

**OFFICE OF ENVIRONMENTAL HEALTH & SAFETY,
CHEMICAL/BIOLOGICAL SAFETY SECTION**

BLOODBORNE PATHOGENS - INFECTIOUS WASTE MANAGEMENT

(Updated 10/23/09)

Developed in accordance with the Occupational Safety and Health Administration (OSHA) [Bloodborne Pathogen Standard](#) (29 CFR 1910.1030) the Virginia Department of Environmental Quality (VDEQ) [Regulated Medical Waste Management Regulations](#) (VR 672-40-01:1/9 VAC 20-120) under the auspices of the VCU [Institutional Biosafety Committee](#) (IBC).

- I. Purpose
- II. Responsibility
- III. Regulated Materials
- IV. Safe Work Practices
- V. Spill Response
- VI. "Red Bags"
- VII. Autoclaving Procedures
- VIII. Chlorination
- IX. Laundry Procedures
- X. Personal Protective Equipment
- XI. Biological Safety Cabinets
- XII. Hepatitis B Vaccine
- XIII. Post-Exposure Evaluation & Follow-up
- XIV. Training/Recordkeeping
- XV. Hepatitis B Vaccine Declination

I. PURPOSE: The purpose of this management program is to minimize university staff and student exposure to bloodborne pathogens and to provide guidance for proper management of regulated medical waste (RMW) materials. The information provided in this program guide is intended to compliment the policies presented in the [University Biosafety Manual](#).

II. RESPONSIBILITY

A. Principal Investigators (PIs) shall be responsible for ensuring that employees are properly trained, and that employee work practices comply with the requirements of all applicable federal and state regulatory and credentialing agencies. Principle investigators shall ensure that a complete [Exposure Control Plan](#) (ECP) is developed for all employees involved in tasks with the potential for exposure to bloodborne pathogens.

B. In accordance with the OSHA bloodborne pathogens standard: all training, medical surveillance/treatment, personal protective equipment (PPE), and other materials required for limiting employee exposure to bloodborne pathogens and other potentially infectious agents shall be provided to staff members free of charge.

C. Insurance that necessary supplies and equipment are provided to laboratory staff shall be the responsibility of the PI.

D. The Office of Environmental Health & Safety will assist (upon request) departments or individual laboratories in the training of employees per the provisions of this program.

E. Provision of infectious waste ("red") bags and pick-up of waste-filled red bags shall be coordinated with the Customer Services Office (828-9444). Provision of suitable containers for disposal of infectious sharps materials shall be the responsibility of the PI.

III. REGULATED MEDICAL WASTE MATERIALS:

A. The Virginia Department of Environmental Quality (VDEQ) Medical Waste Management Regulations and university policy designate the following seven classes of "controlled regulated medical waste":

1. Cultures and stock of microorganisms and biologicals. Discarded cultures, stocks, specimens, vaccines and associated items likely to have been contaminated with organisms likely to be pathogenic to healthy humans.

2. Human blood/blood products and other potentially infectious material (OPIM), animal blood/blood products. Includes wastes consisting of human and animal blood/blood products (includes serum, plasma etc.), and items contaminated by *significant* amounts human and animal blood/blood products. "Significant" quantities of blood are present when materials render visible release of liquid or dried blood upon being subjected to wringing and/or typical handling procedures. Under this definition materials stained with small quantities of embedded blood/blood products do not require disposal as RMW.

3. Tissues and other anatomical waste. This includes all human anatomical wastes and all human tissues, organs, body parts and/or body fluids.

4. Sharps materials. Includes all discarded needles and scalpels (regardless of contamination potential), any other sharps materials likely to be contaminated with pathogenic organisms, and all sharps used in patient care and veterinary practice.

5. Intentionally infected animal carcasses, body parts, urine, feces, bedding and related waste. Also applies when source animals are known or suspected to be infected with organisms potentially pathogenic to healthy humans.

6. Residues, soils, liquids and other debris - resulting from cleanup of a spill of any regulated medical waste.

7. Solid waste contaminated by, or mixed with regulated medical waste.

B. Recombinant DNA (rDNA) Waste: In addition to the seven categories of regulated medical waste defined by the VDEQ, The National Institutes of Health (NIH) classify all rDNA-containing waste as infectious waste (RMW).

