MEDICAL UNIVERSITY OF SOUTH CAROLINA (MUSC)

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

Revised: 8/2003

MEDICAL UNIVERSITY OF SOUTH CAROLINA
BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

MUSC is committed to providing a safe and healthy work environment for our entire staff. In pursuit of this endeavor, the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

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

- Determination of employee exposure
- Implementation of various methods of exposure control, including:

  Standard precautions

  Engineering and work practice controls (i.e., safety devices)

  Personal protective equipment (PPE)

  Housekeeping
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Communication of hazards to employees and training
- Recordkeeping
- Procedures for evaluating circumstances surrounding an exposure incident

The methods of implementation of these elements of the standard are discussed in the subsequent pages of the ECP.

PROGRAM ADMINISTRATION

- Occupational Safety and Health Programs (OSHP) is responsible for the implementation of the ECP. OSHP will maintain, review and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.
- Those employees who are determined to have occupational exposure to blood or other potentially infectious material(OPIM) must comply with the procedures and work practices outlined in this ECP.
- Departments will maintain and provide all necessary PPE, engineering control (e.g., sharps containers, safety devices), labels and red bags as required by the standard.
- OSHP will be responsible for maintaining OSHA records.
- OSHP will be responsible for training, documentation of training and making the written ECP available to employees, OSHA and NIOSH representatives.

Personnel who handle blood and OPIM as part of their jobs have an increased risk of contracting Hepatitis B virus (HBV), Hepatitis C virus (HCV) and Human Immunodeficiency Virus (HIV). HBV, HCV, and HIV have long been recognized as pathogens capable of causing serious illness and death. These viruses are transmitted through blood and certain body fluids. Because the transmission of HIV is considerably less than HBV and HCV, the risk of HIV infection to employees who must handle blood and OPIM is less than the risk for HBV and HCV. While HBV, HCV, and HIV are specifically identified in the OSHA BBP Standard, bloodborne pathogens include any

pathogenic microorganism present in human blood and other body fluids that can infect and cause disease in persons exposed.

MUSC adopts the implementation of standard precautions. Standard precautions require that all human blood or body fluids be treated as if known to be infectious. Potentially infectious materials for HBV, HCV, and HIV or OPIM include human body fluids of semen, vaginal secretion, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures and any body fluid that is visibly contaminated with blood and body fluid where it is difficult or impossible to differentiate between body fluids. Also included are unfixed human tissues or organs, and blood and tissues of animals who are deliberately infected with HBV, HIV or HCV. All regulated medical waste must be handled and disposed of properly per MUSC Policy and Procedures. MUSC defines regulated medical waste to mean liquid or semi-liquid blood or OPIM; contaminated items that would release blood or potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dry blood or OPIM and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological waste containing blood or OPIM.

Occupational exposure may occur in many ways including: 1) needle/sharp injuries; 2) splashes to eyes, nose, mouth; 3) and/or direct exposure to non-intact skin. Employees in certain occupations are assumed to be at high risk for actual and potential bloodborne exposures. These high-risk occupations are identified in Appendix I. Other employees who may be directly exposed to such body fluids depending on their exact work assignments are also identified in Appendix I.

PPE must be used to prevent blood or OPIM from contacting the skin, eyes, mouth, other mucous membrane or passing through to employees work/street clothes or undergarments, unless engineering control or other work practice controls have eliminated occupational exposure. The type and amount of PPE must be chosen based upon the type of potential exposure anticipated during the performance of a task or procedure. PPE must be provided by the department and made readily accessible in the work area at all times. For further details regarding PPE (refer to Appendix I). Failure to wear PPE when risk of exposure is clear will result in a recommendation for disciplinary action. The supervisor must ensure that PPE is worn correctly and is properly fitted.

Gloves will be worn when it can be reasonably anticipated that the employee may have contact with blood, OPIM, mucous membranes, and non-intact skin; when performing vascular access procedures, and when handling or touching contaminated items or surfaces. Disposable gloves will be replaced as soon as possible after contamination, or as soon as punctured or torn. Disposable gloves will not be washed or decontaminated for re-use. Utility gloves will not be decontaminated for re-use unless they are cracked, peeling, torn, punctured or exhibiting other signs of deterioration. Gloves of appropriate size must be made available. In addition, hypoallergenic gloves, or similar alternatives must be readily accessible to those employees who are allergic to gloves normally provided. Although gloves provide a barrier, hand washing/cleansing after glove removal is required. Hand washing/cleansing facilities are generally readily accessible. When the provision of hand washing facilities are not feasible, the employees' department will provide an

appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands will be washed with soap and running water as soon as feasible.

Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar garment shall be worn in occupational exposure situations. The type and characteristic will depend upon the tasks and degree of exposure anticipated. Gowns, including surgical gowns, will be made of impervious material and will protect all areas of exposed skin.

Surgical masks and protective eye wear or chin length plastic face shields are required during any procedures in which splashing, splattering or aerosolization of blood and body fluids is possible. Pocket masks, resuscitation bags, or other ventilation devices will be provided in strategic locations and to key personnel such as nurses, paramedics, physicians and respiratory therapists to eliminate exposure during mouth to mouth resuscitation.

In laboratories, the use of gloves is required for processing body fluid specimens. Masks and protective eyewear are required when the worker's mucosal membranes may come in contact with body fluids.

Persons performing or assisting in postmortem procedures are required to wear PPE to avoid exposure to blood or body fluids. Since gross contamination can be reasonably anticipated, surgical caps or hoods and impervious shoe covers must be worn in addition to other recommended PPE.

Housekeeping and environmental services operations involving substantial risk or direct exposure to body fluids shall take into account the application of proper

precautions while cleaning rooms and blood spills. Cleaning schedules shall be as frequent as is necessary depending upon the area to be cleaned, the type of surface to be cleaned and the amount and type of contamination present. All equipment, environmental and working surfaces will be cleaned and decontaminated with an appropriate disinfectant after completion of procedures, immediately or as soon as feasible when surfaces are contaminated or after any spill of blood or OPIM. A solution of 5.25 percent sodium hypochlorite (household bleach) diluted 1:10 with water, hospital approved tuberculocidal cleaner or other suitable disinfectant will be used for disinfection.

Needles will not be recapped, sheared, purposely bent or broken, removed from disposable syringes, or otherwise manipulated by hand. Recapping is permitted only by usage of a mechanical device or by using a one handed scoop technique as outlined in individual departmental policies and procedures. After they are used, disposable syringes and needles, scalpel blades, and other sharp items must be put in puncture resistant, leak-proof containers for disposal by environmental service personnel or other designated personnel. The containers must be easily accessible to personnel needing them and located in all areas where needles are commonly used, including patient rooms, emergency rooms, intensive care units, surgical suites, laboratories, and clinics. The containers must be secured so that they will not spill their contents if knocked over and will not themselves cause injuries when handled. These containers must be located in any setting where blood is drawn or needles or sharps are used.

Reusable sharps contaminated with blood or OPIM material must not be stored or processed in a manner that requires employees to reach by hand into the

decontamination container where sharps have been placed. Contaminated sharps such as broken glassware will not be picked up directly with the hands. A mechanical device such as dustpan, brush, tongs or forceps must be used and the sharp item disposed of in a puncture resistant leak-proof biohazard container.

Specimens of blood or OPIM will be placed in a leak proof container, then placed in a biohazard specimen bag. If the primary specimen bag could be punctured by the specimen, the secondary transport container must be puncture resistant and leak proof.

Warning labels shall be affixed to containers of regulated waste, refrigerators, freezers, and other containers used to store, transport or ship blood or OPIM. These labels will be fluorescent orange or orange-red with lettering or symbols in contrasting color. The biohazard symbol will be included on these labels. Labels are required for contaminated equipment with identification to which portions of the equipment remain contaminated. This labeling will be performed at site of generation.

When the pneumatic tube system is used for transporting specimens, all workers who might potentially open a carrier shall be trained to regard the contents as biohazardous. Employees who open biohazard carriers will wear gloves when removing specimens from the tube system. They will also be trained in decontamination of the carrier. Biomedical Engineering will be responsible for shutting the contaminated system down and decontaminating the tube system. A tube filled with a 1 to 10 solution of bleach that sprays the tube system down and has bands on the tube is utilized to clean the internal tube system. Environmental Services is responsible for cleaning up blood outside of the tube system.

Linens soiled with body fluids will be handled as little as possible and with minimum agitation to prevent contamination of the employee handling the linens. Employees who have contact with laundry will wear protective gloves and other PPE as indicated. All laundry will be bagged and secured in yellow impervious biohazard bags, which prevent leakage in the location where it was used and while transported to the collection area.

