

ATTACHMENT C

MODEL EXPOSURE CONTROL PLAN

FOR ACADEMIC UNITS WITHIN THE UNIVERSITY OF ALABAMA

(To be completed by each Administrative Unit with students or employees at risk for academic or occupational exposure to bloodborne pathogens. Completed plans should be submitted to EHS.)

MODEL EXPOSURE CONTROL PLAN

(This is intended to be used only as a guideline in completing each individual exposure control plan)

In the interest of preventing accidental exposure to bloodborne pathogens and other infectious materials, The University of Alabama has established a policy of employee and student protection and workplace safety. This Exposure Control Plan has been prepared in accordance with The University of Alabama Bloodborne Pathogens Policy. This Plan will be the focus of annual personnel development training and new employee orientation for all affected employees.

Employees and students are urged to study all provisions of the Plan very carefully. All questions or comments should be directed to EHS (348-5905). We encourage your input and involvement in this program so that we can continue to make our workplace a safe and healthful environment for everyone. The Plan will be subject to review and revision, as needed.

I. Key Definitions

In this Plan, all references to "**occupational exposure**" will mean reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of any employee's duties whether on or off campus.

"**Student Academic Exposure**" means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the student's participation in academic assignments.

"**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.

For more definitions, consult the University of Alabama Policy on Bloodborne Pathogens.

II. Exposure Determination

Attach a copy of the Risk Appraisal Survey completed by your Administrative Unit.

III. Methods of Compliance

In all circumstances, Universal Precautions, as recommended or defined by the Centers for Disease Control (CDC), will be observed in order to prevent contact with blood and other potentially infectious materials, unless they interfere with the proper delivery of healthcare or would create a significant risk to the personal safety of the worker or student.

A. ENGINEERING CONTROLS

Wherever possible, engineering controls will be utilized to reduce potential exposure. Listed below are all controls in this Administrative Unit:

CONTROL	LOCATION	INSTALLATION DATE	MAINTENANCE DUE DATE
Handwashing facilities			
Needleless systems			
Sharps injury protection mechanism			
Containers for sharps			
Containers for infectious materials.			
Other			

_____ will be responsible for inspection and maintenance of these controls. Records will be maintained for frequency of inspection and repairs.

B. REQUIRED WORK PRACTICES (GENERAL)

1. Employees/students shall wash their hands 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.
2. All personal protective equipment must be removed immediately upon leaving the work area or as soon as possible if overtly contaminated and placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

3. Non-needle sharps and needle devices used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids must have a built in safety feature that effectively reduces the risk of an exposure incident (i.e. needle stick).
4. Used needles and other sharps may not be sheared, bent, broken, recapped or resheathed by hand. Used needles may not be removed from disposable syringes. Recapping is permitted only if no other alternative is feasible and must be done using an approved mechanical device or one-handed technique.
5. Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses are prohibited in work areas where there is a potential for occupational exposure.
6. 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.
7. All procedures involving blood or other potentially infectious materials will be done in a manner which minimizes splashing, spraying, and aerosolization of these substances.
8. Mouth pipetting/suctioning is prohibited.
9. If conditions are such that handwashing facilities are not available, antiseptic hand cleaners are to be used. Because this is an interim measure, employees/students are to wash hands at the first available opportunity.
10. The following hygienic work practices will also apply:

NOTE: Attach additional sheets as needed

C. PERSONAL PROTECTIVE EQUIPMENT

Where there is potential for occupational or student academic exposure, employees/students will be provided and required to use personal protective equipment including, but not limited to, gloves, aprons, gowns, lab coats, head and foot coverings, eye protectors (i.e., goggles, glasses with side shields, face shields). This equipment will be provided at no cost to employees. When necessary, hypoallergenic, powderless or other alternative gloving will be provided to employees/students who are allergic to types normally provided.

Supplies may be obtained at the following locations:

Single use gloves (disposable gloves may not be decontaminated or washed for re-use.

Prior to leaving the work area, personal protective equipment (including lab coats) must be removed and properly disposed of or placed into designated storage or laundry areas. Employees are not permitted to carry any type of personal protective equipment home for cleaning or other use. Employees and students should adhere to the designated work practice policies related to use of personal protective equipment.

Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through or contact the employees' or students' clothing, skin, mouth or mucous membranes.

Listed below are types of personal protective equipment available for employees' and students' use and circumstances under which it must be used. (Refer to III, Section E [Personal Protective Equipment] of the Bloodborne Pathogens Policy as guidelines to identify specific procedures in your Administrative Unit that require the use of Personal Protective Equipment.)

