Bloodborne Pathogen Program & Exposure Control Plan

University of Massachusetts Lowell
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Developed in accordance with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030
### Table of Contents:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>3</td>
</tr>
<tr>
<td>RESPONSIBILITY</td>
<td>3</td>
</tr>
<tr>
<td>ENGINEERING AND WORK PRACTICE CONTROLS</td>
<td>4</td>
</tr>
<tr>
<td>Best Practices, Equipment, Sharps, Autoclaving</td>
<td></td>
</tr>
<tr>
<td>HOUSEKEEPING</td>
<td>5</td>
</tr>
<tr>
<td>Spills, Decontamination</td>
<td></td>
</tr>
<tr>
<td>OTHER REGULATED WASTE</td>
<td>6</td>
</tr>
<tr>
<td>Use of Biological Bags, Waste disposal, Containers</td>
<td></td>
</tr>
<tr>
<td>PERSONAL PROTECTIVE EQUIPMENT</td>
<td>7</td>
</tr>
<tr>
<td>HEPATITIS B VACCINE</td>
<td>7</td>
</tr>
<tr>
<td>POST-EXPOSURE EVALUATION AND FOLLOW-UP</td>
<td>8</td>
</tr>
<tr>
<td>TRAINING</td>
<td>9</td>
</tr>
<tr>
<td>HEPATITIS B VACCINE DECLINATION</td>
<td>11</td>
</tr>
<tr>
<td>WEBSITE LINKS FOR SUPPORTING INFORMATION</td>
<td>12</td>
</tr>
<tr>
<td>SIGNATURE PAGE</td>
<td>13</td>
</tr>
</tbody>
</table>
PURPOSE:
The purpose of this exposure control plan is to eliminate or minimize student and employee (persons) occupational exposure to blood or other infectious body fluids. Other potentially infectious body fluids include: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, amniotic fluid, saliva, breast milk and any body fluid contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

RESPONSIBILITY:
The Director of Physical Plant, Director of Facilities Services, Chief of University Police, Director of Environmental Health & Safety, Director of Student Health Services, Director of Athletics, Director of Campus Recreation, Deans, Faculty and Principle Investigators (PI's) shall be responsible for ensuring their employees and students (persons) comply with the provisions of this plan.

Department Supervisors, University Police Supervisors, Health Services, Athletics, Faculty and PI's shall be responsible for providing all necessary supplies such as personal protective equipment. Each department and College Supervisor, Faculty and PI's are responsible for ordering their required personal protective equipment through safety supply vendors. Faculty and PI's shall be responsible for training their respective students for adherence with this plan, disposing of bio-hazardous waste contained in biohazard bags and follow outlined procedures for reporting exposures or releases of suspected infectious substances. The UML Institutional Bio-Safety Committee (IBC) must review and approve all research or teaching activities involving blood or other potentially infectious materials. Faculty and PI's are responsible for submitting the appropriate registration. Further information can be found online. www.uml.edu/ora/institutionalcompliance

The Environmental Health and Safety Department shall be responsible for providing and identifying training programs for Physical Plant, University Police, EHS Staff, EMTs, Health Service, Athletics, Faculty and PI's for adherence with this plan. EHS will coordinate disposing of bio-hazardous wastes contained in biohazard bags. Sharps containers, bio-hazardous waste bags, broken glass boxes and other spill response supplies are available by contacting the EHS Hazardous Materials Receiving Stockroom (X2543).

Hepatitis B vaccinations shall be coordinated by EHS for persons covered by this plan and will be administered at off site locations such as All One Health Resources Incorporated.

Incident report forms for reporting spills or exposures of suspected infectious substances can be obtained from EHS by contacting X2632 or downloaded a form at www.uml.edu/ehs

March 2010
ENGINEERING AND WORK PRACTICE CONTROLS:
Universal precautions will be observed by all employees and students in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious materials will be considered infectious regardless of the perceived status of the source.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to students and employees working at the University of Massachusetts Lowell. Engineering controls must be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

1. Persons must wash their hands or other skin with soap and water, or flush mucous membranes with water, as soon as possible following an exposure incident (such as a splash of blood to the eyes or an accidental needle stick) ** with copious amounts of water for at least 15 minutes.