Infectious waste will be placed in an impervious biohazard red bag and sealed prior to removal from the room. (Also refer to the MUSC Infectious/Biological Waste Management Policy).

MUSC employees who receive a potential BBP exposure will report this exposure to their immediate Supervisor or Hospital Services Coordinator (HSC). Care should be initiated as soon as possible after exposure. The Supervisor or HSC identifies and documents the route of exposure on the Workers Compensation form (ACORD form). Also, at this time, the Supervisor or HSC identifies and documents the source individual, if known and obtains source's blood to be tested for HIV, HBV and HCV.(In accordance with S.C. Statute 44-29-230 titled “Testing Required When Healthcare Worker Exposed to Bloodborne Disease.”) The exposed employee with the completed ACORD form will be immediately referred to Employee Health Services(EHS). A confidential medical evaluation and a "Medical Evaluation of Occupational Exposure" sheet will be initiated by EHS or by the HSC. Blood tests will be conducted on the exposed employee in accordance with CDC Guidelines. (If the employee refuses consent for HIV testing the blood will be held for at least a 90-day period). The

employee will also receive any indicated counseling; information instructions, and/or chemoprophylaxis at no cost.

All employees whether seen in EHS, Emergency Services, or by the HSC will return to EHS within 72 hours for a post-exposure follow-up. This follow-up will include a copy of the evaluating health care provider written opinion, as well as laboratory test results of both employee and source, appropriate therapeutic intervention, and/or counseling indicated. Students will be seen in Student Health Services(SHS) or by the HSC when SHS is closed.

If EHS/SHS is not available, refer to Appendix III and Appendix IV for outlined instructions.

All faculty, students, employees and volunteers who may reasonably anticipate skin, eye, mucous membrane, or parenteral contact with blood or OPIM in the performance of their duties, must participate in a training program at the time of initial employment and before being assigned work or permitted to enter the work area. It is the responsibility of the MUSC OSHP to provide all initial and annual BBP training to all employees with potential exposure to blood and body fluids. The material must be appropriate in content and vocabulary for the educational level, literacy, and language background of the participants. Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at the OSHP office. The training program contains the following elements:

1. An explanation of the OSHA BBP Standard.
2. A general explanation of the epidemiology and symptoms of bloodborne diseases.

3. An explanation of the modes of transmission of bloodborne pathogens.
4. An explanation of the MUSC BBP Exposure Control Plan and how to obtain a copy.
5. An explanation of appropriate methods for recognizing tasks and other activities which may involve exposure to blood and OPIM, including what constitutes and exposure incident.
6. An explanation of the use and limitations of practices that will prevent or reduce exposure including appropriate engineering controls, work practices, and PPE. Safety devices appropriate for the task must be used (i.e., needle protected systems, needleless systems and self/sheathing needles.
7. Information on the type, proper use, location, removal, handling, and/or disposal of PPE.
8. An explanation of the basis for the selection of PPE.
9. Information on the availability of Hepatitis B vaccine, including information on its efficiency, safety, benefits of being vaccinated, methods of administration and that the vaccine will be offered at no cost to the employee.
10. Information on the appropriate actions to take and persons to contact in an emergency.
11. An explanation of the procedure to follow if an exposure occurs, including the method of reporting the incident and the medical follow-up that will be made available. Also, medical counseling will be provided to exposed individuals.
12. An explanation of signs, labels and/or color-coding required by the BBP Standard and used at MUSC.

In addition, these employees must receive training by their supervisor(s) regarding the location, availability, proper use, and disposal of PPE in the assigned work area. Their supervisor(s) must provide training concerning specific work practices and standard precautions as applied to their work environment.

APPENDIX I

MEDICAL UNIVERSITY OF SOUTH CAROLINA

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

EXPOSURE DETERMINATION

Within this plan "blood" is defined as human blood, human blood components and products made from human blood. The following body fluids are defined as "OPIM": human semen, vaginal secretion, 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; any unfixed tissue or organ (other than intact skin) from a human (living or dead); HIV-containing culture medium or other solutions, and blood organs or other tissues from experimental animals infected with HIV, HBV or HCV.