C. Suitable methods for the management and disposal of regulated medical waste materials are discussed in sections IV through VIII of this manual. Detailed instructions and university policies regarding safe work practices and the management/disposal of infectious agents are provided within the [University Biosafety Manual](#).

IV. SAFE WORK PRACTICES

A. Employees shall utilize standard precautions whenever working with potentially infectious materials. Under standard precautions all blood products, OPIM, and human/animal tissues are considered infectious regardless of the perceived status of the source animal/individual, and work practices are chosen appropriately under these assumptions.

B. Under Standard Precautions the following engineering controls and work practices are essential for limiting potential exposure to blood borne pathogens and other infectious agents:

1. Employees shall thoroughly wash hands with soap and water immediately upon removal of gloves after performing of tasks involving potentially infectious materials.

2. Employees shall be familiarized with location and operation of eyewash stations and safety showers in the event of an exposure incident. All exposure incidents must be reported to Employee Health immediately.

3. University staff who encounter improper handling, staging or disposal of potentially infectious and/or sharps materials shall notify Mike Elliott of OEHS as soon as possible at 828-4404.

4. Sharps Materials: All needles, scalpels, blades, scissors and other items which pose laceration hazards shall be managed and disposed of as infectious sharps materials. Sharps materials shall be disposed of in the following manner:

a. Sharps Containers: Suitable sharps containers shall have the following properties:

i. All containers used for sharps disposal shall be rigid and puncture resistant.

- ii. Sharps containers shall be leak resistant.
 - iii. Sharps containers shall be capable of being readily (without coming into contact with sharps materials) and securely sealed prior to disposal.
 - iv. Sharps containers shall be clearly marked with the following labeling: "BIOHAZARD: INFECTIOUS SHARPS".
 - b. Fingers/hands shall never be placed inside of sharps container. In the unlikely event that an item would have to be retrieved or dislodged from a sharps container, forceps or another mechanical device should be utilized.
 - c. Sharps containers shall not be overfilled: sharps materials must fit completely into container - discarded sharps materials shall not protrude from the top of the vessel. When containers approach being full, seal them securely, arrange for disposal and replace with new (empty) sharps containers.
 - d. Dispose of filled sharps containers within red bag-lined incineration box. Arrange for supply of red bags/incineration boxes and infectious waste pickup through VCU Customer Services (828-9444).
 - e. Suitable sharps containers may either be purchased from laboratory supply catalogues or be manufactured from sturdy plastic containers offering secure and effective closure device (coffee cans e.g.). Improvised containers must meet the labeling, performance, and handling requirements listed above.
 - f. Recapping of needles is strongly discouraged and shall not be performed prior to registering with/receiving approval from the IBC through submitting a [Needle Recapping Waiver Form](#).
 - g. Needles, scalpels and other mounted sharps materials may only be removed from mounting (or remounted) through mechanical means – breaking, bending, and/or shearing of needles is strictly prohibited.
5. Non-infectious broken glass shall include all broken glassware which has not come into contact with potentially infectious agents. These materials may include such items as: glassware broken during or after cleaning, glassware broken while containing noninfectious materials (water, buffers et. al.), broken coffee cups, broken soda bottles etc. Glass Pasteur pipettes, test tubes, flasks and petri dishes which have not come into contact with potentially infectious agents may also be classified as non-infectious broken glass, if handled accordingly as detailed below:
- a. Place all noninfectious broken glass items into puncture resistant containers (e.g. sturdy cardboard/fiberboard box).
 - b. Do not fill above the top of the box, when approaching full, seal box and wrap box with several strips of packing or duct tape.
 - c. Clearly label box "NONINFECTIOUS BROKEN GLASS" (use an indelible black marker or other clearly visible permanent pen type).

d. Dispose of noninfectious broken glass box through housekeeping (or place in regular "domestic" trash dumpster).

8. Employees shall never engage in the following activities within work areas where handling or preparation of materials containing potentially infectious agents is being conducted:

- a. Eating.
- b. Chewing gum.
- c. Drinking.
- d. Use of tobacco (include smoking and chewing tobacco products).
- e. Make-up/cosmetic application.
- f. Handling or insertion of contact lenses.
- g. Wearing of shorts.
- h. Wearing of open-toed shoes.

9. Employees should avoid rubbing of eyes and oral contact with fingers/hands while working in areas where activities involving potential infectious agents are being conducted. As noted previously, hands should be thoroughly scrubbed with soap and water prior to exiting laboratory spaces.