2. Persons must wash their hands immediately (or as soon as feasible) after removal of gloves or other personal protective equipment.**

**Persons shall familiarize themselves with the nearest hand washing facilities for the buildings in which they work. Most buildings are public access and will have available hand washing facilities in public restrooms and custodial/janitorial closets. (If hand washing facilities are not available, the EHS Stockroom can provide either an antiseptic cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. If these alternatives are used, hand washing with soap and water is still required as soon as feasible.)

3. Needles shall be disposed immediately after use or as soon as feasible in labeled sharps containers that are closable, puncture-resistant, leak-proof on all sides and bottom, and marked with an appropriate biohazard label provided at the location. If sharps containers are not available at that location, EHS (extension 2543) will pick up and dispose of the needles in an appropriate, labeled sharps container. Persons who encounter improperly disposed needles shall notify EHS of the location of the needle(s). Additionally, the appropriate authorities at the location shall be notified (i.e., lab manager, PI, Faculty).

a. Needles should never be recapped.

b. Needles may be moved or picked up only by using a mechanical device or tool (forceps, pliers, broom and dust pan).

4. Breaking or shearing of needles is prohibited.

5. No eating, drinking, smoking, applying cosmetics or lip balm, or handling contact lenses is allowed in a work area where there is a reasonable likelihood of occupational exposure.

6. No food or drinks shall be kept in refrigerators, freezers, cabinets, shelves, or on counter tops or bench tops where blood or other potentially infectious materials are present.

March 2010
7. Employees must perform all procedures involving blood or other potentially infectious materials in such a manner as to minimize splashing, spraying, splattering, and generation of droplets of these substances.

8. Specimens of blood or other potentially infectious materials must be placed in a labeled or color-coded, container which prevents leakage during collection, handling, processing, storage, transport or shipping. If outside contamination of this primary container occurs, it must be placed within a secondary container that prevents leakage during the actions listed above. If the primary container is punctured by a specimen, the secondary container must be puncture resistant as well as meet the above criteria.

9. Equipment that may become contaminated with blood or other potentially infectious materials must be examined and decontaminated as necessary, unless the employer establishes that decontamination of such equipment or parts of such equipment is not feasible. If decontamination is not feasible, a readily observable label must be attached to the equipment stating which portions remain contaminated in order to ensure that the hazard is conveyed to all employees so that proper precautions can be taken.

10. Autoclaving is an acceptable technique for decontaminating and disposing of biologically contaminated lab plastic ware. Autoclaved bags can be discarded into dark colored trash bags for municipal waste disposal. Note: Items soaked in bleach should not be autoclaved and must be discarded into bio-hazardous waste bags for offsite disposal. Contact the EHS Hazardous Materials Receiving Stockroom at X2543 for removal of bio-hazardous waste containers.

HOUSEKEEPING:
Personnel are required to report spills of any hazardous material including blood or other potentially infectious materials by contacting UML Police Dispatch at X2911. Small spills may be cleaned by personnel at the time of release if personnel have an understanding of the hazards associated with the material and have appropriate training. Personnel should be vaccinated for HEP B and must have the appropriate PPE, tools, and materials to safely absorb and disinfect all surfaces. Spill debris must be collected in bio-hazardous waste bags.

Decontamination will be accomplished by utilizing the following materials:

a. Water mixed with 10% (minimum) solution of sodium hypochlorite (bleach). Since a solution of bleach and water loses its strength quickly, it should be prepared daily before each clean-up to make sure it is effective.

b. Lysol or other EPA-registered disinfectants

- All personnel shall wear personal protection equipment (PPE) when decontaminating and cleaning small blood or other potentially infectious material spills. PPE including latex or nitrile gloves, eye protection, tyvek over garments, N-95 respiratory masks are all to be considered as appropriate when determining the nature of a spill and the safe approach to clean and decontaminate.

- The freshly made bleach solution or disinfectant must be left in contact with the contaminated work surfaces, tools, objects, or potentially infectious materials for at least 10
minutes before cleaning. All contaminated work surfaces, tools, objects, etc. will be decontaminated immediately or as soon as feasible after any contact with blood or other potentially infectious materials.

