

The University of Maine

DigitalCommons@UMaine

General University of Maine Publications

University of Maine Publications

9-26-2018

Bloodborne Pathogens Program

University of Maine System

Follow this and additional works at: https://digitalcommons.library.umaine.edu/univ_publications



Part of the [Higher Education Commons](#), and the [History Commons](#)

Repository Citation

University of Maine System, "Bloodborne Pathogens Program" (2018). *General University of Maine Publications*. 839.

https://digitalcommons.library.umaine.edu/univ_publications/839

This Report is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in General University of Maine Publications by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.

Bloodborne Pathogens Program

Introduction

The University of Maine System (UMS) Bloodborne Pathogens Program (BBP) is designed to meet the regulatory requirements of the OSHA Bloodborne Pathogens Standard and applies to all University employees who may encounter human blood or other potentially infectious materials (as defined by OSHA in the Bloodborne Pathogen Standard (29 CFR 1910.1030) in the performance of their job duties.

Program Requirements

This program applies to all University employees who may encounter blood or other potentially infectious materials in the performance of their job duties. Supervisory and administrative personnel responsible for potentially exposed employees must be familiar with this program and ensure that all requirements are met.

Each University department with employees having Occupational Exposure is required to develop a Department Specific Bloodborne Pathogens Plan that meets or exceeds the requirements of this program. Supervisory and administrative personnel responsible for potentially exposed employees must be familiar with this program and ensure that all requirements are met.

Purpose and Scope

The OSHA Bloodborne Pathogens Standard is designed to protect workers from the hazards associated with bloodborne pathogens. Bloodborne Pathogens are defined by OSHA as pathogenic microorganisms present in human blood that can cause disease in humans. Examples of bloodborne pathogens include, but are not limited to, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV). In addition to human blood, human blood components, and products made from human blood; other potentially infectious materials (OPIM) include:

- 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.
- Human tissues and organs- any unfixed tissue or organ (other than intact skin) from a human (living or dead).
- HIV and HBV cultures- 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.

The UMS Bloodborne Pathogens Program is designed to meet the regulatory requirements of the OSHA Bloodborne Pathogens Standard. The purpose of this program is to:

- Summarize the responsibilities of University departments and personnel.
- Identify employees with potential exposure to blood or OPIM.
- Minimize or eliminate employee exposure to blood or OPIM
- Provide a template for departmental exposure control plans.
- Outline methods of compliance with the OSHA BBP Standard.

TABLE OF CONTENTS

Title	Page
Introduction.....	1
Program Requirements	1
Purpose and Scope	1
1. Responsibilities	4
1.1. UMS Safety Management (SM):.....	4
1.2. Department of Human Resources (HR):.....	4
1.3. Department Supervisors (with employees having occupational exposure):.....	4
1.4. Individual Employees (covered under this program):	4
2. Exposure Determination.....	4
2.1. Job Classifications with Recognized Exposure.....	5
2.2. Job Tasks/ Duties with Recognized Exposure.....	5
3. Communication of Hazard to Employees	5
3.1. Bloodborne Pathogens Training.....	5
3.2. Departmental Exposure Control Plans.....	6
3.3. Bloodborne Pathogens Labels and Signs.....	7
4. Exposure Control and Minimization.....	7
4.1. Universal Precautions	7
4.2. Personal Hygiene and Facilities.....	8
4.3. Housekeeping	8
4.4. Containers	8
4.5. Sharps and Safer Medical Devices	8
4.6. Personal Protective Equipment (PPE)	9
4.7. Regulated Waste	11
5. Hepatitis-B Vaccination.....	11
5.1. Vaccination Information.....	11

5.2.	Vaccination Declination	12
5.3.	Initial Vaccination	12
5.4.	Booster Doses and Immunity Titers	12
5.5.	HBV Vaccination Flowchart	12
6.	Exposure Incidents	14
6.1.	Exposed Employee	14
6.2.	Department Supervisors	14
6.3.	Safety Management	14
6.4.	Human Resources	14
6.5.	Medical Surveillance.....	14
6.6.	Post-exposure Prophylaxis and Counseling	15
7.	Training.....	16
8.	Recordkeeping.....	16
8.1.	Medical Records	16
8.2.	Training Records	17
8.3.	Sharps Injury Log.....	17
	Appendix A – Definitions	18
	Appendix B – HBV Vaccination Declination Form	20
	Appendix C – Departmental Exposure Control Plan	21
	Appendix D – Sharps Injury Log.....	22
	Appendix E – Special Procedures for Laboratories with Infections Human Pathogens.....	23
	Appendix F – Bloodborne Pathogens Exposure Incident Follow-up.....	26

1. Responsibilities

1.1. UMS Safety Management (SM):

- Serves as administrative coordinator of the University Bloodborne Pathogens Program.
- Develops training materials and guidelines.
- Provides training and assistance for departments, supervisors, and employees.
- Coordinates investigations of exposure incidents.
- Audits department compliance.