10. Refrigerators utilized for storage of potentially infectious materials shall be clearly labeled with BIOHAZARD and/or INFECTIOUS MATERIAL warnings. Food and drink items shall never be stored within refrigerators used for storage of potentially infectious materials.

11. Storage and/or consumption of food and beverages shall be restricted from all work areas used for preparation or research activities involving potentially infectious agents (bench tops, counters, cabinets, shelves etc.).

12. Infectious material work areas should be cleaned routinely with a hospital-grade disinfectant. For additional information regarding proper disinfection and maintenance of work areas, and spill response, refer to section 5 and the VCU Biosafety Manual at the following URL: <http://www.vcu.edu/oehs/chemical/biosafe/biosafetymanual.pdf>

13. Laboratory supervisors (PIs and/or lab managers) shall carefully review recommended work practices with laboratory staff prior to their conducting activities which involve potential for exposure to infectious materials.

a. Work practices shall be selected which minimize potential employee exposure due to splashing, spraying, splattering, or other airborne release infectious materials.

b. When available engineering controls alone cannot suitably lower exposure risk, utilization of additional personal protective equipment (PPE) shall be implemented (PPE is detailed in section X.).

V. CLEAN-UP OF INFECTIOUS MATERIAL SPILLS: The majority of the spills in research spaces involve small quantities of materials classified at BSL-2 or lower. Such small-scale spills can usually be safely cleaned up by laboratory staff; provided they are properly trained, possess the correct equipment, employ proper work methods during the response action, and dispose of waste generated accordingly. Clean-up of spills involving larger quantities, BSL-2+ agents, and/or special circumstances may require assistance from OEHS. In the event of any significant incident involving biohazardous agents, contact the OEHS emergency line (828-9834) immediately. A brief guide to the equipment, supplies, and work methods employed during small-scale biohazardous spill response is provided below:

A. Disinfectant: For routine disinfection of laboratory surfaces and clean-up of spills involving biohazardous materials, or materials assumed to be infectious (under "standard precautions") OEHS recommends the use of 10% bleach solution (9 parts water to 1 part bleach) or other hospital-grade disinfectant.

B. Spill Response Kits: Spill response kits must be maintained in all areas where infectious waste is managed. Each spill kit should at a minimum include:

1. At least one gallon of *fresh bleach water or other disinfectant.
2. Absorbent materials, such as absorbent pads, vermiculite, or disposable towels, for containing and treating spills.
3. Spray/mist bottles for bleach water application.
4. A cache of unused "red bags" for receiving waste generated during spill response or for overpacking leaking containers.
5. Rigid containers for receiving contaminated broken glass and other sharps materials.
6. Liquid impermeable disposable coveralls, gloves, boots, caps and **protective breathing devices such as N-95 respirators.
7. Eye protection gear, including splash resistant safety glasses and face shields.
8. A broom, heavy duty brush and dustpan (for spills involving sharps materials).
9. Extra clothing to replace contaminated items (scrubs e.g.).

*Amount of available sodium hypochlorite in bleach stocks and solutions will reduce over time necessitating annual replacement of bleach stock and weekly preparation of fresh solutions used for disinfection/decontamination.

**All use of respirators must be preapproved by OEHS. For inclusion in the university respiratory protection program and assistance in selection of suitable equipment contact Micheal Miller at 828-2596.

C. Small-Scale Biohazardous Spill Response: Large spills and/or incidents involving special hazards/conditions should be reported to OEHS emergency line immediately (828-9834). Details of recommended response action for routine small-scale spills occurring in open laboratory areas are as follows:

1. Evacuate spill area to allow aerosol to settle (15 minutes minimum, greater time may be required depending on nature of the incident).

2. 10% bleach solution may either be applied directly via spray bottle on spill area, or via saturated disposable pads/towels or cloth material.

3. Allow bleach solution to remain in contact with the spilled material for a minimum of 20 minutes.

4. Don two layers of gloves, and eye protection prior to removing bleach-treated spill and clean-up materials from incident site.

5. Place all waste resulting from clean-up directly into a red bag for disposal.

6. Following removal of bleach-saturated towels, mist spill area again with 10% bleach solution and thoroughly wipe down and clean surfaces until no residual material is visible (used towels should again be placed into red bag for disposal).