All employees in the following job classifications are considered to have occupational exposure to bloodborne pathogens:

Anesthesia Technicians
Apheresis Personnel
Autopsy Personnel
Biomedical Equipment Technicians
Clinical Associate
Dental Technicians
Dentists
Dialysis Technicians
Environmental Services Personnel
Extracorporeal Technicians
Health Physicist
Infectious/Biological Waste Personnel
Laundry Personnel
Medical Dosimetrists
Medical Technicians and Technologists
Nuclear Medicine Technicians

Nurses
Nursing Technicians
Occupational Therapists
Paramedics
Patient Care Assistants
Patient Care Technicians
Phlebotomists
Physical Therapists
Physicians
Physicians Assistants
Public Safety Officer
Radiation Oncology Therapist
Radiologic Technologists
Respiratory Therapist
Special Procedure Technicians
Sterile Processing Specialists
Student Professional Associates
Surgical Technicians
Therapeutic Assistants
Transporters
Ultrasound Technologists

Some employees in the following job classifications are considered to have occupational exposure to bloodborne pathogens:

Animal Caretakers
Dieticians
Food Services Personnel
Laboratory Technicians
Laboratory Technologists
Medical Examiners
Nursing Administrative Specialist/Assistant
Occupational Safety and Health Employees
Pharmacists
Physical Plant Employees
Public Safety Officers/Security Officers
Radiation Safety Employees
Researchers/Technicians

This list is not all inclusive. Please refer to specific position descriptions/supervisors for occupations not listed.The following is a listing of tasks and procedures or closely related tasks and procedures in which occupational exposure to blood or OPIM may occur. Each Department and or Patient Care Unit will develop a list specific to that area. These lists will be updated as needed and used for orientation to the area.

Surgical procedures involving contact with blood and OPIM as previously defined.

Physical examinations involving contact with blood and OPIM as previously defined.

Laboratory processing of specimens involving contact with blood and other potentially infectious material as previously defined.

Dental procedures in which splattering or aerosolization of blood, saliva or gingival fluids is likely.

Mouth to mouth resuscitation.

Housekeeping and environmental services operations involving substantial risk or direct exposure to body fluids while cleaning rooms or blood spills or spills of potentially infectious materials as previously defined.

Infectious waste handling operations by housekeeping, environmental services, comparative medicine and infectious waste technicians.

Laundry operations involving direct exposure to blood or potentially infectious materials as previously defined.

Phlebotomy procedures.

Recapping or needle removal using a mechanical or a one handed technique, or where no alternative is feasible and such action is required by a specific medical procedure.

Patient care procedures involving contact with blood or other potentially infectious material.

The foregoing exposure determination has been made without regard to the use of personal protective equipment.

SCHEDULE AND METHOD OF IMPLEMENTATION

Standard Precautions: In February 1997, standard precautions were introduced into the Infection Control program at MUSC to prevent contact with blood and OPIM. All body fluids will be considered potentially infectious materials.

Contract Controls: The following paragraph will be inserted in service contracts, which

require the use of contract employees within the Medical Center:

> "The contractor shall comply with local, county, state and federal health regulations in the conduct of operations. Employees of the contractor must have pre-employment physical evaluations conducted prior to the employee's assignment to the Medical Center. Follow-up physical evaluations shall be conducted at least annually or more frequently if determined to be necessary by specific job requirements or law. Employee health records must be maintained on-premise and made available for review by appropriate MUSC Medical Center personnel.
>
> Contractor shall abide by MUSC Medical Policy as to frequency of employee tuberculin skin testing and availability of prophylactic vaccines for Hepatitis B or HIV. These treatments as well as other required immunizations shall be made available to contractor employees at no cost.
>
> The contractor may elect to use the MUSC Employee Health Services to provide these services for contractor employees at contractor's expense, based upon direct arrangements between the contractor and the MUSC Employee Health Services."

DEFINITIONS

"Blood. The term "human blood components" includes plasma, platelets and serosanguineous fluids (e.g., exudates from wounds). Also included are medications derived from blood, such as immune globulins, albumin and factors 8 and 9.

"Bloodborne Pathogens": While HBV and HIV are specifically identified in the standard, the term includes any pathogenic microorganism that is present in human blood or OPIM and can infect and cause disease in persons who are exposed to blood containing the pathogen. Pathogenic microorganisms can also cause diseases such as hepatitis C, malaria, syphilis, babesiosis, brucellosis, leptosprisos, arboviral infections, relapsing fever, Creutzfeldt-Jakob disease, adult T-cell leukemia/lymphoma (caused by HTLV-I), HTLV-I associated myelopathy, diseases associated with HTLV-II and viral hemorrhagic fever.