1.2. Department of Human Resources (HR):

- Maintains employee training records, medical records, vaccination records, and declination statements.
- Administrates and coordinates medical appointments related to:
 - Hepatitis B vaccination.
 - Post exposure evaluation and medical follow up care.
- Notifies supervisors when employees are authorized to perform tasks with occupational exposure to human blood or OPIM.

1.3. Department Supervisors (with employees having occupational exposure):

- Develop, maintain, and implement Department Specific Exposure Control Plans.
- Ensure employees receive training prior to engaging in tasks with potential exposure.
- Maintain copies of employee training records, training materials and any declination form.
- Coordinate with HR to arrange medical appointments for:
 - Hepatitis-B vaccination.
 - Post exposure evaluation and follow up care.
- Ensure exposed employees seek prompt first aid or medical attention for exposure incidents.
- Report exposure incidents according to established university procedure.

1.4. Individual Employees (covered under this program):

- Comply with requirements of this program and their Department Exposure Control Plan.
- Seek prompt first aid or medical attention for exposure incidents.
- Report exposure incidents to their supervisor.

2. Exposure Determination

The University has determined that occupational exposure to bloodborne pathogens exists for the general job classifications and duties listed below. This exposure determination has been made without regard to the use of personal protective equipment. Although useful in identifying groups

of potentially exposed employees, this general determination does not replace a local exposure determination that supervisors are required to include in their Department Specific Exposure Control Plan.

2.1. Job Classifications with Recognized Exposure

Due to the diverse nature of the University environment there are no job classifications in which all employees have recognized occupational exposure. The University identifies employees with occupational exposure based upon the tasks they are required to perform. Employees in the job classifications listed below are likely to perform tasks with occupational exposure, however, any employee whose assigned job tasks may result in exposure are covered under this program.

- Health care workers and health care faculty
- Biomedical laboratory workers
- Biomedical waste handlers
- Emergency responders and designated first aid providers
- Athletic trainers and lifeguards
- Law enforcement personnel
- Child care workers
- Sporting Event Supervisors and Coaches
- Housekeeping, Custodial, and Laundry Service Personnel
- Rubbish and Recycling crews
- Plumbers

2.2. Job Tasks/ Duties with Recognized Exposure

Regardless of job classification, the tasks listed below have recognized occupational exposure. All employees performing these tasks are considered occupationally exposed:

- Healthcare work involving patient care and contact.
- Laboratory work with human blood or OPIM.
- Handling laundry contaminated with human blood or OPIM.
- Biohazard spill cleanup involving human blood or OPIM.
- Biomedical waste collection/disposal from areas working with human blood or OPIM.
- Any task which results in exposure to human blood or OPIM.

3. Communication of Hazard to Employees

The University is committed to protecting its employees from the hazards associated with bloodborne pathogens. Hazard communication is provided using training, departmental exposure control plans, and signs/labels.

3.1. Bloodborne Pathogens Training

Potentially exposed employees are required to participate in Bloodborne Pathogens Training upon initial job assignment and at least annually thereafter. Training is also required when an existing job task is altered or when a new job task is introduced.

Initial training is conducted in a classroom setting where employees have the opportunity to ask questions and provide feedback on the content of this program. Initial training includes or is followed by a review of the Department Specific Exposure Control Plan. UMS SM trains and qualifies Bloodborne Pathogens instructors to ensure that these individuals are knowledgeable in the subject matter, all elements of the University/Campus Bloodborne Pathogens Program, and other program related details. All training must be documented.

Annual refresher training is conducted either in a classroom or online via the UMS SM website, and followed by a review of the Department Specific Exposure Control Plan.

BBP training includes at least the following elements:

- Identification of applicable regulations, OSHA 29 CFR 1910.1030.
- Review of University/Campus BBP Program and applicable Department Exposure Control Plan.
- Explanation of the epidemiology, modes of transmission, and symptoms of bloodborne diseases.
- Identification of tasks with potential exposure to bloodborne pathogens.
- Recognition of warning signs and labels.
- Description of Work Practice/Engineering Controls.
- Selection, use, and disposal of Personal Protective Equipment (PPE).
- Information regarding Hepatitis B vaccination.
- Procedures for exposure incidents, post exposure evaluation, and follow up procedures.