7. Tools and equipment contaminated by spillage of potentially infectious materials should also be thoroughly immersed (when possible) or wiped down with 10% bleach solution prior to reuse.

8. When incidents involve broken glass or other sharps materials clean-up should be conducted entirely through mechanical means:

a. Apply, work and remove towels used for saturating and cleaning spill surfaces with forceps or other hand-held instrument.

b. Sweep or brush remaining broken glass and/or other sharps materials into a dustpan.

c. Place all resulting waste into an approved sharps container (as detailed in section IV).

d. Mist area again with 10% bleach solution and repeat steps a, b and c.

e. Note: Use of vermiculite may facilitate clean up of spills involving broken glass.

9. After the completion of clean-up of surfaces and equipment affected by the spill, personal protective gear used during the clean-up shall be thoroughly disinfected (with 10% bleach solution) prior to being replaced in spill response kit. Disposable items used during cleanup (gloves, paper suits etc.) must be placed in red bag for disposal. Clothing items contaminated during spill or clean-up operation should also be disposed via red bag.

10. Restock spill kit to replace items used during incident response.

11. Empty bleach solution from spray bottle, rinse with tap water (leaving bleach solution in spray bottle may lead to corrosion and failure of pump).

12. Prepare a report detailing the date, location, nature of infectious waste involved and a description of the incident, cleanup procedures and disposal method. Forward one copy of the report to OEHS.

D. Additional information regarding response to spills involving biohazardous agents (including response to spills occurring in biological safety cabinets) is available in the [University Biosafety Manual](#)

VI. RED BAG PROTOCOL: In accordance with VDEQ/OSHA regulations, and NIH guidelines; generators of RMW are responsible for proper handling packaging, labeling and storage of RMW. The majority of RMW generated within university laboratories is transported off-site for incineration at a permitted RMW disposal facility. Details of the university requirements for the management, staging, packaging, and labeling of RMW are listed below:

A. All bags used for disposal of RMW (as defined in section 6 of this document) must meet the following standards:

1. All bags shall be red in color.
2. All bags shall be highly leak and tear resistant.
3. All bags shall bear the label: "Regulated Medical Waste" in large print.
4. All bags must bear universal biohazard symbol of at least 2" in relief.

B. All waste-filled red bags should be placed within a rigid outer container prior to transport off site.

1. University laboratories package all RMW within cardboard incineration boxes to meet outer container requirements. Incineration boxes and red bags may be acquired through VCU Customer Services at 828-9444.

2. MCVH facilities may utilize closable rubberized roll-off dumpsters to meet outer container requirements. Disposal of RMW generated within hospital facilities may involve onsite sterilization treatment (via chemclave or rotoclave) or transportation offsite for treatment via incineration.

C. Outer containers used for transporting of RMW must bear the following information and labeling:

1. The name, address, and telephone number of the generator and the date of generation (date which inner bags and box were sealed and prepared for transportation).
2. "Regulated Medical Waste" in large print.
3. The universal biohazard symbol.

D. Red bags must never be overfilled. Prior to placing in box, seal red bag by gathering ends and wrapping tightly with several loops of heavy tape. The resulting seal must be leakproof. Red bags bearing visible damage and/or evidence of leakage must be overpacked within an intact red bag.

E. Free liquids must be placed in sturdy leakproof containers which are highly resistant to breakage prior to being placed within red bags.

F. Sharps material should never be placed directly into red bags: all sharps materials shall be packaged within securely closable, leak-proof, puncture-resistant containers prior to placing in red bag/incineration box (as detailed in Section IV. B. 4.).

G. The total weight of individual incineration box may not exceed 40 lbs.

H. Spill response kits must be maintained in all areas where RMW is managed (refer to section V for recommended supplies and clean-up procedures).

I. All areas utilized for the staging or storage of red bags must have impervious surfaces which can be readily sanitized. RMW should never be staged on carpeted or wood floor surfaces. Stage and store RMW in areas which are not readily accessible to the general public - limit access to collection and storage areas to specifically designated personnel. A partial list of designated RMW storage areas for university buildings is detailed on the [University Red Bag Disposal Protocol](#).

