

**University of Rochester Bloodborne Pathogens Exposure Control Plan**

**In Compliance with 29 CFR 1910.1030**

**OSHA Standard for Occupational Exposure to Bloodborne Pathogens**

**Rev050619**

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## I. GENERAL PRINCIPLES

The Occupational Safety and Health Administration (OSHA) promulgated the Occupational Exposure to Bloodborne Pathogens Standard (29 CFR 1910.1030) in December 1991. This Exposure Control Plan (the Plan) is written to comply with the regulation and includes the following information:

- Exposure Determination
- Methods of Compliance
- HIV/HBV Laboratories
- Hepatitis B Vaccination
- Communication of Hazards
- Procedure for Evaluation of Circumstances Surrounding Exposure

OSHA recognizes that the potential for exposure to Bloodborne pathogens extends beyond healthcare professionals and thus defines the scope of this standard to include all personnel at risk for occupational exposures to blood or other potentially infectious materials. This Plan covers all healthcare professionals, laboratory personnel, housekeepers, facilities staff, and any other University employees with the potential for exposure to bloodborne pathogens. **All employees identified in the Exposure Determination are required to comply with this policy. The Exposure Control Plan is designed to protect employees from infection with bloodborne pathogens, including but not limited to hepatitis B virus (HBV) which causes hepatitis B; HIV, which causes acquired immunodeficiency syndrome (AIDS); hepatitis C virus (HCV); and human T-cell lymphotropic viruses. On rare occasions various other bacterial, viral, and parasitic pathogens may also be transmitted by blood exposure.**

The Plan will be implemented in Strong Memorial Hospital (SMH) by the Directors' Office in conjunction with the Infection Prevention Program, SMH Employee Health and the University Health Service (UHS); in Eastman Dental Center (Eastman Institute for Oral Health) by the Office of Clinical Affairs in conjunction with the Eastman Institute for Oral Health Infection Control Program and UHS; throughout the rest of the University the Plan will be implemented by appropriate Deans and Department Heads in conjunction with Environmental Health & Safety (EH&S) and University Health Service. Copies of both the Exposure Control Plan and the Infection Control Manual can be found online at the Strong Health Infection Control Program (<http://intranet.urmc-sh.rochester.edu/policy/infcontrol>) and at Environmental Health & Safety (<http://www.safety.rochester.edu/ih/bbp/bbpindex.html>). Online copies of the plan are available throughout the University including all nursing units, in all clinical, ancillary and support services departments, in laboratories, offices and research locations.

This Plan will be reviewed and updated annually to assure that any new hazards and/or exposure-prone tasks are recognized and sufficiently covered by the Plan.

## II. RESPONSIBILITIES

### **A. Deans, Administrators, and Department Heads**

Deans, Administrators and Department Heads have ultimate responsibility for administration and enforcement of safety within the University including this Exposure Control Plan.

### **B. Supervisors and Principal Investigators**

Supervisors and principal investigators have primary responsibility for implementing the Exposure Control Plan in their area and ensuring that the employees under their supervision comply with the requirements of this plan. These responsibilities include: identifying employees who have potential exposure to human blood or other potentially infectious body fluids, ensuring that these employees attend training, establishing exposure control procedures for all projects under their direction, and assuring that personal protective equipment is available. In addition to assuring PPE is available, the supervisor is responsible for enforcing use of PPE for high risk patient care.

### **C. Occupational Safety Unit, Environmental Health & Safety**

An industrial hygienist within Environmental Health & Safety will oversee the Bloodborne Pathogens Plan. The industrial hygienist's responsibilities include participation in annual updates of the Exposure Control Plan including the Exposure Determination; providing BBP training to applicable groups, identification of OSHA requirements under the standard, providing necessary guidance to maintain compliance with OSHA requirements; and provision of support and encouragement for University staff programs and initiatives to reduce blood exposures.

### **D. Infection Prevention and Control, Strong Memorial Hospital (SMH)**

The SMH Infection Prevention and Control Program, under the direction of the Hospital Epidemiologist, assists in the development and implementation of the Exposure Control Plan in Strong Memorial Hospital.

### **E. Infection Control, Eastman Institute for Oral Health**

The Eastman Institute for Oral Health Infection Control Program, under the direction of the Office of Clinical Affairs which is overseen by the Associate Director for Clinical Affairs, assists in the development and implementation of the Exposure Control Plan. Infection Control staff participate in training and consultation to Office of Clinical Affairs on infection control methods and strategies.

**F. University Health Service**

The University Health Service has responsibility for occupational health of all University employees. Their responsibilities include but are not limited to first aid, HBV vaccination, infectious disease monitoring and follow-up treatment, and exposure data collection. UHS is also responsible for annual health updates and recordkeeping for University employees (excluding Division 5).

**G. SMH Employee Health**

SMH Employee Health, the designated healthcare provider for University of Rochester Medical Center (URMC) employees, has the responsibility for HBV vaccination, compliance immunizations and physicals, annual health updates, and medical recordkeeping for those employees.

**H. Environment of Care Council**

The Environment of Care Council, through oversight of the Hazardous Materials and Waste Management Plan, is responsible for advising the University on the proper handling of regulated medical waste, assuring that the University is in compliance with all federal and state regulations, informing the University Biosafety Officer and SMH Administration of any regulation changes which may affect the instructions given in this Exposure Control Plan.

**I. All Employees Identified in the Exposure Determination**

All employees identified in the exposure determination are required to comply with the Exposure Control Plan. The requirements include attending training, planning and conducting procedures in accordance with the Exposure Control Plan, developing and maintaining good work habits, reporting incidents of exposure to human blood, body fluids, or tissues to UHS or SMH Employee Health

**III. EXPOSURE DETERMINATION**

The University has determined which of its employees/volunteers are at risk of occupational exposure to bloodborne pathogens. Those identified include full-time and part-time faculty, staff, temporary services personnel, time-as-reported staff, graduate and undergraduate student employees.

The results of this exposure determination can be found in Appendix 4.

## IV. METHODS OF COMPLIANCE

Methods of Compliance refer to the techniques and procedures to be followed in order to minimize the risk of exposure to bloodborne pathogens in the workplace. The four basic components to this approach include:

- Universal Precautions
- Engineering and work practice controls
- Personal Protective Equipment
- Housekeeping Practices

The methods outlined in this Plan are written generically so they are applicable to most job classifications with potential exposure to blood or body fluids. For more specific procedures, consult your supervisor. Additional requirements for HIV/HBV research laboratories can be found in Appendix 7.