Engineering Controls means controls that isolate or remove the BBP hazard from the workplace. Examples include safer medical devices, such as sharps with engineered sharp injury protection (SESIPs) and needleless systems. In 1989, sharps disposal containers were installed in patient rooms, examination rooms and operating rooms. Wall mounted sharps disposal containers are mounted at height recommended by the National Institute on Occupational Safety and Health (NIOSH). All sharps disposal containers will be stabilized. In January 1991, the use of fume hoods and biological safety cabinets and HEPA filters were mandated in applicable areas. Where occupational exposure remains after institution of these controls, PPE must be used. Engineering Controls will be examined and maintained or replaced on an ongoing schedule. Safety devices appropriate for the task must be used (i.e., needle-protected systems, needleless systems and self-sheathing needles).

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. “Needleless Systems” provide an alternative to needles for the specified procedures, thereby reducing the risk of percutaneous injury involving contaminated sharps. Examples of needleless systems include, but are not limited to, intravenous medication delivery systems that administer medication or fluids through a catheter port or connector site using a blunt cannula or other non-needle connection.

“Sharps with Engineered Sharps Injury Protections (SESIPs)” are defined as “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.” This term encompasses a broad array of devices that make injury involving a contaminated sharp less likely. They include, but are not limited to: syringes with guards or sliding sheaths that shield the attached needle after use; needles that retract into a syringe after use; shielded or retracting catheters used to access the bloodstream for intravenous administration of medication or fluids; intravenous medication delivery systems that administer medication or fluids; intravenous medication delivery systems that administer medication or fluids through a catheter port or connector site using a needle that is housed in a protective covering, blunt suture needles; and plastic (instead of glass) capillary tubes.

Work Practice Controls: The following controls are applicable to MUSC faculty, staff, employees, students, volunteers and contract employees, all of which are hereafter referred to as "employees,” who may reasonably anticipate skin, eye, mucous membrane or parenteral contact with blood or OPIM in the performance of their duties.

1. Hand washing facilities are generally readily accessible. When the provision of hand washing facilities is not feasible, the employee's department shall provide an appropriate antiseptic hand cleaner in conjunction with clean cloth/paper towels or antiseptic towelettes.

2. In clinical areas where alcohol hand antiseptic is available, its use is preferable over hand washing unless the hands are visibly soiled with blood, body fluids or dirt. Employees shall wash their hands immediately after removal of gloves or other PPE.

3. Employees will wash their hands or use alcohol hand antiseptic immediately after removal of gloves or other protective equipment.

4. Employees will wash hands and any other skin with soap and water, or flush mucous membranes with water immediately after contact with blood or other potentially infectious material.

5. Bending, breaking or shearing of contaminated needles is prohibited.

6. Contaminated needles and other contaminated sharps will not be recapped unless it can be demonstrated that no alternative is feasible or that such action is required by a specific medical procedure. Such recapping or needle removal must be accomplished through the use of a mechanical device or a one handed technique.

7. Contaminated reusable sharps will be placed in appropriate containers until properly reprocessed. Containers must be puncture resistant, labeled with the biohazard warning label, leak proof on the sides and bottom, and processed in such a manner that employees are not required to reach by hand into the container.

8. Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses are prohibited in work areas where there is a likelihood of occupational exposure.

9. Food and drink will not be kept in refrigerators, freezers, shelves, and cabinets or on counter tops or desk tops where blood or OPIM are present. Refrigerators and freezers used for specimens will be identified with a biohazard label.

10. All procedures involving blood or OPIM will be performed in a manner to minimize splashing, spraying, and spattering or the generation of droplets.

11. Mouth pipetting/suctioning of blood or OPIM are prohibited.

12. Specimens of blood or OPIM will be placed in containers, which prevent leakage during collection, handling, storage, transport or shipping.

13. Internal containers for storage transport or shipping will be color coded red and marked with the biohazard symbol. Outer containers will be marked with the biohazard symbol. Containers will be closed prior to being stored, transported, or shipped.