J. Discarded RMW may be stored at room temperature for no more than 7 days past generation date. RMW may be stored for up to 14 days when refrigerated at 2^o to 7^o Celsius (35^o to 45^o Fahrenheit). RMW may never be stored on site for more than 14 days past generation date. The time restrictions placed on storage of RMW make it critical that Customer Services (828-9444) be contacted as soon as containers are filled and sealed (= "generation date").

K. Reusable containers must be thoroughly disinfected (in accordance with manufacturer's directions) after each use.

L. Personnel handling red bags will wear leak-resistant gloves at all times. Hands should be thoroughly scrubbed with soap and water following glove removal.

M. Red Bags will not be utilized for containing any materials other than RMW.

N. Red bags will never be disposed of in municipal waste stream. All red bags must be transported from the facility by licensed contractors for disposal via incineration at a permitted RMW disposal facility. The collection, transportation, and disposal of red bag waste is coordinated through VCU Customer Services (828-9444).

O. Additional/regularly updated information regarding red bag waste management is also available on the [University Red Bag Disposal Protocol](#) web page.

VII. AUTOCLAVING PROCEDURES: The VDEQ allows for onsite treatment of RMW through autoclave sterilization. If VDEQ autoclave procedural requirements are followed, properly treated materials are no longer classified as RMW, and may be disposed of as unregulated solid waste. The VDEQ regulations (and university requirements) for onsite treatment of RMW are summarized below.

A. Autoclave units shall be operated at one of the following temperature, pressure, and time regimens:

1. Temperature of not less than 250^o Fahrenheit for 90 minutes at 15 lbs./square inch.
2. Temperature of not less than 272^o Fahrenheit for 45 minutes at 27 lbs./square inch.

3. Temperature of not less than 320⁰ Fahrenheit for 16 minutes at 80 lbs/square inch.

B. Autoclave units shall be quality controlled at a frequency of no less than once per month. Each quality control event shall consist of:

1. Testing under full load conditions.

2. Use of spores of *B. stearothermophilus* to verify kill capacity (kits providing ready-to-use ampules are available through lab supply catalogues).

3. Recordkeeping of quality control events.

C. Logbooks shall be maintained which record the following data for each autoclave event:

1. Date and time of autoclave use.

2. Autoclave cycle (90 minutes at 250⁰ Fahrenheit e.g.).

3. Autoclave operator, identification of responsible laboratory.

4. Brief description of waste type and quantity.

5. Quality control, maintenance, and calibration information.

6. Logbook records shall be retained for 3 years following last entry date.

D. Materials treated on-site via autoclaving must be containerized as follows:

1. Bags shall be orange in color, impervious, tear resistant and capable of retaining integrity through heat and pressure of sterilization cycle.

2. Orange bags shall bear the following labels:

- a. "BIOHAZARD, REGULATED MEDICAL WASTE"

- b. The universal Biohazard Symbol.

3. Individual orange bags shall be sealed to the extent of being leakproof, if tears or holes in bag are evident, the bag must be placed within a second orange bag.

4. Each bag will be tagged with color-indicating (temperature) tape.

5. Immediately upon the completion of the sterilization cycle, to each orange bag the following label (with requested information provided) shall be securely fixed ([download to Adobe PDF](#)).

Virginia Commonwealth University - OEHS
Box 980112
Richmond, Virginia 23298-0112
Date Autoclaved: _____
Responsible Person: _____
Phone Number: _____

The generator certifies that this waste has been treated in accordance with the Virginia Regulated Medical Waste Management Regulations and is no longer regulated medical waste.

6. Infectious sharps materials and noninfectious sharps which pose a laceration hazard (pasture pipettes, broken glass, etc.) are not acceptable in the autoclave waste stream. Dispose of infectious and noninfectious sharps as indicated in Section IV.

VIII. CHLORINATION: Utilization of chlorination as a sterilization method may be acceptable for several applications involving small material quantities with minimal infectious properties. In some cases, chlorination may actually be safer and more effective than available alternatives. OEHS reviews requests for utilizing chlorination for sterilization of infectious materials on a case-by-case basis. In order to determine if chlorination is a viable sterilization alternative for your laboratory contact <mailto:mtelliot@vcu.edu>.

IX. LAUNDRY PROCEDURES: Lab coats and other garments which become contaminated with potentially infectious materials must be segregated from other "clean" laundry and stored in red bags until they can be properly decontaminated or disposed of. The VCU laundering guidelines are provided below:

A. For all items heavily saturated with blood products or tainted with Level II or above biohazardous materials, disposal via red bag waste stream is strongly advised.