ITEM	PROCEDURE

NOTE: Attach additional sheets as needed

Decontamination of personal protective equipment will be performed in the following manner:

EQUIPMENT	CLEANSER/DISINFECTANT	FREQUENCY

NOTE: Attach additional sheets as needed

D. HOUSEKEEPING

1. Work surfaces shall be decontaminated with an appropriate disinfectant after completion of a procedure; when surfaces are overtly contaminated; immediately after any spill of blood or other potentially infectious materials; and at the end of the work shift.
2. Protective coverings such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper may be used to cover equipment and environmental surfaces. These coverings shall be removed and replaced as necessary (i.e., upon contamination, at the end of the workday).
3. Receptacles with a possibility of contamination shall be inspected and decontaminated on a regularly scheduled basis and decontaminated as soon as possible after visible contamination.
4. Broken glassware shall be cleaned up using mechanical means.
5. Equipment which may become contaminated with blood or other potentially infectious materials will be checked routinely and prior to servicing or shipping and shall be decontaminated as necessary.
6. All bins, pails, cans, and similar receptacles intended for reuse which have a potential for becoming contaminated with blood or other potentially infectious materials shall be

inspected, cleaned and disinfected immediately or as soon as possible upon visible contamination. A regular cleaning schedule will be established and addressed elsewhere in this program.

7. Broken glassware 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, tongs, or forceps.
8. Specimens of blood or other potentially infectious materials shall be placed into a closable, leakproof container labeled or color-coded according to the University's Medical Waste Management Plan prior to being stored or transported. If outside contamination of the primary container is likely, then a second leakproof container that is labeled or color-coded (as per the Medical Waste Management Plan) shall be placed over the first and closed to prevent leakage during handling, storage or transport. If puncture of the primary container is likely, it shall be placed within a leakproof, puncture-resistant secondary container.
9. Reusable items contaminated with blood or other potentially infectious materials shall be decontaminated prior to washing and/or reprocessing.
10. It is the responsibility of _____ to assure that the worksite is maintained in a clean and sanitary condition. Facilities will be cleaned and disinfected with an appropriate agent according to the following schedule:

LOCATION	CLEANSER/DISINFECTANT	FREQUENCY

NOTE: Attach additional sheets as needed

E. WASTE DISPOSAL

1. All infectious waste destined for disposal shall be placed in closable, leakproof containers or bags that are color-coded or labeled as herein described. It shall be the responsibility of _____ to assure that waste is properly disposed and the following rules are observed.

2. If outside contamination of the container or bag is likely to occur, then a second leakproof container or bag which is closable and labeled or color-coded (as per the Medical Waste Management Plan) will be placed over the outside of the first and closed to prevent leakage during handling, storage and transport.
3. Immediately after use, sharps shall be disposed of in closable, puncture resistant, disposable containers which are leakproof on the sides and bottom and that are labeled or color-coded, per the Medical Waste Management Plan.
4. These containers will be easily accessible to personnel and located in the immediate area of use.
5. These containers will be replaced routinely and not allowed to overfill. Employees must not have to insert hands into the container in order to dispose of a sharp.
6. When moving containers of sharps from the area of use they must be closed immediately prior to removal or transport.
7. Reusable containers may not be opened, emptied or cleaned manually or in any other manner which would pose the risk of percutaneous injury.
8. Disposal of contaminated personal protective equipment will be provided at no cost to employees.
9. In accordance with other applicable Federal, State and local regulations concerning medical waste, the following disposal procedures will be observed:

NOTE: Attach additional sheets as needed

F. LAUNDRY

1. Laundry which has been contaminated with blood or other potentially infectious materials or may contain contaminated sharps will be handled as little as possible and with a minimum of agitation.
2. Contaminated laundry must be bagged at the location where it was used and shall not be sorted or rinsed in patient care areas.
3. Contaminated laundry shall be placed and transported in bags that are labeled or color-coded as herein described. Whenever this laundry is wet and present the potential for soaking or leaking through the bag, it will be placed and transported in leakproof bags.
4. Employees/students responsible for handling potentially contaminated laundry are required to wear protective gloves and other appropriate personal protective equipment to prevent occupational exposure during handling of sorting.
5. Laundering of personal protective equipment is to be provided by the Administrative Unit at no cost to employees.
6. If laundry is shipped off site to a second facility which does not utilize Universal Precautions in its handling of all laundry, bags or containers with appropriate labeling and/or color-coding will be used to communicate the hazards associated with this material.
7. Persons responsible for ensuring the proper handling, storage, shipping or cleaning of contaminated laundry are: _____.
8. Additional requirements pertaining to the handling of laundry are as follows:

NOTE: Attach additional sheets as needed

G. HEPATITIS B VACCINATION

1. Employees

- a. The University Medical Center shall make available the hepatitis B vaccine and vaccination series to all employees who are at risk for occupational exposure. The University Medical Center will also provide post exposure evaluation and follow-up to all students who have an exposure incident. University Medical Center will provide

post exposure evaluation and follow-up to all employees who have an exposure incident.