3.2. Departmental Exposure Control Plans

Departments are required to develop and maintain Exposure Control Plans (ECP) for any and all workers with exposure to blood or OPIM. Department ECPs are designed to eliminate or minimize occupational exposure while conducting departmental specific tasks. Supervisors must ensure that their Department ECP is updated annually and accessible to employees.

Department ECPs must contain at least the elements listed below.

- List of job tasks with occupational exposure.
- Description of work practice/engineering controls, and Personal Protective Equipment (PPE). *Potentially exposed employees must be consulted on the identification, evaluation, and selection of these controls.*

Supervisors are required to conduct ECP training for employees upon initial job assignment and at least annually thereafter. Training is also required when an existing job task is altered or when a new job task is introduced. Training must be documented.

Supervisors are required to review and update ECPs at least annually and whenever necessary to reflect new or modified tasks and procedures. This review must include:

- Review/update of all required elements of the ECP.
- Consideration/implementation of new technologies to eliminate or reduce employee exposure, including safer medical devices.
- Input from potentially exposed employees.

3.3. Bloodborne Pathogens Labels and Signs

The Biohazard label/sign (Figure A) is required on all containers that store, contain, or hold materials known or suspected to contain blood or OPIM.

Biohazard labels are required to be:

- Orange or red colored, with lettering and symbols in a contrasting color.
- Imprinted on or affixed to containers in a manner that prevents loss or unintentional removal.



Figure A

Biohazard labels are not required on:

- Red bags or red containers, when this procedure is outlined in the departmental ECP.
- 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.
- Individual containers that are placed in a labeled secondary container during storage, transport, shipment or disposal.
- Regulated waste that has been decontaminated.
- Specimen containers when universal precautions are used, specimens are readily identifiable, and specimens remain within the facility.

4. Exposure Control and Minimization

The following engineering and work practice controls are required in all University departments to eliminate or minimize employee exposure to blood or OPIM. These controls must be examined on a regular basis to ensure their effectiveness. Where potential occupational exposure remains after institution of these controls, personal protective equipment must also be used. Controls listed in this section represent the minimum regulatory requirements. Clarifications and details specific to local protocols and controls/procedures for specific work tasks are required to be listed in the Department Specific Exposure Control Plan (Appendix C).

4.1. Universal Precautions

Employees are required to use Universal Precautions. Universal precautions means:

- All blood, blood products, and OPIM are treated as potentially infectious.
- All body fluids that cannot be positively identified are considered potentially infectious.
- Contact with blood and OPIM is avoided or minimized whenever possible.

- Personal protective equipment is used whenever contact with blood or OPIM is anticipated.

4.2. Personal Hygiene and Facilities

Personal hygiene is critical to reducing the spread of pathogens; therefore, the following are prohibited in work areas where blood or OPIM may be present:

- Storage or consumption of food and drink items.
- Storage or use of cosmetics, contact lenses, or medications.

Hand washing is also critical to reducing the spread of pathogens, therefore:

- Employees are required to wash their hands with soap and running water immediately after contact with blood or OPIM and/or after removing protective gloves.
- Hand washing facilities must be accessible to employees.
- If hand washing facilities are not accessible, antiseptic hand cleaner and/or towelettes may be used as a temporary measure until hand washing facilities become available.

4.3. Housekeeping

Work areas and laboratories must be maintained in a clean and sanitary condition. Departments are required to implement appropriate written schedules for cleaning and decontamination of equipment and work surfaces/areas. Additionally, the following general housekeeping practices are required:

- Minimize splashing, spraying, spattering, and generation of droplets of blood/OPIM.
- Keep work areas free from unnecessary items and free from contamination.
- Regularly replace protective coverings on equipment and working surfaces.
- Dispose or decontaminate items as soon as feasible.
- Decontaminate equipment prior to storage, service, or shipping. When user decontamination of equipment is not feasible, equipment must be labeled with the Biohazard symbol and statement identifying the nature and extent of contamination.
- Mouth pipetting/suctioning of blood or OPIM is prohibited.