14. The employee's department will provide, at no cost to the employee, access to appropriate PPE such as gloves, gowns, lab coats, face shields, masks, eye protection, mouth pieces, resuscitation bags, pocket masks and other ventilation

devices. The supervisor is responsible for performing hazard determinations that identifies the task and required PPE.

15. The employee's department will provide PPE in appropriate sizes, which is readily available or is issued to employees. Hypoallergenic gloves, glove liners and powderless gloves must be readily available for employees who are allergic to the gloves normally provided.

16. The employee's department will clean; launder and dispose of personal protective clothing and equipment at no cost to the employee. Disposable protective clothing and equipment provided by the department is an acceptable alternative to cleaning and laundering.

17. All PPE, including impervious or fluid resistant lab coats, masks, shoe covers, and gloves will be removed prior to leaving the work area and placed in an appropriately designated container for storage, washing or disposal.

18. Gloves and other personal protective clothing and equipment will be worn when the possibility for contamination exists.

19. Gloves are to be worn for all phlebotomies or intravascular access..

HBV VACCINATION AND POST EXPOSURE EVALUATION AND FOLLOW-UP

Hepatitis B vaccination is available at Employee Health Services within 10 working days of initial assignment to a position where occupational exposure to bloodborne pathogens is possible and at anytime thereafter that employee chooses to receive the vaccine; unless the employee has previously received the complete Hepatitis B vaccine series, antibody testing shows immunity, or the vaccine is contraindicated for medical reasons. Refusal to receive the vaccine will be in writing utilizing the statement found in Appendix A to Section 1910.1030 of the OSHA Standard. If a routine booster of Hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster(s) will be made available.

> "I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated

> with Hepatitis B Vaccine, at no charge to myself; however, I decline Hepatitis B Vaccination at this time. I understand that by declining the vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B Vaccine, I can receive the vaccination series at no charge to me."

Following a report of an exposure incident the employee will receive a confidential medical evaluation and follow-up including documentation of routes of exposure and the circumstances under which the exposure risk occurred, identification and documentation of the source individual unless that identification is infeasible or prohibited by state or local law. Post exposure chemoprophylaxis when medically indicated will be provided as will counseling and evaluation of reported illnesses. (Refer to Appendix II and III).

RECORD KEEPING

Sharps Injury Log: Occupational Safety and Health will maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log will be recorded and maintained in such manner to protect the confidentiality of the injured employee. The sharps injury log will contain, at a minimum:

a. The type and brand of device involved in the incident

b. The department or work are where the exposure occurred

c. An explanation of how the incident occurred.

See Appendix V for the sample of MUSCs Sharps Injury Log

Medical Records: Employee Health Services shall establish an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.20.

1. This record shall include:

   a. The name and social security number of the employee.

b. A copy of the employee's Hepatitis B vaccination status including the dates of all the Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.

c. A copy of all results of examinations, medical testing, and follow-up procedures.

d. The employer's copy of the healthcare professional's written opinion.

e. A copy of the information provided to the healthcare professional that is responsible for evaluating an employee after an exposure incident.

2. The employer shall ensure that employee medical records are:

a. Kept confidential. While paragraph (h) (1) (iii) of the BBP standard requires that medical records are to be kept confidential, paragraph (h) (1) (iii) (B) stipulates that disclosure is permitted when required by this standard or other Federal, State, or local law.

b. Are not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law. The employer will maintain the records required for at least the duration of employment, plus 30 years in accordance with 29 CFR 1910.20.

Training Records: Training records will include the following information:

1. The dates of the training sessions.

2. The contents or a summary of the training sessions.

3. The names and qualifications of persons conducting the training.

4. The names and job titles of all persons attending the training sessions.

5. Training records will be maintained for 3 years from the date on which the training occurred.

6. Records of any subsequent yearly training.

7. Employee training records are provided upon request to the employee or the employees authorized representative within 15 working days. Such requests will be addressed to Occupational Safety and Health at 843-792-3604.

MUSC OFF-CAMPUS BLOODBORNE PATHOGEN PACKET

The MUSC off-campus Bloodborne Pathogen Packet is available by calling Occupational Safety and Health at 843-792-3604.

This packet is recommended for employees and students that are working more than two hours from our facility and who may have potential blood or body fluid exposure. It is to be used as a guideline in the event of a Bloodborne Pathogen Exposure.