- b. These evaluations and procedures shall be:
 - (1) Made available at no cost to the employee;
 - (2) Made available at a reasonable time and place;
 - (3) Performed under the supervision of a licensed physician;
 - (4) Provided according to the recommendations of the US Public Health Service.
- c. Laboratory tests shall be conducted by an appropriate accrediting agency, approved by the Chief Medical Officer, at no cost to the employee.
- d. The hepatitis B vaccination shall be made available to an employee who has occupational exposure, within 10 workdays of initial assignment. Exceptions are:
 - (1) The employee has previously received the complete hepatitis B vaccination series and submits acceptable proof .
 - (2) Antibody testing reveals the employee is immune.
 - (3) The vaccine is contradicted for medical reasons.
 - (4) The employee signs a statement (Attachment D) declining the vaccination series.
- e. Participation in a pre-screening program Must not be a prerequisite for receiving the vaccination.
- f. Employees who accept the vaccination will receive information about the vaccine from the University Medical Center and sign a consent form (see Attachment C). A copy of the consent form will be maintained in the University Medical Center files.
- g. Employees who decline the hepatitis B vaccination shall sign the prescribed statement shown in Attachment D. This signed statement shall be placed in the employee's departmental file.
- h. If an employee initially declines the vaccination but at a later time (while still covered by this policy) desires to accept it, it shall be made available after signing the appropriate consent form (Attachment C of the University of Alabama Bloodborne Pathogens Policy).
- i. Documentation of the employee's hepatitis B vaccination status (Attachment E) will be maintained in the University Medical Center.

2. Students

- a. Students who are at risk for student academic exposure to bloodborne pathogens will be required to submit proof of immunity to Hepatitis B (either by vaccination or previous exposure) to their supervisor, or sign a statement (Attachment D) indicating that they understand their risks of exposure but have declined vaccination. If a

student is under the age of 19, parental signature on the declination form will be required.

- b. Documentation of the vaccination status for students at risk for exposure (Attachment E) and, if applicable, the signed statement declining vaccination (Attachment D), shall be placed in UMC records. A copy of this documentation shall be provided to the student to be submitted to the faculty member responsible for the academic activity associated with a risk for exposure.

H. EXPOSURE EVALUATION AND FOLLOW-UP

1. Employees

Should an employee be exposed to a potentially infectious material (via needle stick, splash, etc.) post-exposure evaluations will be provided as described herein.

- a. Following a report of an exposure incident, the employee will be provided a confidential medical evaluation and follow-up including:
 - (1) Documentation of the route(s) of exposure, HBV and HIV antibody status of the source patient(s) (if known), and the circumstances under which the exposure occurred.
 - (2) If the source patient can be determined and permission is obtained, collection and testing of the source patient's blood to determine the presence of HIV or HBV infection.
 - (3) Collection of blood from the exposed employee as soon as possible after the exposure incident for determination of HIV/HBV status. Actual antibody or antigen testing of the blood or serum sample may be done at that time or at a later date, if the employee so requests. Samples will be preserved for at least 90 days.
 - (4) Follow-up of the exposed employee including antibody or antigen testing, counseling, illness reporting, and safe and effective post-exposure prophylaxis, according to standard recommendations for medical practices.
- b. The attending physician will be provided the following information:
 - (1) A description of the affected employee's duties as they relate to the employee's occupational exposure.
 - (2) Results of the source individual's blood testing, if available.
 - (3) All employee medical records, including vaccination records, relevant to the treatment of the employee.
- c. The attending physician will provide a written opinion to this employer concerning the following:
 - (1) The physician's recommended limitations upon the employee's ability to receive the Hepatitis B vaccination.
 - (2) A statement that the employee has been informed of the results of the medical evaluation and that the employee has been told about any medical conditions

resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

- (3) All other findings and diagnoses shall remain confidential and shall not be included in the written report.
- d. For each evaluation under this section, University Medical Center will obtain and provide the employee with a copy of the attending physician's written opinion within 15 days of the completion of the evaluation.

2. Students

Should a student be exposed to a potentially infectious material (via needle stick, splash, etc.) post-exposure evaluations will be provided as described herein.