4.4. Containers

Departments are required to provide appropriate containers for the storage, transportation, or shipping of items known or suspected to contain blood or OPIM. Containers must be:

- Designed to prevent leakage.
- Puncture resistant when used to contain sharps.
- Labeled and closed prior to being stored, transported, or shipped.
- Regularly inspected for and cleansed of external contamination.
- Placed in a labeled secondary container if external contamination exists.

4.5. Sharps and Safer Medical Devices

The term 'sharps' generally refers to needles, razor blades, scalpels, and other instruments used in clinical or laboratory procedures, but may also refer to broken glassware or any item capable of

puncturing the skin. To improve safety and reduce the incidence of sharps related injuries, the following procedures are required when working with sharps.

4.5.1. Use of Sharps

Single-use disposable sharps and safer medical devices must be handled in a manner which reduces the possibility of a sharps injury. The following requirements apply when working with single-use sharps:

- Dispose of sharps in an appropriate sharps container immediately after use.
- Do not shear, bent, break, or alter sharps prior to disposal; do not recap needles.
- Use tools or other mechanical means when picking up exposed sharps.

Reusable sharps should be avoided and substituted with single-use sharps whenever feasible. If their use cannot be avoided, contaminated reusable sharps must be placed in appropriate and designated sharps containers until properly decontaminated and ready for reuse. Additional guidelines for the safe use and decontamination of reusable sharps must be included in the departmental ECP.

4.5.2. Sharps Containers

In areas where sharps are used, sharps containers are required to be easily accessible and located as close as feasible to the immediate area of use. Employees must not open, reach into, or tamper with sharps containers. Sharps containers must be:

- Puncture and spill resistant.
- Properly labeled.
- Maintained in an upright position.
- Closed prior to handling, storage, transport, or shipping.
- Disposed of when 2/3 full or when indicated by the manufacturer.
- Designed in a manner which does not require employees to reach into the container.

4.5.3. Safer Medical Devices

In clinical or laboratory settings, Safer Medical Devices are required to be substituted for traditional sharps whenever feasible. Safer medical devices include needleless systems, shielded needle devices, sharps with engineered sharps injury protections (SESIP), and plastic or break-resistant glassware, vials, and capillary tubes. Supervisors must ensure that employees are consulted in the use of safer medical devices.

4.6. Personal Protective Equipment (PPE)

Departments are required to provide employees with PPE appropriate for their designated job tasks and ensure that employees use PPE as directed by this program and the Department Exposure Control Plan. PPE includes, but is not limited to gloves, gowns, laboratory coats, face shields/masks, eye protection, and resuscitation/ventilation devices such as mouthpieces, resuscitation bags, or pocket masks. PPE is considered appropriate when it is:

- Designed to prevent blood or OPIM from contacting the skin, eyes, mouth, mucous membranes, and normal clothing or undergarments for the duration of time it is used.
- Issued to or readily accessible to employees.
- Available in the appropriate sizes and hypoallergenic.
- Inspected prior to use; not used if damaged or contaminated.

Employee Refusal- The OSHA Bloodborne Pathogens Standard [29 CFR 1910.1030] allows for employees to temporarily and briefly decline to use PPE when, under rare and extraordinary circumstances, it is the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or co-worker. In the event of such a situation, the supervisor and SEM will conduct an investigation to determine how to prevent future occurrences.

4.6.1. Protective Gloves

Protective gloves include both single use disposable gloves and utility gloves. Disposable nitrile, vinyl, surgical, or examination gloves are required to be used when it can be reasonably anticipated that the employee may have hand contact with blood or OPIM. Disposable gloves must be discarded immediately after use and when contaminated, damaged, or otherwise compromised. Disposable gloves may not be washed or decontaminated for re-use.

Utility gloves should be used when performing tasks that could easily compromise the integrity of disposable gloves. Utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised.

Special Provisions for Volunteer Blood Donation Centers - the OSHA Bloodborne Pathogens Standard [29 CFR 1910.1030] allows for employers to waive the mandatory use of gloves for vascular access/phlebotomy procedures in volunteer blood donation centers. The University does not allow for this special provision and requires that gloves be worn for all vascular access/phlebotomy procedures.

4.6.2. Other PPE

Goggles or glasses with solid side shields and masks or face shields must be worn when performing tasks that may generate splashes, spray, spatter, or droplets of blood or OPIM.

Gowns, aprons, lab coats, clinic jackets, surgical caps/hoods, shoe covers or similar outer garments are required when contamination of personal clothing can be anticipated. The specific type and characteristics will depend upon the task and degree of exposure anticipated. Additional requirements and guidelines for PPE must be included in the Department Exposure Control Plan.