APPENDIX II
MEDICAL EVALUATION OF OCCUPATIONAL EXPOSURE

DATE ____/____/

Blood Borne Pathogen Exposure/Follow-up

Employee name _____ social security number _____

Home phone _____ work phone _____

Employer _____ department _____

Date & time of exposure ____/____/_____:_____ am pm Location: _____

Type of exposure: 9 Needle stick 9 Laceration 9 Bite 9 Splash 9 Other_____

Circumstances of Exposure:_____

_____

_____

Identifiable Source:
Name: _____ Med Record # _____
Pt. Location _____
Blood contamination screen drawn on patient?: 9 Yes 9 No
Attending MD Name: _____
Known communicable Disease?: _____

Employee's Medical History and Treatment:

C	Employee completed Hepatitis B Vaccine series?	9	YES	9	NO
C	HIV consent and Pre-HIV counseling HCP signature?	9	YES	9	NO
C	Blood contamination screen drawn on employee?	9	YES	9	NO
C	Post exposure protocol (PEP) initiated?	9	YES	9	NO
C	Baseline (PEP) labs drawn?	9	YES	9	NO
C	PEP counseling by HCP completed?	9	YES	9	NO
C	PEP consent or declinations signed?	9	YES	9	NO
C	Employee instructed to call & make follow-up appt in 3 days?	9	YES	9	NO
C	Copy of all medical records prepared for EHS?	9	YES	9	NO

Nurse Signature (initial BBP visit): _____ Date: ___/___/_____

Source Blood Contamination Results
HIV _____ HbsAG _____ HCV _____ HIVStat _____

Employee Blood Contamination Results
AHBsAG _____ HIV _____ Other labs _____

Post Exposure Follow-up: (Employee please initial)

_____ I have been informed of the results of the post exposure evaluation

_____ I have been informed of any medical conditions resulting from exposure to blood or other potentially infectious materials, which require evaluation or treatment.

_____ I have been counseled about adherence to Universal Precaution procedures and maintaining confidentiality of the sources' medical information.

Employee Signature:_____ Date: ___/___/_____

Nurse's Signature: _____Date: ___/___/_____

APPENDIX III

EMPLOYEE/STUDENT EXPOSURE EVALUATION PROCESS

HOURS: EMPLOYEE HEALTH HOURS 7:00 A.M. – 4:30 P.M.
STUDENT HEALTH HOURS 8:00 A.M. - 4:30 P.M.

EMPLOYEE/STUDENT EXPOSURE INCIDENT

Supervisor

ACORD FORM

EMPLOYEE/STUDENT HEALTH SERVICES

SOURCE BLOOD TO LAB
HIV STAT/HIV
HbsAg
HCV

EMPLOYEE HEALTH NURSE
STUDENT

EMPLOYEE/STUDENT HEALTH PROVIDER

EMPLOYEE/STUDENT BLOOD TO LAB:
AHBsAg
HIV (WITH CONSENT)
BLC (BASELINE CHEMO PROPHYLAXIS)

COUNSELING
HIV
HBV
HCV
PEP (POST-EXPOSURE PROPHYLAXIS)
EMPLOYEE/STUDENT HEALTH PROVIDER
POST EXPOSURE FOLLOW-UP

BLOODBORNE PATHOGEN EXPOSURE/ FOLLOW/UP SHEET

APPENDIX IV

EMPLOYEE /STUDENT EXPOSURE EVALUATION PROCESS

HOURS: AFTER 4:30 P.M., WEEKENDS AND HOLIDAYS

EMPLOYEE/STUDENT EXPOSURE INCIDENT

HSC/SUPERVISOR
ACORD FORM/BLOODBORNE PATHOGEN
EXPOSURE FOLLOW-UP SHEET
SOURCE BLOOD TO LAB:
STAT HIV, HbsAg, HCV
EMPLOYEE/STUDENT BLOOD TO LAB:
AHBsAg, HIV (WITH CONSENT), BLC
CONTACT PROVIDER ON-CALL
COUNSELING:
HIV, HBV, HCV, PEP

EMPLOYEE/STUDENT HEALTH PROVIDER POST
EXPOSURE FOLLOW-UP WITHIN 72 HOURS

APPENDIX V

Sharps Injury Log

Date/Time	Job Class/Dept	Location of Incident	Type/Brand of Device	How Injury Occurred

HBV, HCV, and HIV RESEARCH LABORATORIES AND PRODUCTION FACILITIES

Standard Microbiological Practices: All required waste will be decontaminated by autoclaving to destroy bloodborne pathogens. In Institutional Biosafety Committee-approved situations chemical decontamination is an appropriate alternative to autoclaving. Autoclaved (or chemically decontaminated) material will then be managed as infectious waste.