### A. Universal Precautions

1. An approach to infection control that assumes that the blood, body fluids, and tissues of ALL persons are potentially infectious with bloodborne pathogens. These pathogens include but are not limited to human immunodeficiency virus (HIV), hepatitis B virus, hepatitis C virus, and other agents.
2. Infection may occur via three types of occupational exposure to blood or other infectious body fluids:
  - a. Parenteral exposure (needlestick, injection, cut),
  - b. Mucous membrane exposure (eye, mouth), or
  - c. Non-intact skin exposure (wounds, dermatitis).
3. Precautions designed to prevent exposure to blood and other potentially infectious materials will apply without regard to the particular person who is the source of the blood, body fluid, etc. The precautions to be taken are applied universally to all patients and all laboratory specimens containing blood/body fluids, hence the term Universal Precautions.
4. DEFINITION OF POTENTIALLY INFECTIOUS MATERIALS (for bloodborne pathogens):
  - a. Human blood and blood products
  - b. Human semen and vaginal secretions
  - c. Human cerebrospinal fluid (CSF), synovial fluid, peritoneal fluid, pericardial fluid, amniotic fluid
  - d. Human saliva in dental procedures (assume blood contamination)
  - e. Any human body fluid visibly contaminated with blood
  - f. Any unfixed human tissue or organ
  - g. Human cells and cell lines

- h. HIV-containing cell, tissue, or organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or hepatitis B virus (HBV).

Notice that other body excretions such as saliva, breast milk, urine, stool, vomitus and respiratory secretions are not included on this list (unless visibly contaminated with blood). However, many of these excretions present other infectious hazards. *AS A PRACTICAL MATTER, at the University of Rochester, UNIVERSAL PRECAUTIONS APPLY TO ALL BLOOD, BODY FLUIDS, TISSUES, AND SECRETIONS.*

## **B. Engineering & Work Practice Controls**

Engineering and work practice controls are designed to minimize or eliminate employee exposure to bloodborne pathogens. Physical means to isolate the hazard, such as sharps disposal containers and self-sheathing needles, are called engineering controls. Work practice controls are standard methods by which tasks are performed in an effort to improve safety, such as by prohibiting recapping of needles. Both engineering and work practice controls are effective if each employee develops good working habits.

### 1. Handwashing:

- a. Even if there is no known exposure, all employees are required to wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment. Alcohol based hand sanitizer (for example, Purell) may be used for disinfection if hands are not visibly soiled.
- b. Following exposure to blood or other potentially infectious materials, employees shall wash hands and any other exposed skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible.
- c. Eye wash stations are to be provided in all areas where there is a potential for contamination of the eyes or face.
- d. Hand washing facilities with soap and running water will be readily accessible to employees. When provision of handwashing facilities is not feasible an appropriate antiseptic hand cleanser and paper towels or antiseptic towelettes will be provided. After use of such antiseptic cleansing, hands should be washed with soap and running water as soon as feasible.

### 2. Sharps, Sharps Disposal, and Sharps Containers:

- a. Needles, lancets, scalpel blades, sharp pipettes, slides, broken/contaminated glass, surgical staples, orthodontic wires, wooden applicator sticks or any other item likely to puncture a bag are considered sharps and must be disposed of in an approved sharps container. **Everyone is responsible for the proper disposal of sharps that they have used.** Sharps should never be left on bedside tables, bracket tables, procedure trays, or dining trays for someone else to pick up. **Sharps should never be discarded into the trash.**



- b. **Bending, shearing, or breaking of used needles is strictly prohibited.**
  - c. Approved sharps containers are puncture-resistant hard plastic, leak-proof on the sides and bottom, and biohazard-labeled. Sharps containers are wall-mounted in most patient rooms of SMH (except where they constitute a risk to the patient); larger free-standing, plastic sharps containers are used in high-volume clinical areas and laboratories.
  - d. The height at which sharps containers are mounted on walls plays a key role in allowing for proper sharps disposal and the prevention of avoidable sharps injuries at the University. Frequently, sharps injuries associated with mounted sharps containers result from inappropriately disposed of needles and bouncing back of a needle during disposal. These types of incidents are more easily prevented if the opening of the sharps container is visible to the individual disposing of the sharp. Thus the height of sharps containers must be such that the container opening is visible to the vast majority of the users. Environmental Health & Safety has also reviewed data taken from studies logging the height of patient caregivers on various units. Environmental Health & Safety has concluded that the **opening** of the sharps containers should be mounted between 48 inches and 54 inches from the floor. This height will accommodate most shorter individuals and allow everyone to see the container opening while disposing of their sharps. This height will also balance the need to keep sharps containers from the reach of curious children. Sharps containers should be mounted away from areas where children can climb up and reach the containers, and should not be installed in areas where children may be unsupervised.
3. Sharps Safety Devices:
- a. Safety butterflies, syringes, lancets, IV needles and straight needles must be employed whenever possible. Appropriate hospital committees, prior to purchasing, evaluate all safety devices for ease of use and protection afforded to staff. A passive system is preferred to a staff activated system. Safety devices require staff understanding of the technology and activation system. In-servicing on the safety device is required prior to using the device. All used devices are disposed of in the sharps receptacle. Refer to Appendix 2. for lists of sharps safety devices. Appropriate hospital committees continue to review needle safety technology for advancements in the needle safety systems.
  - b. Entry into an IV system is to be done only through a needleless device whenever a needleless device is available. Needleless access devices are employed on all central lines and on intermittent injection sites. Entry into IV systems is accomplished either through an existing needleless port in the IV line or by applying a needleless access pin to the IV port.
  - c. Engineering controls used to prevent sharps injuries are reviewed and recommended for trial by the University's Occupational and Employee Health Blood Exposure Committee and the SMH Value Analysis Advisory Board. Reviews are conducted as technology in sharps safety advances and as injury trends are identified. Appendices 2, 8 and 9 outline the review process for

sharps safety devices and a list of devices in use. All employees are encouraged to participate in the selection of engineering controls addressed at eliminating blood exposures. Employees may participate by contacting their supervisor, their committee representative, the Occupational Safety Unit of Environmental Health & Safety (x5-3241), or the University Health Service (x5-2662).

- d. Research laboratories staffed by non-clinical personnel (i.e. those that receive Institutional Biosafety Committee approval), alternatively, may consult the Biosafety Officer (x5-3014) for device selection and training.