4.6.3. Cleaning, Laundering, Repair, and Replacement of PPE

Whenever possible, PPE should be chosen and designed for single use, however, some PPE may be reused. Procedures for cleaning, laundering, repair, and replacement of PPE must be included in the departmental ECP. Departments must follow all manufacturer recommendations regarding PPE. General requirements for handling PPE in these situations include:

- Remove PPE when damaged or contaminated and prior to leaving the work area; do not remove PPE from the workplace.
- Place damaged or contaminated PPE in a designated area or container for cleaning, laundering, repair or disposal.
- Departments must clean, launder, repair, or replace PPE at no cost to the employee.

4.7. Regulated Waste

The University campuses handles and disposes of regulated waste in accordance with all applicable local, state, and federal regulations. Regulated waste is defined as:

- Liquid or semi-liquid blood or OPIM.
- Items capable of releasing blood or OPIM in a liquid or semi-liquid state if compressed.
- Items capable of releasing caked or dried blood or OPIM during handling.
- Laboratory, pathological, and microbiological wastes containing blood or OPIM.
- Sharps contaminated with blood or OPIM (for the purposes of disposal, shielded needle and SESIP devices are considered sharps).

Regulated waste, including sharps, must be discarded as soon as feasible and collected in appropriate containers near the work area. Regulated waste containers must be:

- Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping.
- Labeled.
- Closed when full and prior to removal.

Regulated wastes must be handled by employees with Bloodborne Pathogens training. Regulated waste must be stored in a designated area until disposal. Disposal of regulated wastes is the responsibility of specific campuses, with consultation and guidance from UMS Safety Management.

5. Hepatitis-B Vaccination

The University is committed to protecting its employees from Hepatitis B virus (HBV). In accordance with OSHA regulation and University policy, all employees with occupational exposure to blood or OPIM are offered the opportunity to receive medical consultation and HBV vaccination.

5.1. Vaccination Information

Employees are informed of the risks of Hepatitis-B infection and the benefits of vaccination during initial BBP training. Employees are also informed that medical consultations and HBV vaccinations are available at no cost to all potentially exposed employees. At the conclusion of training, employees are offered the opportunity to receive the vaccination and/or consult with a physician to

discuss any personal medical issues or questions regarding the vaccination not answered during BBP training.

5.2. Vaccination Declination

Employees who decline medical consultation and/or HBV Vaccination must document their decision by choosing 'Decline' and signing a copy of the HBV Vaccination Declination Statement (Appendix B). Signed declination statements must be sent to Human Resources by the BBP Trainer and Supervisor with a copy of the training record. Declination statements are maintained with employee medical records in Human Resources.

Employees who initially decline HBV vaccination but at a later date decide to accept the vaccination must contact their supervisor, Human Resources, campus safety personnel, or UMS Safety Management. At that time, provisions will be made for the employee to receive the vaccination.

5.3. Initial Vaccination

Employees who accept medical consultation and/or HBV Vaccination are required to document their decision by choosing Accept on the HBV Vaccination Statement (Appendix B). These statements must be sent to Human Resources by the BBP Trainer or Supervisor with a copy of the training records.

