which may be contaminated, use mechanical means such as a brush, and dustpan, tongs, or forceps. DO NOT pick up directly with the hands.

Sharps containers will be closable, puncture resistant, labeled or color-coded, and leak proof on sides and bottom, and maintained upright throughout use. Containers will be located in all athletic training rooms and the physician's exam office.

Once the lid on the Sharps container is closed, it officially becomes "waste" and must be disposed of within 14 days.

Reusable containers are not to be opened, emptied, or cleaned manually or in any other manner which will expose employees to the risk of injury. DO NOT reach by hand into a container which stores reusable contaminated sharps.

Overfilling of sharps containers creates a hazard when needles protrude from openings. Close Sharps containers when 3/4 full. Then it will be disposed of in the proper manner.

When disposal of waste or sharps container becomes necessary, please call Jim Pulliam, Manager of UTC Safety and Risk Management at extension 5209, and schedule a pick up time for the materials. Also inform him of any needs for other materials such as sharps containers, biohazard bags and boxes. The biohazardous waste must be in an appropriately labeled box and that is packed and closed in accordance with the directions marked on the box. Also, ensure that the lids on all sharps containers are closed and securely fastened. The office of UTC Safety and Risk Management operates from the hours of 8:30am to 4:30pm.

4. Precautions in Handling Specimens

4.1 Collection of Blood or OPIM

Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping. The container must be closed before being stored, transported, or shipped. During the entire specimen collection process, the athletic trainer must use gloves and may need other personal protective equipment as appropriate.

4.2 Collection of Urine Samples

The UTC Intercollegiate Athletic Department has a Drug Testing Procedure in place which involves the testing of athletes through the analysis of a urine sample which is analyzed at an outside laboratory. Once the athlete has provided the specimen, an athletic trainer will collect a sample specimen, placing it in an approved container that prevents leakage during handling. The specimens are put in a sealed bag(s) which can accommodate more than one sample prior to shipping to the laboratory. The athletic trainer will use gloves during the entire collection process until the specimen is placed into the approved container. Any remaining sample in excess of that required for testing will be disposed of in either a urinal or toilet.

In accordance with the Department of Transportation, (DOT) and the National Institute of Drug Abuse (NIDA) Guidelines for handling samples, the athletic trainer serves as the specimen processor.

5. Management of Contaminated Equipment and Instruments

Assess equipment and/or instruments for contamination, and decontaminate if possible, before servicing or shipping. Equipment and/or instruments which have not been fully decontaminated must have a label attached with information about which parts remain contaminated

Sterile instruments will be wiped off with isopropyl alcohol following use and will then be bagged and marked before being taken to the Storage Room, by one of the staff athletic trainers, to be sterilized in the autoclave. .

Instrument trays will be cleaned once a week or more often if deemed necessary due to contamination. An antimicrobial solution (such as Isoquin) will be used in the trays and thermometer holders. Instruments will be wiped off with isopropyl alcohol before and after each use before being placed back into the instrument trays or thermometer holders.

Equipment (ie. splints, stretchers, oxygen equipment) will be wiped off with antimicrobial solution or discarded using the Regulated Waste - Non-Sharps Management procedure.

6. Whirlpool Cleaning

An antiviral/fungal/bacterial cleaning solution (ex. Whizzer) will be used to clean hydrotherapy equipment on a daily basis. During normal operation a water soluble, chlorinated cleaning agent (ex. Hydro-Chlor) will be used to decrease risk of contamination both during and between patient uses.

Prior to patient use, the whirlpool will be filled to operational level and the appropriate amount of cleaning agent will be dissolved into the water. When the whirlpool is emptied, the sides and bottom will be cleaned using an antiviral/fungal/bacterial cleaner.

On a weekly basis, or more frequently if needed, the antiviral/fungal/bacterial cleaning solution will be run through the agitator. The agitator will be placed in a bucket containing a mixture of the solution and the motor will be run for 10 minutes. Following this, the agitator will be rinsed by placing it in a bucket of water and running it for 5 minutes.

7. Personal Protective Equipment General Guidelines

All personal protective equipment will be provided, repaired, cleaned, and disposed of by the employer at no cost to employees. Employees shall wear personal protective equipment when doing procedures in which exposure to the skin, eyes, mouth, or other mucous membranes is anticipated. The articles to be worn will depend on the expected exposure. Various sizes will be kept on hand. Employees who have allergies to regular gloves may obtain hypoallergenic gloves.

The following items will be made available to persons providing service in the athletic training room:

- latex examination gloves
- goggles
- CPR mouth shields/masks
- face masks
- aprons
- cleaning/utility gloves

Items that will be made available to persons with duties in the athletic laundry rooms:

- cleaning/utility gloves
- aprons

If a garment is penetrated by blood or other potentially infectious material, the garment shall be removed as soon as possible and placed in a designated container for laundering or disposal. All personal protective equipment shall be removed before leaving the work area; it shall be placed in assigned containers for washing, decontamination or disposal.

7.1 Protection for Hands

Gloves shall be worn in the following situations:

- when it can be reasonably anticipated that hands will contact blood or other potentially infectious materials, mucous membranes, and non-intact skin. (blisters, lacerations, abrasions, subungual hematoma, etc.)
- when performing vascular access procedures (administering intravenous solution, if qualified)
- when handling or touching contaminated items or surfaces. (laundry, soiled bandages, gauze, etc.)
- when team physician is suturing, draining hematoma auris, managing ingrown toenails, paronychia, dermatological lesions etc.)
- when collecting specimens
- if the employee has cuts, scratches, or other breaks in the skin

Disposable Gloves

Replace as soon as feasible when gloves are contaminated, torn, punctured, or when their ability to function as a barrier is compromised. Do not wash or decontaminate single use gloves for re-use.

