

# University of Massachusetts/Amherst Laboratory Occupational Health Program For Human Source Material



## **Persons Included in the Plan and University Responsibility:**

1. Any UMass laboratory staff, which, by the nature of their job required tasks, has occupational exposure to blood or other potentially infectious materials shall be included in this plan.
2. All newly hired employees covered by this regulation and employees who through transfer or change of job description become covered by this standard shall also be reported to EH&S for inclusion under the plan.
3. All required training, personal protective equipment; engineering controls, record keeping, other supplies and testing necessary for compliance with the standard shall be supplied at no cost to the employee.
4. All covered employees shall be offered immunization against Hepatitis B Virus (HBV) and/or any other job appropriate immunizations.

## **Definitions:**

1. Occupational Exposure means reasonably anticipated 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.
2. Blood means human blood, human blood components and products made from human blood.
3. Other Potentially Infectious Materials (OPIM) means:
  - The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids,
  - Any unfixed tissue or organ (other than intact skin) from a human (living or dead), and
  - HIV-containing cell or tissue cultures, 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 HBV.
4. Parenteral means piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.
5. Bloodborne Pathogens means pathogenic microorganisms that are or may be present in human blood and can cause disease in humans. These pathogens include,

but are not limited to, hepatitis B virus (HBV), Hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

6. Engineering Controls means controls (e.g.: sharps disposal containers and self-sheathing needles) that isolates or removes the bloodborne pathogens hazard from the workplace.
7. Personal Protective Equipment is specialized clothing or equipment worn by an employee for protection against a hazard (e.g.: gloves face protection, masks, gowns, etc.). General work clothes (uniforms) not intended to function as protection against a hazard are not considered to be personal protective equipment. Other definitions may be found in the text of the regulation.

**Personal Protective Equipment:**

1. When there is occupational exposure, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection and ventilation devices shall be supplied.
2. The personal protective equipment, in appropriate sizes, must be readily accessible at the worksite or issued to the employee.
3. Laundry service, cleaning materials and disposal service for the maintenance or disposal of personal protective equipment shall be supplied by the employer (Example: lab coat program).
4. Personal protective equipment shall be repaired or replaced by the employer as needed to maintain its effectiveness.
5. Each supervisor is responsible for assuring that employees under their control utilize appropriate personal protective equipment.
6. Standard (Universal) precautions to prevent contact with blood or other potentially infectious materials shall be observed.

**Personal Hygiene:**

1. Hand washing facilities or effective portable decontamination materials shall be readily available in areas where exposure to blood or other potentially infectious materials is likely.
2. Employees shall wash their hands after removing gloves and/or other personal protective equipment.
3. Employees shall wash their hands and other skin areas with soap and water or flush mucous membranes with water immediately or as soon as feasible following contact with blood or other potentially infectious materials.
4. If a garment is penetrated by blood or other potentially infectious material, the garment shall be removed immediately or as soon as feasible (refer to 3 above).
5. All personal protective equipment shall be removed prior to leaving the work area.
6. Reusable personal protective equipment, if contaminated, shall be decontaminated and inspected prior to reuse.

**Sharps Use:**

1. Consideration should be given to reduce or eliminate occupational exposure to needles.
2. Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate disposal containers. These containers shall be puncture resistant, labeled and not filled above the fill line.

3. Broken glassware which may be contaminated with human body fluids shall not be picked up directly with the hands. It shall be handled using mechanical means, such as a brush and dustpan, tongs or forceps. The contaminated broken glassware shall be placed in a puncture resistant container and disposed as medical waste. Decontamination of the broken glassware by autoclave or chemical means may be necessary to protect subsequent handlers of the waste.

**Hepatitis B vaccination and post exposure evaluation:**

All covered employees shall be offered immunization against Hepatitis B Virus (HBV).

1. The prescreening, hepatitis B vaccinations, post screening and necessary boosters will be administered by University Health Service in compliance with current recommendations.
2. Employees who refuse to participate in a prescreening program will not be excluded from the program.
3. Employees who initially decline hepatitis B vaccination but at a later date, while still covered under the standard, decide to accept the vaccination shall be given such in a timely manner.
4. Covered employees who decline to accept hepatitis B vaccination when offered, shall sign the Hepatitis B Declination form.
5. If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available to all covered employees.

**Post exposure evaluation and follow-up:**

1. An exposure incident shall be reported by the employee to the supervisor, manager or dean who shall complete an Incident Report
2. The exposed worker shall then report to the University Health Service or Cooley Dickinson Hospital for a confidential medical evaluation and follow-up which shall include the following:
  - a. Documentation of the route(s) of exposure and the circumstances under which the exposure incident occurred;
  - b. Identification and documentation of the source individual, unless proven infeasible or prohibited by law;
  - c. The source individual's blood shall be tested as soon as feasible after consent is obtained for determining HIV and HBV status or documentation of refusal to test shall be obtained. If the source individual's consent is not required by law, the blood, if available, shall be tested and the results documented (note: if positive status of the source has already been established, retesting is not required);
  - d. Results of the source individual's testing shall be made available to the exposed employee and the employee shall be informed of laws regulating the disclosure of the identity and infectious status of the source individual;
  - e. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained;
  - f. If the employee consents to baseline blood collection but does not give consent at that time for 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. Post exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service will be offered to the exposed worker.
4. Counseling of the exposed worker will cover the topics of symptomatology, risk of disease transmission and behavior modification recommended for at risk individuals.
5. Exposed employees are encouraged to report illness symptoms consistent with HIV, HBV and HCV infection for the six-month period immediately following exposure.
6. University Health Service healthcare professional's written opinion shall be made available to the employee within 15 days of completion. The evaluation shall contain the following information:
  - a. Hepatitis B vaccination status of the employee and vaccination or booster advisability;
  - b. Statement that the employee has been informed of the results of the evaluation and has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation. (All other findings or diagnoses shall remain confidential and shall not be included in the written report).