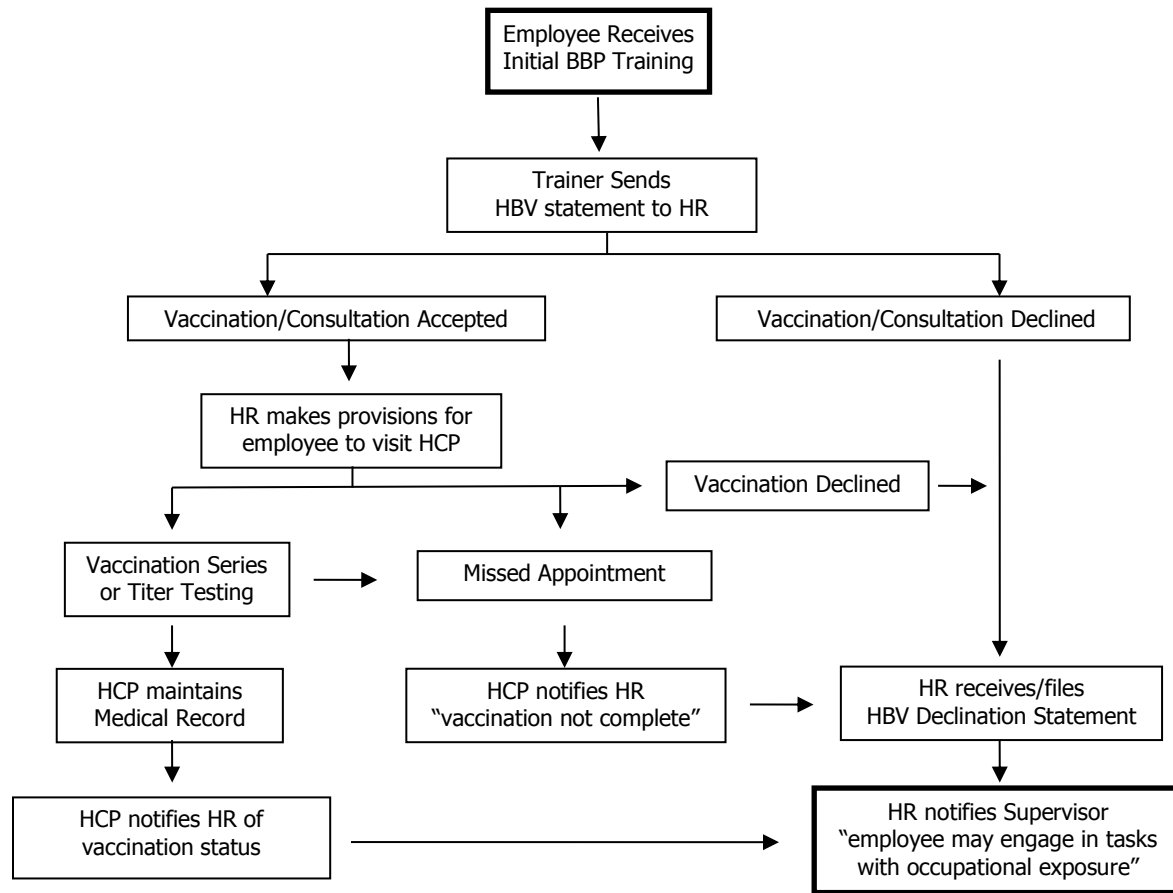
Human Resources is required to contact the employee and their supervisor within 10 working days of initial BBP Training and make arrangements for medical consultation and/or vaccination. Employees should not perform job tasks with potential exposure until informed it is safe to do so by letter from Human Resources.

Medical consultation and subsequent HBV vaccination must be administered during the employee's work shift and at a nearby health care facility designated by Human Resources. A licensed health care provider must provide vaccinations in accordance with current U.S. Public Health Service procedures. Records of vaccination must be kept by the Healthcare Provider and Human Resources.

5.4. Booster Doses and Immunity Titers

If booster doses or immunity titers for HBV vaccination are recommended by the Healthcare Provider or the U.S. Public Health Service, such services must be made available to affected employees.

5.5. HBV Vaccination Flowchart



6. Exposure Incidents

The University is committed to preventing employee exposure to blood or OPIM, however, when and if exposures occur, the campus safety personnel (or UMS SM) responds accordingly.

6.1. Exposed Employee

Following any occupational exposure, or suspected exposure, the exposed employee is required to seek prompt first aid and/or medical attention and immediately report the exposure incident to their immediate supervisor. If the supervisor is not immediately available, the employee should seek appropriate care and report the exposure as soon as practicable.

6.2. Department Supervisors

Supervisors are required to direct exposed employees to obtain the necessary first aid and/or medical treatment. Following immediate care, supervisors must notify the University and document the incident as directed by established University procedure. The supervisor should be prepared to provide detailed information regarding the incident, including but not limited to, the route(s) of exposure and the circumstances under which the exposure incident occurred.

6.3. Safety Management

Following notification of an exposure incident, SM will coordinate an investigation of the exposure incident to determine recommendations for preventing future occurrences. Information gained during the investigation will be shared with Human Resources as applicable.

6.4. Human Resources

Following notification of an exposure incident, Human Resources is required to provide employees with the opportunity to receive a confidential medical surveillance/evaluation. Medical evaluations must include the elements listed below. Coordination and subsequent documentation of medical surveillance is the responsibility of the Department of Human Resources.

6.5. Medical Surveillance

6.5.1. Exposed Employee

The exposed employee must be offered the opportunity to have their blood collected and tested for the presence of bloodborne pathogens. Collection of blood must occur as soon as feasible following the exposure incident and only if the employee consents to the procedure. The employee may choose to provide consent for baseline blood collection, but not for subsequent testing. If this occurs, the blood sample must be preserved by the Healthcare Provider conducting the test for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, testing must be done as soon as feasible.