4. Recapping Policy:

- a. **Needles are not to be recapped or disassembled from syringes before disposal.**
- b. For disposal, a needle-syringe assembly is deposited as a unit directly into a sharps container. Needles attached to IV tubing should be cut off, with the end of the tubing, and placed directly into the sharps container. The remainder of the IV tubing should **not** be discarded into the sharps container.
- c. **Exception:** If recapping must be done for procedural or safety reasons, a specifically designed recapping device or the one-handed technique is employed for safe recapping of the needle. (For example, a needle must be removed from a blood gas syringe before sending the syringe to the laboratory, and the needle must be recapped before it can be safely removed.)

**One-handed re-capping technique:**

- (1) place needle-cap on counter-top or table;
- (2) take hand away from cap and away from needle;
- (3) holding only the syringe, guide needle into cap;
- (4) lift up syringe so cap is sitting on needle hub;
- (5) secure needle-cap into place.

5. Reusable Sharps:

Immediately, or as soon as feasible, contaminated reusable sharps are to be placed in appropriate containers until properly reprocessed. Containers shall be puncture resistant, biohazard-labeled or color-coded, and leak-proof on the sides and bottom.

6. Biological Safety Cabinets:

- a. Biological safety cabinets provide employee, environmental, and product protection against potential hazards that are presented as an airborne particulate. This protection is achieved through HEPA (High Efficiency Particulate Air) filtration. Biological safety cabinets are used in laboratories to provide employee protection from splashing, spraying, and inhalation of potentially infectious materials.

- b. Certification of biological safety cabinets is required regardless of its usage:
  1. Following cabinet relocation,
  2. Following HEPA filter replacement,
  3. Following repair or maintenance on any sealed portion of the cabinet.
- c. All newly installed biological safety cabinets must be certified in place before initial use regardless of usage type.
- d. Biological safety cabinets must be recertified annually if one or more of the following are used within the cabinet.
  1. Recombinant or synthetic nucleic acids
  2. Human products including but not limited to blood, body fluids, unfixed tissues, cells and cell lines
  3. Organisms requiring biosafety level 2 or higher containment
  4. Radioisotopes
  5. Carcinogens or other hazardous chemicals in particulate form
- e. Certification must be performed by an outside contractor. All certifiers must have demonstrated knowledge in working with biological safety cabinets. This knowledge must include training from manufacturers of cabinets. All individual certifiers must be accredited by a nationally recognized accreditation program such as but not limited to the National Sanitation Foundation. The biological safety cabinet certification procedure must comply with the National Sanitation Foundation's Standard Number 49: Class II (Laminar Flow) Biohazard Cabinetry.
- f. Decontamination of biological safety cabinets is performed by an outside contractor as noted above. Biological safety cabinet decontamination procedure must comply with the National Sanitation Foundation's Standard Number 49: Class II (Laminar Flow) Biohazard Cabinetry.
- g. Decontamination using gaseous formaldehyde or Vaporized Hydrogen Peroxide (VHP) must be performed:
  1. Before moving the cabinet to another location,
  2. Before HEPA filter replacement,
  3. Before repair or maintenance involving access to a contaminated plenum of the cabinet.
- h. Hazardous volatile chemicals must never be used in non-ducted Class II type A1 or A2 (formerly called A/B3) biological safety cabinets. Class II type A biological safety cabinets vent or discharge exhaust air directly into the laboratory. HEPA filters will not trap gases or vapors therefore only ducted biological safety cabinets (Class II type B) are appropriate for hazardous volatile chemicals.
- i. Lab personnel are responsible for and required to empty and chemically disinfect the work surface of the biological safety cabinet upon completion of experiments. Contact the Biosafety Officer for disinfectant recommendations. Research laboratories staffed by non-clinical personnel (i.e. those that receive Institutional Biosafety Committee approval) must use disinfectants listed in the laboratory's LAB/L form.
- j. Additional information regarding biological safety cabinets can be found at this web link: <http://www.safety.rochester.edu/ibc/doc/class2BSCrequire.doc>.

Contact the Laboratory Safety Unit (x5-3241) of Environmental Health & Safety with questions regarding biological safety cabinets, certification, decontamination, and qualified biological safety cabinet contractors.

7. Eating, drinking, smoking, applying cosmetics, or handling contact lenses:  
Eating, drinking, smoking, applying cosmetics, or handling contact lenses are prohibited in work areas where there is a reasonable potential of occupational exposure to blood or body fluids (e.g., operating rooms, procedure rooms, and laboratories). Hand cream is not considered a cosmetic. Petroleum or mineral oil based hand creams may adversely affect glove integrity and should not be used. If petroleum or mineral oil based hand cream is used, it must be washed off prior to donning gloves.
8. Food and drink:  
Food and drink are never to be kept in refrigerators, freezers, or cabinets which are, at any time, used for storage of blood or other potentially infectious materials.
9. Laboratory Procedures:  
All laboratory procedures involving blood or other potentially infectious materials shall be performed in a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.
  - a. Laboratory procedures involving human blood or other potentially infectious body fluids which may generate aerosols or micro-droplets must be completed using the protective features of a Class II biological safety cabinet. Laboratory procedures which may generate splashes, sprays or large droplets of blood or other potentially infectious body fluids are to be performed preferentially in a biological safety cabinet. If a biological safety cabinet is unavailable, protection may be achieved using a work station shield to protect the face of the laboratory worker. Note, if a work station is used, the risk of exposure to employees working adjacent or opposite the shield must be considered. If a biological safety cabinet or work station shield is not used, then personal protective equipment must be used to protect the laboratory worker's mucous membranes and include a fluid resistant splash mask and goggles or, alternatively, a chin-length face shield. Such procedures include but are not limited to opening of vacutainers or other stoppered / pressurized specimen containers and pipetting.
  - b. When centrifuging potentially infectious body fluids, covers shall be used on carriers. A waiting period of 10 minutes after centrifuge has come to a full stop before opening and removing any specimens is required. If breakage is known to have occurred, the carrier should be opened in a biological safety cabinet. If a biological safety cabinet is not available, then a chemical fume hood could be used instead. If no local ventilation device is available, then wait 30 minutes after centrifuge has stopped and remove while wearing full face protection.
  - c. Mouth pipetting of blood or other potentially infectious materials is prohibited.