- Equipment that may become contaminated with blood or other potentially infectious materials will be examined and decontaminated before servicing or use.

- Never pick up broken glassware directly with your hands. Use hand tools and/or sweep or brush materials into a dustpan. Collect this material in a bio-hazardous waste bag.

- Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner that would expose employees to the risk of percutaneous injury.

- All equipment and exercise mats associated with Athletics and Campus Recreation shall be wiped clean after each use with an EPA registered disinfectant.

**OTHER REGULATED WASTE:**
Other regulated waste shall be placed in containers that are closable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transportation or shipping.

The waste must be labeled or color-coded and closed before removal to prevent spillage or protrusion of contents during handling, storage, or transport.

In the event that outside contamination of the waste container occurs, it must be placed within a secondary container that meets the above criteria.

Biohazard bags, biohazard boxes, and biohazard labels are available by contacting the EHS Hazardous Materials Receiving Stockroom located at Olney Building, Room OG3, telephone extension 2543.

Personal protective equipment contaminated with blood or other potentially infectious material shall be handled as little as possible. Such personal protective equipment should be placed in a bio-hazardous waste container.

Incineration of bio-hazardous waste shall be handled by a biological waste destructor. This shall be coordinated by the Environmental Health and Safety Department.

Contact the EHS Hazardous Materials Receiving Stockroom at extension 2543 for the removal of bio-hazardous waste bags, boxes or sharps containers.
PERSONAL PROTECTIVE EQUIPMENT:
Where occupational exposure remains after institution of engineering and work controls, personal protective equipment shall also be utilized.

Principle Investigators, Faculty and Department Supervisors shall provide gloves, face shields, masks, eye protection, and aprons in appropriate sizes at no cost to students and employees. The University will replace or repair personal protective equipment as necessary at no cost to students and employees.

All personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth, or mucous membranes under normal conditions of use and for the duration of time for which the protective equipment will be used.

Students and Employees must:

- Utilize protective equipment in occupational exposure situations.
- Remove garments that become penetrated by blood or other potentially infectious material immediately or as soon as feasible.
- Replace all garments that are torn or punctured, or that lose their ability to function as a barrier to bloodborne pathogens.
- Remove all personal protective equipment before leaving the work area.
- Place all garments in the appropriate designated area or container for storage, cleaning, decontamination, or disposal.

HEPATITIS B VACCINE:
The Hepatitis B vaccination shall be made available to all employees and students who have the potential for occupational exposure unless the person has previously received the complete series of three Hepatitis B inoculations, antibody testing has revealed that the person is immune, or the vaccine is contraindicated for medical reasons. The Hepatitis B vaccination shall be made available after the employee or student has received the training in occupational exposure and within 10 working days of initial assignment.

If the person initially declines Hepatitis B vaccination, but at a later date decides to accept the vaccination, the vaccination shall then be made available.

All persons who decline the Hepatitis B vaccination offered shall sign the OSHA-required waiver indicating their refusal.

If a routine booster dose of Hepatitis B vaccine is recommended by U.S. Public Health Service or a licensed physician at a future date, such booster doses shall be made available at no cost to the employee and coordinated by EHS.

March 2010
The Hepatitis B Vaccine shall be offered to all Custodial Staff, Plumbers, University Police, Faculty with clinical assignments, Nursing Laboratory Professional Technicians, Animal Care Staff, Clinical personnel from Student Health Services, EHS, EMT Emergency Responders and Faculty/Staff with approved IBC registrations.

Depending on their job situation and likelihood of exposure, the vaccine may also be offered to preventive maintenance personnel, trades persons, PI’s, faculty, lab technicians and other personnel as necessary.

**POST-EXPOSURE EVALUATION AND FOLLOW-UP:**

All exposure incidents shall be reported, investigated, and documented on an Incident Report Form provided by EHS.

When an employee incurs an exposure incident, it shall be reported immediately to their supervisor, Environmental Health and Safety Office ext. 2618 and the Personnel Office at extension 3560.

When a student incurs an exposure incident, it shall be reported immediately to their Faculty, PI, Clinical Preceptor, Environmental Health and Safety Office ext. 2618 and the Student Health Services Director at extension 4991.