6.5.2. Source Individual

The University is required to attempt to identify the source individual. If the source individual can be identified, they must be contacted as soon as feasible following the exposure incident. If consent is obtained the source individual will be referred to a health care provider to have their blood collected and tested for the presence of bloodborne pathogens.

If consent is not obtained, it must be documented that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, will be tested and the results documented. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

Results of the source individual's testing must be made available to the exposed employee within five (5) days of receiving the source individual's results. The employee also must be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

6.5.3. Information Provided to the Healthcare Professional

The University is required to provide the following information to the healthcare provider evaluating an employee after an exposure incident:

- A copy of the Bloodborne Pathogen Standard
- A description of the exposed employee's duties as they relate to the exposure incident.
- Documentation of the route(s) of exposure and circumstances under which exposure occurred.
- Results of the source individual's blood testing, if available.
- All medical records relevant to the appropriate treatment of the employee including vaccination status.

6.5.4. Healthcare Professional's Written Opinion

The University is required to obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The healthcare professional's written opinion for post-exposure evaluation and follow-up must be limited to the following information:

- Confirmation that the employee has been informed of the results of the evaluation
- Confirmation that the employee has been informed about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.
- If Hepatitis-B vaccination is indicated, and if the employee has received such vaccination.
- Any/ all findings or diagnoses shall remain confidential and shall not be included in the written report.

6.6. Post-exposure Prophylaxis and Counseling

Exposed employees must be provided with appropriate post-exposure prophylaxis as indicated by the Healthcare Provider or the U.S. Public Health Service. Post-exposure counseling will be made available through the University Employee Assistance Program.

7. Training

Bloodborne pathogen training is required for all employees who are occupationally exposed (i.e. required to provide first aid, cleanup blood spills, wash contaminated laundry or surfaces, or work with samples of human tissue, blood, or body fluids). Training must be provided at the time of initial assignment to tasks where occupational exposure may occur, and annually thereafter. Training must include:

- epidemiology and symptoms of bloodborne diseases
- modes of transmission of bloodborne pathogens
- exposure control plan and the means by which the employee can obtain a copy of the written plan
- appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials
- use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment
- types, proper use, selection, location, removal, handling, decontamination and disposal of personal protective equipment
- 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 free of charge
- appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials
- 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
- post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- signs and labels and/or color coding required

Bloodborne pathogen training must be provided annually and must include an opportunity for interactive questions and answers with the person conducting the training session.

8. Recordkeeping

8.1. Medical Records

Medical records are required to be kept for each employee with occupational exposure. Medical records are the responsibility of Human Resources and any applicable healthcare providers and must include:

- The name and social security number of the employee;

- A copy of the employee's Hepatitis B vaccination status including the dates of all the Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.
- A copy of all results of examinations, medical testing, and follow-up procedures.
- The employer's copy of the healthcare professional's written opinion.
- A copy of the information provided to the healthcare professional.

Employee medical records must be kept confidential and not disclosed or reported to any person within or outside the workplace without the employee's express written consent, except as required by this section or by applicable law. Medical records must be maintained for at least the duration of employment plus 30 years.

8.2. Training Records

Supervisors will maintain a copy of the employee's Bloodborne Pathogens training records. Training records must include the following information and shall be maintained for 3 years from the date on which the training occurred:

- The dates of the training sessions
- Names of persons conducting training
- The names and job titles of all persons attending the training sessions

Departments are required to maintain a copy of employee training records and ensure retraining is provided at least annually. Departments are also required to maintain copies or a summary of the departmental (ECP) training materials along with the qualifications of the person conducting the training for a minimum of three years.

8.3. Sharps Injury Log

Safety Management maintains a comprehensive Sharps Injury Log using data from workplace injury reports. Departments are required to maintain a local sharps injury log for the recording of percutaneous injuries from contaminated sharps. The sharps injury log must be in addition to any other reporting required by this program. The information in the sharps injury log must be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log must contain, at a minimum, the information listed below. An example Sharps Injury Log can be found in Appendix D.

- The type and brand of device involved in the incident,
- The department or work area where the exposure incident occurred, and
- An explanation of how the incident occurred.

Appendix A – Definitions

Blood -- human blood, human blood components, and products made from human blood.