B. Laundry items contaminated with minute quantities of known or suspected infectious materials products may be disinfected by fully saturating affected areas with 10% bleach solution. Following a minimum 20 minute soaking period (with 10% bleach solution) decontaminated garments should be washed in hot water with detergent and bleach added to cycle.

C. Laundering of materials contaminated with more than minute quantities of blood products must be performed by specially licensed contracting firms. Arrangement for the services of a laundering contractor is a departmental responsibility. For assistance in retaining a laundering contractor, contact University Customer Services at 828-9444.

X. PERSONAL PROTECTIVE EQUIPMENT

A. Personal protective equipment (PPE) must be utilized whenever engineering controls and work practices alone do not provide ample exposure protection. Principal Investigators shall provide all needed PPE to laboratory staff free of charge. Principle Investigators shall also be responsible for providing training to all laboratory staff which details proper use of PPE. OEHS can assist with PPE training upon departmental or laboratory request.

B. Selection of PPE shall be based on the anticipated level of exposure to potential bloodborne pathogens posed by the laboratory procedure(s) to be performed. Appropriately selected PPE shall protect the employee from contact with potential bloodborne pathogens via contact with skin, eyes, mucus membranes and/or through aerosol inhalation under normal conditions throughout the period of exposure risk. Suitable PPE should also prevent the clothing of laboratory staff members from coming into contact with blood or other potentially infectious materials.

C. The following PPE items shall be considered the minimum acceptable level of protection and shall be worn during all activities involving potentially infectious agents:

1. Gloves (latex, nitrile or other approved impervious material).
2. Laboratory Coat.
3. Eye Protection (OSHA- approved safety goggles or glasses equipped with splash guards).

D. Procedures which pose exposure risks that cannot be suitably managed by engineering controls and minimum level PPE (gloves, lab coat and eye protection) shall require the implementation of a higher level of PPE. A listing of some of the more common "high" level PPE utilized within university laboratories and specific functions is provided below:

1. Respiratory Protection Devices: utilized whenever potential for exposure to bloodborne pathogens via inhalation exists. The use of any respiratory protection device must be preapproved by OEHS. Under the University Respiratory Protection Program, OEHS assists with the selection of suitable respiratory protection devices and provides fit testing and respirator training for all university staff. Refer to the OEHS [Respiratory Protection Program](#) web page for additional information.

2. Face Shields: procedures which involve a high potential for splashing and/or spattering of blood or other infectious materials require the use of a face shield in addition to safety glasses/goggles. The face shield serves to protect the exposed skin of the face and offers additional eye protection to the wearer.

3. Disposable Clothing: procedures involving high potential for splashing/spattering of blood or other potentially infectious materials may also necessitate protection beyond the standard lab coat. Disposal clothing composed on impervious fabric should be donned to protect underclothing and skin while conducting such activities.

E. Please note that the wearing of clothing which exposes skin on the legs (shorts, short skirts etc.) and feet (sandals, flop-flops etc.) is strictly prohibited within laboratories which perform manipulations involving potentially infectious materials.

XI. BIOLOGICAL SAFETY CABINETS (BSCs): The BSC serves as a first line of defense in protecting the researcher and outer environment from exposure to potentially harmful biological agents. University policies regarding the use and maintenance of BSCs are discussed below:

A. All manipulations involving agents classified (by NIH/CDC) BSL-2 or greater which have the potential of generating biohazardous aerosols must be performed within a BSC.

B. All BSCs utilized for manipulations involving bloodborne pathogens and/or BSL-2 or greater classified organisms must be certified annually per the requirements of National Sanitation Foundation Standard 49.

C. Signage should be conspicuously posted on all BSCs not certified for use involving BSL-2 or greater agents indicating that the BSC is not suitable for work involving biohazardous agents.

D. Work involving biohazardous agents in conjunction with volatile chemicals which may produce toxic and/or flammable vapors must be performed within BSCs which are vented to the building exterior.

E. More detailed information regarding BSCs can be viewed at the following URL:
<http://www.cdc.gov/od/ohs/biosfty/bsc/bsc.htm>

XII. HEPATITIS B VACCINATION

A. Hepatitis B vaccinations are available, free of charge, to all university staff who are assigned to areas where potential for occupational exposure to the viral pathogen is present. Principle Investigators shall notify staff of the availability of Hepatitis B vaccinations, and shall make all necessary arrangements with VCU Employee Health for providing vaccination services.