10. Patient Care Procedures:

All patient care procedures involving blood or other potentially infectious materials shall be performed in a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

- a. Examples of patient care activities that may result in splashing or spraying of body fluids include but are not limited to:
  1. Moving ventilated patients
  2. Debriding wounds
  3. Changing soaked dressings
  4. Flushing ports of needleless IV system
  5. Suctioning ventilated patients
  6. Emptying drainage from patient's tubes (i.e. chest tubes, Foleys, J-tubes)
  7. Insertion and removal of an arterial or central line
  8. Surgical procedures including bedside procedures
- b. For those tasks, personal protective equipment must be worn to prevent fluid contact with face (especially eyes and mouth), skin, and clothing. (Refer to Section on Personal Protective Equipment for more information.)
- c. Mouth suctioning of blood or other potentially infectious materials is prohibited.

11. Specimen containers & transport:

- a. Specimens of blood or other potentially infectious materials shall be placed in a container, which prevents leakage during collection, handling, processing, storage, transport, or shipping.
- b. All blood tubes, blood culture bottles, culturesses, screw-top plastic or glass specimen containers/ vials containing any specimens are handled in accordance with Universal Precautions.
- c. Gloves are worn when handling, transporting, or processing all specimen containers.
- d. Biohazard labels are required on:
  1. Any specimen known or suspected to be infected with one of the following (Place biohazard label on specimen and on zip-lock bag):
    - a. Creutzfeldt-Jakob Disease (write "CJD" on labels),
    - b. *Mycobacterium tuberculosis* (TB),
    - c. Lassa Fever, Ebola Virus, Marburg Virus, Hantavirus or other hemorrhagic fever viruses,
    - d. Anthrax
  2. Specimen bags
  3. Any outer container used to carry or enclose primary specimen containers
  4. Any specimen container sent outside of the University (must be labeled on container, not on outside of package).
- e. Containers which are leaking or which are visibly contaminated with blood/body fluids on the outside are placed inside a clear zip-lock bag and sealed or are placed inside another leak-proof container.

12. SMH pneumatic tube system:

- a. **All specimens sent through the SMH pneumatic tube system must be placed in a zip-lock bag and sealed.** Requisition forms are not placed inside zip-lock bag. Please refer to the Strong Memorial Hospital Infection Prevention Program for specific information regarding using the tube system for laboratory specimens.
- b. Contaminated pneumatic tube carriers are handled in accordance with Universal Precautions. Contaminated carriers are disinfected with bleach solution (see D. Housekeeping) or other disinfectant recommended by manufacturer and approved by SMH Infection Control Committee.
- c. Employees who open tube carriers containing patient specimens must wear gloves.
- d. Decontamination of the pneumatic tube system is done by Medical Center Facilities.
- e. Problems with the pneumatic tube system must be directed immediately to the Tube Hot-Line (x5-4949).

13. Equipment decontamination:

- a. Any equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.
- b. The equipment shall be labeled with a biohazard symbol stating which portions remain contaminated.
- c. This information shall be conveyed to all affected employees, servicing representatives prior to handling, servicing, or shipping so that appropriate precautions will be taken.

**C. Personal Protective Equipment (PPE)**

The use of Personal Protective Equipment places a barrier between the employee and the potentially infectious materials to which he/she may be exposed. In accordance with Universal Precautions, the blood, body fluids, and tissues of all persons are considered potentially infectious. PPE must be utilized based on the particular task performed, regardless of the patient involved or the source of blood or other specimen involved. **PPE will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use.** Job hazard assessments must be conducted prior to issuance of personal protective equipment to employees. This assessment is performed by the supervisor of the area for job titles being supervised.

**The following directives apply to most areas of occupational exposures:**

**Personal protective equipment must be worn in all cases where there is the potential for exposure to blood or body fluids. The only exemption from the use of protective equipment is on rare and extraordinary occasions when its use would prevent the proper delivery of health care or would pose an increased hazard to the personal safety of the worker. An employee's decision not to use PPE is to be made on a case-by-case basis, prompted by legitimate and truly extenuating circumstances. In these cases, whether or not an exposure occurred, an incident report must be filled out explaining the event.**

1. General:

- a. Provision: The University provides appropriate PPE at no cost to employees. Employees with special PPE requirements may receive alternative PPE types by contacting UHS (for example, gloving alternatives including glove liners and different gloving materials).
- b. Use: Each Department Head or Supervisor will ensure the provided PPE is used appropriately by employees under his/her direction. In the event that PPE is not used when indicated, the circumstances shall be investigated and documented by the Supervisor. Any unusual or extraordinary events are to be documented on an incident report form.
- c. Accessibility: Each supervisor will ensure that appropriate PPE, in appropriate sizes, is readily accessible at the worksite or issued directly to all employees working in the area under their authority.
- d. The upkeep of PPE is the responsibility of the University. Cleaning, laundering, disposal, repair and replacement of PPE shall be done as specified by each department to maintain its effectiveness.
- e. If a garment(s) is penetrated by blood or other potentially infectious material, the garment(s) shall be removed immediately or as soon as feasible.
- f. All PPE shall be removed prior to leaving the work area.
- g. When PPE is removed it, shall be placed in an appropriately designated area or container for storage, washing, decontamination, or disposal.

2. Gloves:

Gloves are selected on the basis of material and intended use. Vinyl gloves are typically less durable and more prone to tears and leakage than are latex or nitrile gloves. Use of vinyl gloves is recommended when minimal or no direct contact with wet blood or potentially infectious body fluids is anticipated. Use of nitrile gloves is recommended for moderate to high risk tasks that involve direct, heavier contact with body fluids, i.e. sufficient contact to wet the glove. See Appendix 11, ***Glove Recommendations*** for additional selection criteria and examples.

**“Universal Gloving”** is required for all healthcare workers; this means that gloves must be worn for ALL contact with patients and their environments.

- a. Gloves are required to be worn for all anticipated hand contact with human blood, body fluids, tissues, or mucous membranes and when handling items or surfaces suspected to be contaminated with blood or other potentially infectious materials.
  - b. Gloves must be worn during all invasive procedures.
  - c. Gloves must be worn during all vascular access procedures, including all phlebotomies and insertions of IV’s or other vascular catheters.
  - d. Gloves must be worn during any examination of wounds, non-intact skin, mucous membranes, or areas of active bleeding, and during instrument examination of the oropharynx, respiratory tract, gastrointestinal tract, and genitourinary tract.
  - e. Gloves must be worn during all clean-up of blood/body fluids and during decontamination of instruments and equipment.
  - f. Gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured or when their ability to function as a barrier is compromised.
  - g. Gloves are to be worn only in the area of suspected exposure and must be discarded prior to leaving the room.
  - h. Disposable / single use gloves shall not be washed and reused.
3. Face Protection:
- a. Masks:
    1. Masks covering both the nose and mouth must be worn (in addition to eye protection) whenever spray, splash, spatter or aerosols of blood or body fluids may be generated, and contamination of the mouth or face can be reasonably anticipated. Masks must be worn during all major surgical procedures, all obstetrical procedures, and all insertions of arterial catheters and central vascular catheters.
    2. To be effective, masks must be worn correctly with the metal band fitted to the nose, the top ties at the crown of the head, the bottom of the mask under the chin, and the bottom ties at the nape of the neck.
    3. A mask is either on or off: it is never to be allowed to dangle around the neck where it can become heavily contaminated with microorganisms.
    4. A mask should be changed if it becomes moist, regardless of how long it has been worn.
    5. Used masks must be discarded prior to leaving the room. They should never be carried in pockets. (For exceptions see Ribavirin administration in the SMH Policy Book and Tuberculosis Control Plan in the SMH Infection Control Manual.)