- a. Following a report of an exposure incident, the student will be provided a confidential medical evaluation and follow-up including:
 - (1) Documentation of the route(s) of exposure, HBV and HIV antibody status of the source patient(s) (if known), and the circumstances under which the exposure occurred.
 - (2) If the source patient can be determined and permission is obtained, collection and testing of the source patient's blood to determine the presence of HIV or HBV infection.
 - (3) Collection of blood from the exposed student as soon as possible after the exposure incident for determination of HIV/HBV status. Actual antibody or antigen testing of the blood or serum sample may be done at that time or at a later date, if the employee so requests. Samples will be preserved for at least 90 days.
 - (4) Follow-up of the exposed student including antibody or antigen testing, counseling, illness reporting, and safe and effective post-exposure prophylaxis, according to standard recommendations for medical practices.
- b. The attending physician will be provided the following information:
 - (1) A description of the affected student's duties as they relate to the student's academic exposure.
 - (2) Results of the source individual's blood testing, if available.
 - (3) All student medical records, including vaccination records, relevant to the treatment of the student.
- c. The attending physician will provide a written opinion to the appropriate academic unit concerning the following:
 - (1) The physician's recommended limitations upon the student's ability to receive the Hepatitis B vaccination.
 - (2) A statement that the student has been informed of the results of the medical evaluation and that the student has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

(3) All other findings and diagnoses shall remain confidential and shall not be included in the written report.

d. For each evaluation under this section, the University Medical Center will obtain and provide the student with a copy of the attending physician's written opinion within 15 days of the completion of the evaluation.

I. COMMUNICATION OF HAZARDS

1. Signs will be posted at the entrance to any work areas in HIV or HBV Research Laboratories or Production Facilities.

Hazard signs will be posted at the entrance to the following areas:

AREA	PROCEDURE

Signs will bear the International Biohazard Symbol in a florescent orange-red color.

1. Labels*

- a. Warning labels shall be affixed to containers of infectious waste; refrigerators and freezers containing blood and other potentially infectious materials; and other containers used to store or transport blood or other potentially infectious materials except as provided below.
 - b. Labels will bear the International Biohazard Symbol including BIOHAZARD written under the symbol. They will be fluorescent orange or orange-red or predominantly so, with lettering or symbols in a contrasting color.
 - c. All labels will be an integral part of the container or will be affixed as close as safely possible to the container by string, wire, adhesive or any other method that prevents their loss or unintentional removal.
 - d. Red bags or red containers may be substituted for labels on containers of infectious waste.
 - e. The person responsible for ensuring that containers of biohazardous waste are properly labeled is:
-

***Inquiries concerning the availability of labels should be made to EHS.**

J. INFORMATION AND TRAINING

1. All workers/students with occupational or student academic exposure are required to participate in Exposure Control training prior to their initial assignment and at least annually thereafter. This training will be free of charge to employees and students and scheduled during working hours.
2. Refusal or failure to attend a required training session will result in the following disciplinary actions:

3. The person(s) responsible for providing this training and coordinating the program for employees is a representative from the University Office of Environmental Health and Safety. The person(s) responsible for coordinating the training for students is the coordinator of the Bloodborne Pathogen policy in the division where the risk for academic exposure occurs.
4. At the end of each training session, employees and students will acknowledge their participation in the program by signing a form provided by the University, an example of which may be found in Attachment F of the University Bloodborne Pathogens Policy. This form should be provided to the student and employee to be filed in the personnel file or student record.
5. Employees/students will receive training and information in the following areas:
 - a. A copy of the University Policy on Bloodborne Pathogens and an explanation of its contents.
 - b. A general explanation of the epidemiology and symptoms of bloodborne diseases.
 - c. An explanation of the epidemiology and symptoms of bloodborne pathogens.
 - d. An explanation of the Exposure Control Plan and where you may obtain a copy.
 - e. An explanation of the appropriate methods for recognizing tasks and procedures that may involve exposure to blood or other potentially infectious materials.

- f. An explanation of the use and limitations of practices that will prevent or reduce exposure, including appropriate engineering controls, work practices, and personal protective equipment.
- g. Information on personal protective equipment which will address types available, proper use, location, removal, handling, decontamination and/or disposal.
- h. An explanation of the basis for selection of personal protective equipment.
- i. Information on the Hepatitis B vaccine, including information on its efficacy, safety, and benefits of being vaccinated.
- j. Information on the appropriate actions to take and persons to contact in the event of an emergency.
- k. Procedures to follow if an exposure incident occurs, including the method of reporting the incident.
- l. Information on the medical follow-up that will be made available and on medical counseling provided to exposed individuals.
- m. An explanation of signs, labels, and/or color-coding.
- n. A question and answer session with the trainer.

K. RECORDKEEPING

1. Medical records following an exposure incident shall be kept for the length of the worker's employment or the student's enrollment plus 30 years. Records will be maintained in the health care facility which attends the person.
2. All Sharps Injury Logs shall be maintained by the department in which the exposure incident occurred.
3. Training records shall be kept for 3 years. These records will be maintained in the employee's personnel files or in the student's academic records.