

**BLOODBORNE PATHOGENS**

## PURPOSE

The purpose of this policy is to establish procedures that will ensure compliance with the Occupational Safety and Health Administration's (OSHA) "Bloodborne Pathogens Standard" in Part 1910.1030, Title 29 of the Code of Federal Regulations.

## ACCOUNTABILITY

Under the Dean and Senior Vice president for Academic Affairs, the Infection Control Committee shall ensure compliance with this policy. The Infection Control Manager and the Institutional Safety Officer shall oversee implementation of this policy.

## APPLICABILITY

This policy applies to faculty, staff, and students and includes the following potentially Infectious Materials:

Human body fluids: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pericardial fluid, pleural fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Any unfixed tissue or organ (other than intact skin) from a human (living or dead).

HIV, HCV or HBV-containing cell or tissue cultures, organ cultures, and HIV, HCV or HBV-containing culture medium or other solutions: any blood, organs, or other tissues from experimental animals infected with HIV, HCV or HBV. (Bloodborne pathogens as they relate to the use of animal blood may also be covered by policies pertaining to MSM Research.

## DEFINITIONS

1. Bloodborne pathogen shall refer to pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens shall include, but are not limited to hepatitis B virus (HBV), **hepatitis C virus (HCV)** and human immunodeficiency virus (HIV).
2. Engineering Controls shall mean controls, which by design, isolate or remove the bloodborne pathogen hazard from the workplace (e.g. sharps disposal containers, self-sheathing needles, containment devices – **biosafety cabinet, etc.**).
3. Occupational Exposure shall be used to refer to reasonably anticipated or inadvertent skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

4. Standard Precaution is a Centers for Disease Control and Prevention (CDC) set of guidelines for health care workers on dealing with blood, all body fluids, secretions and excretions (except sweat), non-intact skin and mucous membranes. They are designed to reduce the risk of transmission of microorganisms. This guideline is more protective than OSHA's Universal Precautions because it considers all body fluids with the exception of sweat to potentially contain bloodborne pathogens.
5. **Universal Precautions** is an approach to infection control. According to the concept of Universal Precautions, all human blood and **certain human body fluids** are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens. According to the OSHA Standard the 'Other Potentially Infectious Material' (OPIM) includes semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pericardial fluid, pleural fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures. The following human body fluids are not considered potentially infectious materials: urine, sweat, spit, tears, feces, and vomit unless the fluid is visually contaminated with blood or OPIM.

## **POLICY**

### **A. Requirements:**

The primary focus of this policy is to establish procedures, in accordance with OSHA's "Bloodborne Pathogen Standard" 1910.1030 that will protect MSM staff and students from the hazards related to occupational exposures to bloodborne pathogens and other potentially infectious materials. As such, this policy will supplement does not supersede any existing School policy on HIV, **HCV** and HBV or handbooks developed to provide a safe work and learning environment for MSM staff, students, and faculty.

All MSM departments and patient care facilities shall be responsible for developing standard operating procedures (SOPs), which will establish compliance with this policy.

This policy shall be reviewed and revised on an annual basis, or more frequently as new information becomes available.

### **B. Procedures:**

#### **1. Exposure Control Plan**

The School and each patient care facility (facility) shall ensure that a written "Exposure Control Plan" is developed and implemented. This plan will function as a standard operating procedure, describing the process and/or programs established by all specific departments or facilities to eliminate or minimize employee exposure to bloodborne pathogens and other potential infectious materials. In some cases, the Infection Control Manager may develop departmental Exposure Control Plans. This

will especially apply to those departments whose risk of exposure is moderate, high, and/or unique. In such cases where departmental Exposure Control Plans are developed they shall be modeled after the School or Facility's plan.

- a. The Exposure Control Plan shall minimally consist of the following components:
  - i. An Exposure Determination for those titles within that School or Facility:
    - (a) including a list of all job titles in which all employees have occupational exposure (as defined in this policy).
    - (b) including a list of all job titles in which some employees in that title have occupational exposure. For these titles, a list of all tasks and procedures (or groups of closely related tasks and procedures) in which occupational exposure occurs shall also be included.
  - ii. Descriptions or copies of specific programs, policies, or procedures implemented in each department or patient care facility to address the requirements in this policy.
- b. Each department or facility shall ensure that the Exposure Control Plan is accessible to its employees for examination.
- c. The Exposure Control Plan shall be reviewed and updated, by representatives of the Safety Committee and Infection Control Committee at least annually and, whenever tasks, procedures, or titles are modified such that risk of exposure to bloodborne pathogens change.

## **2. Universal Precautions**

- a. Universal Precautions are to be utilized when there is reason to anticipate contact with (blood, body fluids or other potentially infectious material from any human source. Universal Precautions shall be followed and appropriate barrier or personal protective equipment shall be used any time exposure to substances are anticipated according to the guidelines established by OSHA Bloodborne Pathogen Standard.

## **3. Engineering Controls**

- a. Each department or facility is responsible for reviewing and implementing available engineering controls. Engineering Controls refer to measures, which by design, isolate or remove bloodborne pathogen hazard from the workplace (e.g. sharps, disposal containers, and self-sheathing needles).

- b. Engineering controls shall be maintained and evaluated periodically by the Institutional Safety Officer or qualified vendors to ensure their continued effectiveness.