- b. Face Shields:  
Face shields are an alternative to safety goggles and masks. Face shields combine protection for the eyes, nose, and mouth. Face shields must be at least chin length and may be worn over prescription glasses.
4. Eye Protection:
- a. Eye protection includes goggles or glasses with solid side shields - (Ordinary glasses are not acceptable).
  - b. Protective eyewear (in addition to a mask) must be worn whenever spray, splash, or aerosols of blood, body fluids, or tissue/bone particles may be generated, and contamination of eyes or face can be reasonably anticipated. Protective eyewear shall be worn during all major surgical procedures, deliveries, and during placement of arterial catheters.
  - c. Masks which incorporate a shield covering the eye area may be utilized.
  - d. When soiled, protective eyewear is to be decontaminated per manufacturer's directions.
  - e. Protective eyewear shall be discarded when defective or broken and not able to be repaired.
  - f. **Safety glasses with solid side shields are only appropriate when fluid quantities are small and the likelihood of splashing or spraying is low.**
5. Gowns and Aprons:
- a. Regular work clothes, surgical scrubs, and uniforms are not considered protective attire. Proper use of protective attire is intended to prevent contamination of skin, mucous membranes, and work clothing.
  - b. A water-resistant cloth isolation gown shall be worn whenever splashing, spattering, or spraying of blood or body fluids is anticipated or when blood/body fluid contamination of the arms is anticipated.
  - c. Disposable plastic apron shall be worn if clothing is likely to become soiled with blood or body fluid but the requirement for an isolation gown is not met.
  - d. Surgical, Obstetrical, and Post-mortem Procedures: the standard, fluid-resistant surgical gown is appropriate for most procedures. During those procedures in which heavy contamination or soak-through of a gown with blood or body fluids is reasonably anticipated, a fluid-proof or highly-fluid-resistant gown shall be worn. An isolation gown or surgical gown shall be worn when performing any obstetrical delivery in SMH.
  - e. All protective clothing must be removed after each use and prior to leaving the room. Gowns/aprons are not to be hung-up for reuse; a new gown is used for each contact.
6. Laboratory Coats:
- Lab coats are not made of impervious materials. Therefore, lab coats only protect against 'nuisance' contact (unlikely to cause exposures). Additional barriers may be required based on individual tasks.

- a. All personnel in SMH Clinical Laboratories shall wear buttoned laboratory coats at all times when present in the laboratory. Personnel in other laboratories of the University shall wear buttoned laboratory coats whenever procedures involving human blood, body fluids, tissues, or bloodborne pathogens are being performed.
  - b. All protective clothing must be removed after each use and prior to leaving the room. Laboratory Coats may be worn throughout a period of work (unless visibly contaminated with blood or other infectious material) but must be removed before leaving the laboratory area.
  - c. Laboratory coats which are used to prevent nuisance contact are to be laundered by the "University". Purchasing can be contacted for help in arranging laundry service. The Eastman Institute for Oral Health employees are to check with their supervisors for procedures concerning drop off and pick up of laboratory coats for laundering.
7. Surgical caps/hoods:  
Surgical caps/hoods shall be worn when gross contamination of the head due to spraying of blood or body fluid is reasonably anticipated. Most such situations involve surgical operations in which caps or hoods are already required for reasons of sterility. These should be discarded before leaving the location.
8. Shoe covers, leg covers, or boots:  
Shoe covers, leg covers, or boots shall be worn when gross contamination of the lower legs and/or feet with blood or infectious body fluid is reasonably anticipated. Such procedures include, but are not limited to, orthopedic surgery, cardiovascular surgery, certain intra-abdominal surgery, and autopsies. Protective footwear shall be removed before leaving the room.
9. Resuscitation Equipment:  
Pocket masks, resuscitation bags, or other ventilation devices shall be provided in strategic locations as well as to key personnel where the need for resuscitation is likely. This will minimize the need for emergency mouth-to-mouth resuscitation.

**D. Housekeeping Practices**

Housekeeping practices are everyone's responsibility. Developing proper work habits and disposal techniques helps to ensure a safe working environment. The Environmental Services Department and Infection Prevention may be contacted for assistance.

1. General:  
The supervisor shall assure that the work site is maintained in a clean and sanitary condition. Cleaning is performed in a manner to prevent potentially infectious

materials from becoming airborne.

2. Contaminated Items:

All items which come in contact with potentially infectious materials shall be cleaned on a regularly scheduled basis. In most cases this will be at least daily and after each known contamination.

3. Contaminated Work Surfaces:

All work surfaces shall be properly cleaned and disinfected after contact with blood or other potentially infectious material using a solution of 5.25% sodium hypochlorite (bleach) diluted 1:10 with water or any other disinfectant approved for use by Infection Prevention and Control. The bleach solution should be prepared in a container labeled with the contents and discarded and re-made monthly. Bleach solutions should be labeled with the following information: Bleach solution, dilution (1:10), date made, and the hazard description: "Corrosive". Eastman Institute for Oral Health employees are to use a solution of LpHse or bleach. LpHse solution must be prepared in a container labeled with the contents and discarded and remade every 14 days. LpHse solutions must be labeled with the following information: LpHse solution, date made, and the hazard description: "Corrosive". Any other disinfectant must be used according to manufacturer's recommendations with the approval of the appropriate Infection Control Committee (SMH or Eastman Institute for Oral Health).

**Note:** See the Hazard Communication Program for SMH for information on chemical labeling requirements <http://www.safety.rochester.edu/ih/hazcom/hazcommedical.html>

4. Reusable instruments/equipment:

Reusable instruments/equipment must be rinsed of gross soil prior to being sent to the appropriate department for decontamination. Items requiring repair must be decontaminated before sending to Clinical Engineering.