Following a report of an exposure incident, the University recommends that the exposed person go to AllOne Health, Lowell General Hospital, or Saints Medical Center, for a confidential medical evaluation and follow-up. Students should go to the Office of Student Health Services. The exposed individual may decline medical evaluation or seek medical attention from their own primary care physician if they so choose.

**AllOne Health**

600 West Cummings Park, Suite 3400  
Woburn, MA 01801  
Phone: (781) 935-8581  
(Satellite Office located at 85 Parkhurst Road, Chelmsford, MA 01824)

**Lowell General Hospital**

295 Varnum Avenue  
Lowell, MA 01854-2134  
Phone: (978) 937-6000

**Saints Medical Center**

1 Hospital Drive  
Lowell, MA 01852  
Phone: (978) 458-1411

**Office of Student Health Services**

University of Massachusetts Lowell  
McGauvran Student Center, Room 355, Suite 5  
71 Wilder Street  
Lowell, MA 01854-3091  
Phone: (978) 934-4991

March 2010
Any medical evaluation and follow up must include at least the following elements:

1. Documentation of the route(s) of exposure, date and time.

2. A description of the circumstances under which the exposure occurred.

3. The identification and documentation of the source individual. (The identification is not required if the employer can establish that identification is impossible or prohibited by state or local law.) The collection and testing of the source individual's blood for HBV and HIV serological status will occur as soon as feasible after consent is obtained in order to determine HBV and HIV infectivity. Results of the source individual's testing will be made available to the exposed employee.

4. The collection and testing of the exposed employees blood for HBV and HIV serological status.

5. Post-exposure treatment for the employee or student, when medically indicated.

6. Counseling.

7. Evaluation of any reported illness.

8. Medical evaluations shall be made by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional. All laboratory tests must be conducted by an accredited laboratory at no cost to the person.

9. Cost for post exposure evaluation and follow-up will not be the responsibility of the person.

10. All medical records will be kept in accordance with 29 CFR 1910.1020.

**TRAINING:**
All high-risk persons shall participate in a training program provided by or approved by the Environmental Health & Safety Office. Training will occur before assignment to a task where occupational exposure may take place and at least annually thereafter. Additional training will be provided when changes such as modification of tasks or procedures affect the person’s occupational exposure.

Any person who is exposed to infectious materials shall receive training, even if the person was allowed to receive the HBV vaccine after exposure.

The training program will include at least the following elements:


2. A general explanation of the epidemiology and symptoms of bloodborne diseases.
3. An explanation of the modes of transmission of bloodborne pathogens.

4. An explanation of the person’s exposure control plan and the means by which the employee can obtain a copy of the written plan.

5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood or other potentially infectious materials.

6. 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.

7. Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.

8. An explanation of the basis for selection of personal protective equipment.

9. An explanation and awareness of the term and intent of “Universal Precautions”

10. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, and the benefits of being vaccinated.

11. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the follow up that will be made available.

12. Information on the post-exposure and evaluation follow up provided for the employee following an exposure incident

13. Explanation of signs and labels or color-coding used to communicate a biological hazard.

14. A question and answer period with the person conducting the training session.
Hepatitis B Vaccine Declination

I understand that due to my occupational exposure to blood or other infectious materials that I may be at risk of 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 occupational exposure to blood or other potentially infectious materials and I want the Hepatitis B vaccine, I can receive the vaccine series at no charge to me.

(Print name)                             (Title)                                                        (Date)

(Signature)

Remit To: University of Massachusetts Lowell
         1 University Avenue
         Lowell, MA 01854
         Department of Environmental Health and Safety
         Kitson Hall, Office 115 or Fax: 978-934-4065

March 2010
WEBSITE LINKS FOR SUPPORTING INFORMATION


www.uml.edu/ehs

www.uml.edu/ora/institutionalcompliance (IBC Registration Info)
SIGNITURE PAGE:

This document has been reviewed and approved by the University of Massachusetts Lowell Office of Environmental Health and Safety.

___________________________  __________________________
Director of Environmental Heath and Safety    Date

___________________________  __________________________
Safety Specialist                      Date