Special Practices:

1. Laboratory doors will be kept closed when work involving HBV, HCV, or HIV is in progress.

2. Contaminated materials that are to be decontaminated at a site away from the work area will be placed in a durable, leak-proof, labeled or color coded (the color is orange for infectious materials) container that is closed before being removed from the work area.

3. Access to the work area will be limited to authorized persons. Written policies and procedures will be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures will be allowed to enter the work areas and animal rooms.

4. When OPIM or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol will be posted on all access doors.

5. All activities involving OPIM will be conducted in biological safety cabinets or other physical-containment devices within the containment module. No work with these other potentially infectious materials will be conducted on the open bench.

6. Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing will be used in the work area and animal rooms. Protective clothing will not be worn outside of the work area and shall be decontaminated before being laundered.

7. Special care will be taken to avoid skin contact with other potentially infectious materials. Gloves will be worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

8. All waste from work areas and from animal rooms will be packaged and disposed of as infectious waste.

9. Vacuum lines will be protected with liquid disinfectant traps and high efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.
10. Hypodermic needles and syringes will be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) will be used for the injection or aspiration of other potentially infectious materials. Extreme caution will be used when handling needles and syringes. A needle will not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe will be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

11. All spills will be immediately contained and cleaned up by staff or others properly trained and equipped staff. If the spill contains HBV, HCV, or HIV or might contain one of these agents then the spill should be decontaminated with an appropriate chemical agent prior to cleaning.

12. A spill or accident that results in an exposure incident will be immediately reported to the laboratory director or other responsible person.

13. A biosafety manual has been prepared and adopted and is periodically reviewed and updated at least annually and more often if necessary. Personnel will be advised of potential hazards; will be required to read instructions on practices and procedures; and will be required to follow them.

14. Certified biological safety cabinets (Class I, II, or III) or other appropriated combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, will be used for all activities with OPIM that pose a threat of exposure to droplets, splashes, spills, or aerosols.

15. Biological safety cabinets will be certified when installed, whenever they are moved and at least annually.

16. HBV, HCV, and HIV research laboratories will meet the following criteria:

    a. Each laboratory will contain a facility for hand washing and an eye wash facility, which is readily available within the work area.

    b. An autoclave for decontamination of regulated waste will be available.

17. HBV, HCV, and HIV production facilities will meet the following criteria:

    a. The work areas will be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors will be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double-doored clothes-change room (showers may be included), airlock, or other access facility that requires passing through two sets of doors before entering the work area.

    b. The surfaces of doors, walls, floors and ceilings in the work area will be water-resistant so that they can be easily cleaned. Penetrations in these surfaces will be sealed or capable of being sealed to facilitate decontamination.

    c. Each work area will contain a sink for washing hands and a readily available eye wash facility. The sink will be foot, elbow, or automatically operated and will be located near the exit door of the work area.

    d. Access doors to the work area or containment module will be self-closing.

    e. An autoclave for decontamination of regulated waste will be available within or as near as possible to the work area.

    f. A ducted, exhaust-air ventilation system will be provided. This system will create directional airflow that draws air into the work area through the entry area. The exhaust air will not be recirculated to any other area of the building, will be discharged to the outside, and will be dispersed away from occupied areas and air intakes. The proper directions of the airflow will be verified (i.e., into the work area).

18. Additional training requirements for employees in HBV, HCV, and HIV research laboratories and production facilities includes:

    a. Demonstration of proficiency in standard microbiological practices and techniques and in practices and operations specific to the facility before being allowed to work with HBV, HCV, or HIV.

    b. Assurance that the employee has prior experience in the handling of human pathogens or tissue cultures before working with HBV,HCV, or HIV.

    c. Participation in and satisfactory completion of a training program for employees who have no prior experience in handling human pathogens.

A progression of work activities will be assigned as techniques are learned and proficiency is developed. Employees may participate in work activities involving infectious agents only after proficiency has been demonstrated.