- a. Personal protective equipment is to be worn when handling and rinsing contaminated items.
- b. If items are dripping, they shall be placed in a clear plastic bag and a biohazard label placed on the outside of the bag. Under no circumstances is a red bag to be used.
- c. If the using unit/department is responsible for decontaminating instruments, a chemical germicide approved by the appropriate Infection Control Committee (SMH or Eastman Institute for Oral Health) must be used.
- d. Reusable instruments including sharps such as scissors and skin hooks sent to Material Processing for decontamination shall be handled in a strainer type basket to facilitate pre-soaking as necessary. If the instruments become tangled, a mechanical means such as forceps shall be used to sort through them.

5. Disposable instruments/supplies:
  - a. Immediately after use, disposable supplies should be discarded in appropriate containers located nearby.
  - b. All regulated medical waste should be placed into red bags or sharps containers.
  
6. Laundry:
  - a. Universal precautions are used for handling all soiled laundry. Soiled laundry is designated by green bags.
  - b. Linen and protective clothing soiled with body fluids are to be handled as little as possible and with minimum agitation to prevent contamination of the person handling the linen. Gloves shall be worn whenever handling soiled linens.
  - c. Contaminated laundry shall be bagged at the location where it was used. (Whenever laundry is wet and presents the potential for soak-through or leakage from the bag, it shall be placed and transported in **leak-proof** bags.) The linens are to be placed in the appropriately designated area for transportation to the linen distribution area by an environmental services worker.
  - d. Linen distribution workers are required to wear heavy protective gloves and long sleeved gowns or lab coats to prevent occupational exposure during handling of linen. Care should be taken to avoid leaning the bags against clothing.
  - e. Laundry from SMH and Eastman Institute for Oral Health is shipped off-site to vendors who use Universal Precautions in the handling of all laundry. Caged carts for soiled linen are to be cycled through the cart washer on a weekly basis and after noticeable contamination.
  - f. The soiled cart area is to be swept and mopped daily with Hospital-approved detergent-disinfectant.

#### **E. Spills**

The most immediate concern following a spill of potentially infectious material is to contain the area and treat any exposed persons. Then a **properly trained employee\*** can begin the clean-up and decontamination process.

**\*A properly trained employee** is an employee who has taken Bloodborne Pathogens Training (in MyPath) or has received "live training" from Environmental Health and Safety.

The following steps are to be taken immediately after a spill:

1. Contain the spill by placing an absorbent cloth (i.e., paper towels, sheet) over the area involved. Keep all unnecessary people out of the area. If the spill is in a patient room or laboratory, close the door. If the spill is in a public access area such as a hallway, call Public Safety at x13 for assistance in limiting access to the area.
  
2. Any employee sustaining skin, mucous membrane, or percutaneous contact with

potentially infectious materials shall cleanse the affected areas as soon as possible, as follows:

- a. Intact skin: wash with soap and water.
  - b. Non-intact skin and needlesticks/scalpel cuts: wash with soap and water.
  - c. Intra-oral exposure: spit and rinse the mouth with water.
  - d. Eyes: rinse well with sterile saline or water (if available), or tap water. (Note: Remove contact lenses first. After rinsing eyes, disinfect contacts per manufacturer's recommendation.)
3. An employee who has had an exposure is required to:
- a. Report exposure, as soon as possible, to the **Blood Exposure Hotline 24/7 at 275-1164.**
  - b. Contact his/her supervisor
  - c. Fill out an incident report form ([www.safety.rochester.edu/SMH115.html](http://www.safety.rochester.edu/SMH115.html))
4. A **properly trained employee\*** (see definition above) shall proceed with the clean-up and decontamination of the area involved.
- a. Wear appropriate personal protective equipment to prevent blood or other potentially infectious materials from reaching the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes. Examples of appropriate personal protective equipment include, but are not limited to, gloves, lab coat, goggles, and mask.
  - b. Cover the spilled material with bleach solution or other appropriate disinfectant approved by the appropriate Infection Control Committee (SMH or Eastman Institute for Oral Health). Work from the outside inward. Avoid splashing or splattering of blood.
  - c. Pick up any broken glass or sharps by mechanical means, such as tongs or a broom and dustpan. This debris can then be deposited into a sharps disposal container. **Never pick up sharps directly by hand.**
  - d. Wipe up blood and disinfectant solution with absorbent cloth or paper towels.
  - e. Discard disposable cloths/towels and protective equipment into a red bag.
  - f. Wash hands with soap and water.
  - g. If the spill was cleaned by someone other than an Environmental Service employee and the area needs further cleaning, then Call Environmental Services to have the area cleaned with regular detergent- disinfectant. The Eastman Institute for Oral Health employees are to call the Maintenance Department at x5-5070 to have their area cleaned with regular detergent disinfectant.

#### **F. Waste Disposal**

1. Definition of Regulated Medical Waste (RMW):  
Any liquid or semi-liquid blood, body fluids or other potentially infectious materials; contaminated items that would release blood, body fluids or other potentially

infectious materials in a liquid or semi-liquid state if compressed; items that are capable of releasing blood, body fluids or other potentially infectious materials during handling; used or unused sharps; and pathological and microbiological wastes containing blood, body fluids or other potentially infectious materials. Also included are cultures and stocks of infectious agents, contaminated animal carcasses, body parts and bedding of animals known to have been exposed to infectious agents. (See Appendix 5. for disposal guidelines.) Feces or materials saturated with feces are not RMW. Urine or materials saturated with urine is not RMW unless the urine is submitted as a clinical specimen for laboratory tests or if the patient is known to have a disease which may be transmitted through urine.

2. Infectious Waste:



All infectious waste destined for disposal shall be placed in closable leak-proof containers or bags which are red in color. The containers should be labeled with the universal biohazard warning sign and the word "Biohazard." The labels should be fluorescent orange or orange-red with lettering and symbols in contrasting colors. If outside contamination of the container or bag is likely to occur, then a second closable leak-proof container or bag shall be placed over the outside of the first and closed to prevent leakage during handling, storage, and transport. (This applies only to internal transportation of regulated medical waste. External shipments are subject to additional requirements. Contact the Environmental Compliance manager at x5-4699 for more information.)

3. Unbroken Blood Tubes:

All unbroken blood tubes shall be disposed of in a hospital approved sharps shelter or in a plastic-lined cardboard box specifically approved for this purpose.

4. Sharps:

Immediately after use, sharps shall be disposed of in closable, puncture resistant, disposable containers. These containers shall be easily accessible to personnel and located in the immediate area of use. Sharps containers will be replaced when  $\frac{3}{4}$  full.