#### **4. Work Practices and Hygiene**

Each department or facility shall establish general work practices that will eliminate or minimize employee exposure. These may include, but are not limited to:

- a. Hand washing techniques and requirements.
- b. Procedures for handling and disposing of contaminated needles and sharps.
- c. Lists of prohibited activities. For example, eating, drinking, and handling contact lenses in those work areas where there is potential for exposure or storage of food in locations where blood or other potentially infectious materials are present.
- d. Procedures to minimize splashing, spraying, spattering, generation of droplets, etc. during tasks which involve blood or other potentially infectious materials. Containment Equipment including BioSafety Cabinets (BSC) should be used if aerosols are produced. In addition, when centrifuging blood the tubes or containers must be capped.
- e. Procedures for decontamination of contaminated equipment before servicing, shipping or disposal. A readily observable label shall be attached to such equipment stating which portions remain contaminated.

#### **5. Personal Protective Equipment**

- a. Each department or facility shall identify the specific procedures and/or tasks where personal protective equipment is required to prevent exposure to bloodborne pathogens. Specific descriptions of the personal protective equipment required for each task or procedure shall be included in the School's or Facility's Exposure Control Plan. For example, employees who transport specimens from clinics or patient care areas to laboratories may be required to wear gloves and laboratory coats. This requirement should be specified in the facility's plan.

Each department or facility shall be responsible for providing personal protective equipment identified as essential to job performance at no cost to the employee. Personal protective equipment may include, but not be limited to gloves, gowns, and face masks.

#### **6. Housekeeping**

- a. Each department or facility shall ensure that an appropriate written schedule for cleaning and decontaminating different work areas and surfaces, based upon the location within the facility, type of surface to be cleaned, types of contamination present, and tasks or procedures being performed in the area, is established and implemented in each of their units.
- b. Each department or facility shall ensure that all equipment and environmental and working surfaces are cleaned and contaminated appropriately after contact with blood or other potentially infectious materials.
- c. Each department or facility shall ensure that regulated waste is maintained, labeled, and disposed of in accordance with applicable Federal, State, and Local regulations.

## **7. Hepatitis B Vaccination and Post-Exposure Evaluation**

- a. As required by the School Policy on HIV, **HCV** and **HBV**, all house staff, faculty and staff who have direct patient contact, who perform or take part in exposure-prone procedures (as defined in the School Policy on HIV, **HCV** and **HBV**), or who have contact with potentially infectious body fluids or laboratory materials must be immunized against hepatitis B or be able to demonstrate immunity. In accordance with the standard, the Infection Control Manager shall be responsible for establishing procedures such that all employees who have occupational exposure can obtain hepatitis B vaccinations at no cost to them. The vaccination shall be made available after the employee has received training in accordance with this policy (see section 9 of the policy) and within 10 working days of assignment to duty, unless immunity has been established or the vaccine is contraindicated for medical reasons.

If an employee's duties do not require direct patient contact, performance of exposure-prone procedures (as defined in the HIV, **HCV** and **HBV** policy), or contact with potentially infectious body fluids or laboratory materials, and/or the employee declines the vaccination, he/she must sign a specifically worded declination form (Exhibit I). Each facility shall ensure that the nurse with overall responsibility for providing the hepatitis B vaccinations maintains a copy of the OSHA Bloodborne Pathogen standard and declination form.

- b. Confidential medical evaluation and follow-up shall be made immediately available to employees after an exposure incident is reported.

## **8. Labels and Signs**

- a. Warning labels in accordance with the OSHA Bloodborne Pathogen standard shall be affixed to containers or regulated waste, refrigerators and freezers containing blood or other potentially infectious materials (Exhibit 11).

- b. OSHA bloodborne pathogen labels/signs must also be posted at the entrances to work areas conducting HBV, HCV and HIV research.

## 9. Training

- a. Each department or facility shall ensure that all employees with potential occupational exposure participate in a training program on Bloodborne Pathogens with the following frequency.

- i. At initial assignment
- ii. Annually
- iii. When changes that affect the employee's occupational exposure occur.

- b. Training shall include as a minimum:

- i. An explanation of the contents of the OSHA Bloodborne Pathogens Standard and information on how a copy of the standard may be obtained if requested.
- ii. A general explanation of the epidemiology and symptoms of bloodborne diseases.
- iii. An explanation of the modes of disease transmission.
- iv. A review of the School's or facility's Exposure Control Plan and the steps that the employee can take to obtain a copy.
- v. An explanation of the appropriate methods that can be used to recognize and evaluate tasks and activities with potential exposure.
- vi. An explanation of the use and limitations of the different methods of control including, but not limited to, engineering controls, work practice and personal protective equipment.
- vii. Information on the types, proper use, location, removal, handling and disposal of personal protective equipment and the basis for selection of the different types of equipment.
- viii. Information on the appropriate actions and procedures to follow if an exposure occurs.
- ix. Information on the hepatitis B vaccine including efficacy, safety, and that the vaccine will be free of charge.

- x. An explanation of the signs and labels required by the standard.
- xi. An opportunity for interactive questions and answers, and
- xii. Additional training for employees in HIV, HCV and HBV research laboratories, which is specific to the practices and operations of the laboratory.

## **10. Record Keeping**

- a. Each department or facility shall ensure that medical records for each employee/student with occupational exposure are maintained for the duration of employment and 30 years thereafter. Each department or facility shall ensure confidentiality of employee medical records. The medical record shall include:
  - i. hepatitis B vaccination status; including the dates of the vaccinations
  - ii. a copy of all results of the post-exposure medical evaluations
  - iii. copies of any information provided to the physicians performing medical evaluations related to this policy and the OSHA bloodborne pathogen standard.
- b. Training records shall be maintained by each department and patient care facility. The records shall include training dates, contents of training, names and qualifications of instructors, and names and titles of the employees attending the training. These training records shall be maintained a minimum of 3 years.

### **Exhibits**

- a. Hepatitis V Vaccine Declination Form
- b. Occupational Exposure to Bloodborne Pathogens Standard

**By Direction of the president:**

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**Dean and Senior Vice-president for Academic Affairs**