Utility/Cleaning Gloves

Decontaminate for re-use if the gloves are in good condition. Discard when gloves are cracked, peeling, torn, punctured or show other signs of deterioration (whenever their ability to act as a barrier is compromised).

7.2 Protection for Eyes/Nose/Mouth/Body

Employees and athletic training students shall wear masks in combination with eye protection devices (goggles or glasses with solid side shields) or chin-length face shields whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

When cleaning a potentially infectious material spill, employees or students will wear gloves.

8. Housekeeping (Environmental and Working Surfaces)

The clinical facilities will be maintained in a clean and sanitary condition. Countertops, treatment tables, rehabilitation equipment and other work surfaces will be cleaned using a disinfectant with virucidal, fungicidal, and antibacterial properties (Whizzer). Cleaning will take place in the following situations:

- after completing procedures on an individual patient
- immediately or as soon as feasible after overt contamination with of blood or OPIM
- at the end of the shift if the surface may have become contaminated since the last cleaning.

9. Laundry

Employees and students who handle contaminated laundry are to wear latex gloves and other appropriate personal protective equipment as needed. Universal precautions will be used when dealing with laundry that has come into contact with blood or OPIM

Contaminated laundry will be handled as little as possible with a minimum of agitation. It will not to be sorted or rinsed, but will be placed in a container or bag immediately. Contaminated laundry which may soak-through or cause leakage will be put in a biohazard bag to prevent soak through or leakage of fluids to the exterior.

Laundry will be cleaned in the Laundry Rooms located in the McKenzie Arena. Contaminated laundry will be washed using detergent and bleach.

10. Communication of Hazards to Employees, Athletic Training Students, Student Managers, Athletes, and Visiting Teams

Employees and students will be informed of hazards through a system utilizing red biohazard bags as well as a training program that is discussed in Section VI of this plan.

Warning labels will be easily visible on all containers of regulated waste. Labels shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color. The label is either to be an integral part of the container or affixed as close as possible to the container by a method which prevents loss or unintentional removal of the label. The label shall have the biohazard symbol and the text BIOHAZARD.

Red bags or red containers may be substituted for the warning label.

A visiting intercollegiate athletic team's athletic trainer will be have red biohazard bags and/or sharps containers, and other personal protective equipment made available to them during the course of athletic competition.

IV. PROCEDURES FOR EVALUATION AND FOLLOW-UP FOR POST-EXPOSURE

Persons who have had an exposure incident shall report the incident to either a staff Athletic Trainer, an ACI, or a member of the OSHA Compliance Committee who will then follow the procedures as stated below. All employees and students who incur an exposure will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. This follow-up will include the following:

1. Written documentation of the route of exposure and the circumstances related to the incident are to be reported as soon as possible following the exposure. This is to be returned to a member of the OSHA Compliance Committee within 48 hours.
2. The source individual will be identified, if possible. The blood of the source individual will be tested for HIV/HBV infection after consent from the source individual is obtained.
3. Results of testing of the source individual will be made available to the exposed employee or student. Exposed individuals will be informed about the applicable laws and regulations concerning disclosure of the identity and infection of the source individual.
4. The employee or student will be offered the option of having their blood collected and tested for HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee or student to decide if the blood should be tested for HIV serological status. If the employee or student decides after that time that testing will not be conducted then the blood sample will be discarded.
5. The employee or student will be offered post-exposure counseling. The employee or student will be referred to appropriate counseling centers concerning precautions to take during the period after the exposure incident. The employee or student will also be given information on what potential illness to be alert for and to report any related experiences to appropriate personnel.

The OSHA Compliance Committee will assure that the policy outlined above is effectively carried out and will maintain records related to this policy.

V. EMPLOYEE AND STUDENT TRAINING

Employees, Graduate Assistants, and Athletic Training Students will be trained regarding blood borne pathogens prior to initial assignment to tasks where exposure may occur. Additional training will be provided whenever there are changes in tasks or procedures that would affect occupational exposure.

Training will take place at least once annually. The training approach will be tailored to the educational level, literacy, and language of the employees and students. The training plan will include an opportunity for employees and students to have their questions answered by the athletic trainer who is competent in the OSHA/Blood borne Pathogen Compliance Issues. The OSHA Compliance Committee is responsible for arranging and/or conducting these trainings.

The following content must be included:

- 1.Explanation of the blood borne pathogen standard
- 2.General explanation of the epidemiology, modes of transmission and symptoms of blood borne diseases
- 3.Explanation of this exposure control plan and how it will be implemented
- 4.Procedures which may expose employees or students to blood or other potentially infectious materials

5. Control methods that will be used at this facility to prevent/reduce the risk of exposure to blood or other potentially infectious materials
6. Explanation of the basis for selection of personal protective equipment
7. Information on the hepatitis B vaccination program including the benefits and safety of vaccination
8. Information on procedures to use in an emergency involving blood or other potentially infectious materials
9. What procedure to follow if an exposure incident occurs
10. Explanation of post-exposure evaluation and follow-up procedures
11. An explanation of warning labels and/or color coding

This Exposure Control Plan was reviewed and updated by:
MacKenzie L. McDonald, Assistant Athletic Trainer

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