Eastman Institute for Oral Health employees are to contact the Maintenance Department at x5-5070 for sharps container replacement.

5. Guidelines:  
Guidelines for the disposal of regulated medical waste can be found in Appendix 5. Additional information is available through the Environmental Compliance Manager (x5-4699).

**G. Hepatitis B Vaccination**

1. The hepatitis B vaccination series is recommended for all personnel at risk of occupational exposure to human blood or other potentially infectious materials.
2. The University provides vaccination at no cost to employees identified in the exposure determination section of this plan. Department/Units included in this vaccine program are determined by the University Administration based on recommendations from Environmental Health & Safety, Occupational Health and Infection Prevention Programs. Other requirements of the vaccination program include:
  - a. The first vaccination shall be made available to all eligible employees within 10 working days of initial assignment.
  - b. Employees who decline the hepatitis B vaccination at the time it is offered will be required to sign a statement explaining that they understand the risks associated with acquiring hepatitis B virus infection, that they were offered the vaccination at no charge, and that if they change their mind in the future they can then receive the vaccination.
  - c. If an employee initially declines hepatitis B vaccination but at a later date (while still covered under the standard) decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time at no cost to the employee.
  - d. If a routine booster dose(s) of hepatitis B vaccine is recommended by the United States Public Health Service at a future date, such booster doses(s) shall be made available to employees with continued occupational exposures at no cost to the employees.
3. Vaccine Preparation: Recombinant hepatitis B vaccine
4. Vaccine Administration: Vaccine is given in the deltoid muscle in a series of 3 injections (initial, 1 month, 6 months).
5. Pre-vaccination serologic screening is not routinely performed. If an employee wishes to be screened prior to vaccination, he/she may do so at his/her own expense.

6. Post-vaccination screening and revaccination as per University of Rochester Medical Center/Strong Memorial Hospital Bloodborne Pathogens Protocol:
  - a. Post-vaccination screening (anti-HBs = Hepatitis B surface antibody) is performed 1- 2 months after the third dose of vaccine. Vaccine non-responders (negative anti-HBs) will be revaccinated followed by anti-HBs screening.
  - b. Employees previously vaccinated, but never screened for anti-HBs, may be screened at a later time and revaccinated if necessary (negative anti-HBs).
  - c. Routine periodic screening and/or revaccination is not presently recommended by the United States Public Health Service, except as part of exposure follow-up.
  - d. Vaccinees who request periodic screening and/or revaccination, except as specified above, may do so at their own expense.

#### **H. Labels**

Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material, and other containers used to store, transport or ship blood or other potentially infectious materials. **(In the hospital and in the clinical areas of the Eastman Institute for Oral Health where Universal Precautions are utilized extensively in the handling of all specimens, the labeling/color-coding of specimens is not necessary provided that containers are recognizable as containing specimens. If the specimens are to be sent to an outside agency they must bear the biohazard symbol or red coloring. See Specimen containers and transport for further information.)**

1. Labels shall include the following legend:



2. Labels shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color.
3. Red bags or red containers may be substituted for labels.



4. Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements.
5. Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.
6. Equipment which is contaminated shall be labeled and labels shall state what parts of equipment cannot be decontaminated.

**I. Training**

1. Employees identified in the exposure determination as having occupational exposures shall participate in a training program which shall be provided at no cost to the employee and during working hours.
2. Training will be provided for all current employees identified at time of exposure determination. New employees will be trained at the time of initial assignment to tasks where occupational exposure may take place.
3. Annual training for all employees shall be provided within one year of their previous training. This is included in the Annual Mandatory In-Service Education Program.
4. Additional training shall be provided when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new potential exposures created.
5. Trainers will be knowledgeable in the subjects of bloodborne pathogens, PPE, the content of this Exposure Control Plan, and the requirements of the OSHA standard. Trainers will have experience in infection control, occupational health, industrial hygiene, or nursing.
6. The training program shall contain the following elements:
  - a. An accessible copy of the regulatory text of this standard and an explanation of its contents.
  - b. A general explanation of the epidemiology and symptoms of bloodborne diseases.
  - c. An explanation of the modes of transmission of bloodborne pathogens.
  - d. An explanation of this Exposure Control Plan and the means by which the employee can obtain a copy of the written plan.
  - e. An explanation of the appropriate methods for recognizing tasks and other

activities that may involve exposure to blood and other potentially infectious materials.

- f. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment (PPE).
- g. Information on the types, proper use, location, removal, handling, decontamination, and disposal of PPE.
- h. An explanation of the basis for selection of PPE.
- i. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered at no charge.
- j. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
- k. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- l. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- m. An explanation of the signs and labels and/or color-coding.
- n. An opportunity for interactive questions and answers with the person conducting the training session.

#### **J. Recordkeeping**

1. Medical Records: For each employee with occupational exposure, the University is required to establish and maintain an accurate record which includes the employee's name, social security number, hepatitis B vaccination status, and any information related to exposure follow-up. These records are confidential and will be retained for the duration of employment plus 30 years. University Health Service will maintain such medical records for all University employees. SMH employee records shall be maintained by SMH Employee Health.
2. Training Records: Training records shall include dates of the training sessions, contents of the training sessions, names and job titles of all persons attending the training sessions. These records shall be maintained for 3 years from the date on which the training occurred.
3. Exposure information (Post-Exposure, Evaluation and Follow Up) is kept by SMH Employee Health for 5 years plus the current year.
4. Sharps Injury Log: All percutaneous injuries from contaminated sharps are recorded in the OSHA 300 Log and the Sharps Injury Log. Records of all instances include:
  - a. the date of the injury

- b. the type and brand of the device involved
- c. the department or work area where the incident occurred
- d. an explanation of how the incident occurred.

Worker's Compensation is responsible for maintaining both the OSHA 300 Log and the Sharps Injury Log. The Sharps Injury Log is reviewed at least annually by Environmental Health & Safety, and entries in the Log are maintained for at least 5 years following the incidents. If a copy of the Sharps Injury Log is requested by anyone, any personal identifiers will have been removed from the report.

The source for the collection of sharps injury information for the University is the Employee Incident on-line reporting system. Employee Incident reports must be completed for all exposure incidents. The link to the reporting system is located at [www.safety.rochester.edu/SMH115.html](http://www.safety.rochester.edu/SMH115.html). A link to this page can also be found on the Nursing webpage.