B. Employees who decline the Hepatitis B vaccination shall sign the OSHA required "Hepatitis B Declination Form" (provided in section XV). Employees who initially decline the Hepatitis B vaccination, but decide at a later date to receive the vaccination shall be provided with the vaccination upon request and no charge.

C. If a routine booster dose of Hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster doses shall be provided to the employee at no charge. Additional information regarding Hepatitis B vaccine and related employee/employee requirements concerns is available within the VCU model [Exposure Control Plan](#).

XIII. POST EXPOSURE EVALUATION & FOLLOW-UP

A. All exposure incidents shall be reported, investigated and documented. Employees shall report exposure incidents to their supervisor immediately.

B. All potentially exposed staff members shall proceed to Employee Health (828-0584) for medical evaluation as soon as possible. The medical evaluation shall include the following elements:

1. Documentation of exposure route (skin contact, needle stick etc.).
2. Description of circumstance under which incident occurred.
3. The identification and documentation of the source individual (not required if the employer can establish that identification is impossible or prohibited by state or local law).
4. Collection and testing data of source individual for HBV and HIV serological status.

5. Post-exposure treatment for the employee, when medically indicated in accordance with the U.S. Public Health Service.

6. Counseling.

7. Evaluation of any resulting illness.

B. Healthcare professionals evaluating exposed employees will be provided with all of the above-listed information (as available) and shall retain copies of the following documents on site:

1. The University Bloodborne Pathogen - Infectious Waste Management Program (this document).

2. The OSHA Bloodborne Pathogen Regulations (29 CFR 1910.1030).

C. All laboratory tests required in association to the exposure incident shall be conducted by accredited laboratories at no cost to affected employee(s).

D. Employees shall receive a copy of the attending healthcare professional's written opinion within 15 days of the completion of the exposure evaluation.

XIV. TRAINING & RECORDKEEPING

A. All employees who have the potential for coming into contact with bloodborne pathogens and/or other infectious materials shall be provided with training which fully covers the details of this plan, the university biosafety manual, the model university exposure control plan, IBC requirements, and applicable elements of OSHA 29 CFR 1910.1030.

B. Follow up training shall be conducted on (at minimum) an annual basis after the initial training session. Additional training shall also be conducted within individual laboratories prior to initiation of new or modification of existing procedures involving potentially infectious materials.

C. Training programs shall include the following elements:

1. An accessible copy of a complete laboratory-specific [Exposure Control Plan](#) exposure control plan and documentation of explanation of contents to all laboratory employees.

2. An accessible copy of the [University Biosafety Manual](#) university biosafety manual and documentation of explanation of contents to laboratory all laboratory employees.

3. Institutional Biosafety Committee Mandated Training: The IBC requires that all university staff working within laboratories complete applicable sections of the [Laboratory Safety Training Modules](#) under the direction of their supervisor.

4. An accessible copy of OSHA 29 CFR 1910.1030 ([Bloodborne Pathogen Standard](#)) and documentation of explanation of contents to all lab employees.

5. Provision and documentation that of a general explanation of the epidemiology and symptomology of diseases associated with bloodborne pathogens.

6. Discussion of the modes for the transmission of bloodborne pathogens and other infectious materials.

7. An explanation of the employer's exposure control plan, and a written copy of the plan.

8. Discussion of methods for identifying tasks which involve the potential for exposure to blood products and other infectious materials;

9. Detailed information regarding the use and limitations of engineering controls for reducing exposure risks.

10. Detailed information regarding the use and limitations of personal protective equipment (PPE) for reducing exposure risk.

11. Hands-on training detailing types, applications, and proper use and care.

XV. HEPATITIS B DECLINATION FORM: All employees involved in tasks which pose the potential for exposure to bloodborne pathogens who decline free Hepatitis B vaccination shall be required to sign the following form:

I understand that due to my occupational exposure to blood or other infectious materials that I may be at risk for acquiring Hepatitis B virus infection. I have been given the opportunity to be vaccinated with the Hepatitis B vaccine at no charge to myself. However I decline the Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have exposure to blood or other potentially infectious materials and I want the Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

(print name)-----

(title)-----

(signature)-----

(date)-----