#### **K. Monitoring for Compliance**

The University will monitor for compliance through spot checks and scheduled inspections in areas where employees may be potentially exposed. Checks will be performed by area supervisors. Consultation will be provided by SMH Infection Control, Eastman Institute for Oral Health Infection Control, and Environmental Health & Safety.

#### **L. Enforcement**

All employees defined in the Exposure Determination section of this Exposure Control Plan are required to comply with the Plan. Failure to comply may result in corrective disciplinary action as defined in the University's Personnel Policies.

### **V. POST-EXPOSURE, EVALUATION AND FOLLOW-UP**

The plan for post-exposure evaluation and follow-up will ensure that: measures are taken to minimize the risk of infection secondary to the exposure; that the circumstances surrounding the exposure are investigated and documented; and that the employee receives medical consultation, follow-up, and treatment, if necessary, in a timely and expeditious fashion.

#### **A. Any employee sustaining skin, mucous membrane, or percutaneous contact with blood or other potentially infectious materials shall cleanse the affected areas as soon as possible, as follows:**

1. Intact skin: wash with soap and water.
2. Non-intact skin and needlesticks/scalpel cuts: wash with soap and water.

3. Intra-oral exposure: spit and rinse the mouth well with water.
  4. Eyes: rinse well with sterile saline or water (if available), or with tap water. (Note: Remove contact lenses first. After rinsing eyes, disinfect contacts per manufacturer's recommendation.)
- B. An employee who has had an exposure is required to:
1. Report exposure, as soon as possible, to the **Blood Exposure Hotline 24/7 at 275-1164**. During off-hours, the answering service will notify the Employee Health nurse on-call to triage the exposure incident
  2. Contact his/her supervisor,
  3. Fill out an incident report form ([www.safety.rochester.edu/SMH115.html](http://www.safety.rochester.edu/SMH115.html))
- C. Post-exposure evaluation and follow-up will include the following:
1. Date, time, and location of exposure;
  2. Route(s) of exposure;
  3. Type of infectious material;
  4. Circumstances under which the exposure incident occurred, including task performed, type of accident, equipment malfunction, personal protective equipment in use, etc.
  5. Identification of the source individual, if known, unless not feasible or prohibited by state law.
- D. If possible, the source individual's blood shall be tested for human immunodeficiency virus (HIV), hepatitis B (HBV), and hepatitis C (HCV). Written consent is required for HIV testing.
1. When the source individual is already known to be infected with HIV, retesting is not usually necessary. When the source individual is known to be HBV or HCV positive, additional confirmatory tests of infectiousness may be appropriate.
  2. If a notification waiver is obtained from the source individual (as required by New York law), results of the source individual's testing shall be made available to the exposed employee (through the evaluating medical provider), and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
  3. If consent for testing or notification waiver cannot be obtained from the source individual, this will be documented in writing.
- E. An exposed employee will be referred, as soon as possible, for medical evaluation and follow-up. (An evaluation may be initiated by telephone for nights, weekends, and holiday). An exposed employee may designate his/her own physician for post-exposure medical evaluation and/or follow-up.

1. The provider will have access to the following information. If the employee designates his/her own physician for post-exposure medical evaluation, upon notification of this designation, SMH Employee Health will forward to that healthcare provider the following information:
  - a. A copy of the OSHA Bloodborne Pathogens Standard;
  - b. A description of the exposed employee's duties as they relate to the exposure incident;
  - c. Documentation of the route(s) of exposure and circumstances under which exposure occurred;
  - d. Results of the source individual's testing, if available, except as prohibited by law; and
  - e. All medical records relevant to the treatment of the employee, including vaccination status, which are the employer's responsibility to maintain.
  
2. The healthcare provider will obtain the employee's blood for baseline serologic testing as soon as feasible. Serologic testing for HBV and HCV antibody status will be offered and performed in accordance with CDC recommendations. HIV testing will be performed only after written, informed consent is obtained and pretest counseling is provided. If the employee consents to baseline blood collection, but does not consent at that time to HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.
  
3. The healthcare provider will advise and counsel the exposed employee with respect to the risk of infection with bloodborne pathogens resulting from the exposure; appropriate treatment and follow-up, based on CDC recommendations and current standards of practice, will be provided.
  - a. Post-exposure hepatitis B prophylaxis will be provided in accordance with CDC guidelines.
  - b. Post-exposure prophylaxis (PEP) following HIV exposure will be evaluated and provided on a case-by-case basis in accordance with CDC recommendations and current practice. PEP may be offered with combinations of antiretroviral drugs depending on the type of exposure, the source material involved, and the likelihood of resistance to various antiretroviral agents. PEP, when indicated, should be initiated as soon as possible after the exposure incident, preferably within hours.
  - c. Evaluation of reported illnesses: the employee will be advised to report and seek medical evaluation at SMH Employee Health or at their designated healthcare provider for any acute illness during the follow-up period, especially the first 12 weeks following exposure. Such illness, particularly if characterized by fever, rash, myalgia, malaise, or lymphadenopathy may be indicative of recent HIV infection.
  - d. The healthcare provider will inform the employee of his/her baseline test results and provide post-test counseling.

- e. Following a documented or suspected exposure to HIV, HBV, and/or HCV, the exposed employee will be offered repeat follow-up testing at 4 weeks, 3 months, and 6 months, as appropriate per CDC recommendations.
4. SMH Employee Health will provide to the employer a copy of the evaluating healthcare provider's written opinion within 15 working days of the completion of the evaluation. This written opinion is limited to the following:
    - a. Whether hepatitis B vaccination is indicated for the employee, and whether such vaccination has been administered.
    - b. That the post-exposure evaluation was performed, and that the employee has been informed of the results of that evaluation.
    - c. That the employee had been told about any medical conditions resulting from the exposure which require further evaluation or treatment.
    - d. All other findings, including diagnoses and test results, remain confidential and shall not be included in the written report.

## REFERENCES

- Center for Disease Control and Prevention (CDC): <http://www.cdc.gov>
- CDC Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post exposure Prophylaxis: [www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm).
- Occupational Safety and Health Administration (OSHA): [www.osha.gov](http://www.osha.gov)
- OSHA Safety & Health Topics: Bloodborne Pathogens: <http://www.osha.gov/SLTC/bloodbornepathogens/index.html>
- New York State Department of Health: <http://www.health.state.ny.us/home.html>
- NYS Informed Consent form to perform HIV testing: <https://www.health.ny.gov/forms/doh-2557.pdf>
- SMH Infection Control Program: <https://sites.mc.rochester.edu/departments/infection-prevention/>