Bloodborne Pathogens (BBP) - pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Contaminated - the presence or the reasonably anticipated presence of blood or OPIM on an item or surface.

Contaminated Laundry - laundry which has been soiled with human blood or OPIM, or which may contain sharps.

Decontamination - the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls - means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needle less systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure Incident - a specific eye, mouth, mucous membrane, non-intact skin, or parenteral contact with blood or OPIM that results from performing assigned job duties.

Hand washing facilities - a facility providing an adequate supply of running potable water, soap, and single use towels or hot air drying machines.

HBV- Hepatitis B virus

HIV- Human Immunodeficiency virus.

Laundry - clothing, bedding, or similar items to be washed, laundered, or otherwise cleaned.

Needleless systems - a device that does not use needles for the collection of bodily fluids or withdrawal of bodily fluids after initial venous or arterial access is established; the administration of medication or fluids; any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Occupational Exposure - reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from the performance of an employee's duties.

Other Potentially Infectious Material (OPIM) – 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. Tissues can be considered OPIM also. Any unfixed tissue or organ (other than intact skin) from a human (living

or dead) is considered OPIM; 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.

Parenteral -- piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

Personal Protective Equipment - specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

Regulated Waste - liquid or semi-liquid blood or OPIM; contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIM.

Sharps - Needles, scalpels, broken glassware, or other sharp object that can penetrate the skin.

Sharps with engineered injury protection s- a needless sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Source Individual - any individual, living or dead, whose blood or OPIM may be a source of occupational exposure to the employee. Examples include but are not limited to, hospital and clinic patients, clients in institutions for the developmentally disabled, trauma victims, clients of drug and alcohol treatment facilities, residents of hospices and nursing homes, human remains, and individuals who donate or sell blood or blood components.

Sterilize - the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Universal Precautions - an approach to infection control. According to the concept of Universal Precautions, all human blood and other potentially infectious materials are treated as if known to be infectious for HIV, HBV and/or other bloodborne pathogens.

Work Practice Controls - means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

Appendix B – HBV Vaccination Declination Form

INSERT

HBV Vaccination Declination Form

HERE

Appendix C – Departmental Exposure Control Plan

INSERT

Departmental Exposure Control Plan

HERE

Appendix D – Sharps Injury Log

INSERT

Sharps Injury Log

HERE

Appendix E – Special Procedures for Laboratories with Infections Human Pathogens

This section applies to research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of infectious human pathogens such as HIV and HBV. The section does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs. These requirements apply in addition to the other requirements of this program.

E1.1 Standard Microbiological Practices

All regulated waste shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

E1.2 Special Practices

Signs will be posted at the entrance of infectious human pathogen (HBV or HIV) research laboratories. Signs will be identical to the Labels described in this program, but also display:

- Names of any and all infectious agents.
- Special requirements for entering the area.
- Contact information of the designated area supervisor.

Laboratory doors shall be kept closed when work involving infectious agents, such as HIV or HBV, is in progress.

Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leak proof, labeled or color-coded container that is closed before being removed from the work area.

Access to the work area shall be limited to authorized persons. Written policies and procedures shall be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures shall be allowed to enter the work areas and animal rooms.

When other potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol shall be posted on all access doors. The hazard warning sign shall comply with signage requirements of this program.

All activities involving other potentially infectious materials shall be conducted in biological safety cabinets or other physical-containment devices within the containment module. No work with these other potentially infectious materials shall be conducted on the open bench.

Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be used in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

Special care shall be taken to avoid skin contact with other potentially infectious materials. Gloves shall be worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

Before disposal all waste from work areas and from animal rooms shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials.

A spill or accident that results in an exposure incident shall be immediately reported to the laboratory director or other responsible person.

A biosafety manual shall be prepared or adopted and periodically reviewed and updated at least annually or more often if necessary. Personnel shall be advised of potential hazards, shall be required to read instructions on practices and procedures, and shall be required to follow them.

E1.3 Containment Equipment

Appropriate, certified biological safety cabinets or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, shall be used for all activities with other potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

Biological safety cabinets shall be certified when installed, whenever they are moved and at least annually.

Infectious human pathogen research laboratories shall meet the following criteria:

- Each laboratory shall contain a facility for hand washing and an eye wash facility which is readily available within the work area.
- An autoclave for decontamination of regulated waste shall be available.

Infectious human pathogen production facilities shall meet the following criteria:

- The work areas shall be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors shall be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double-doored clothes-change room (showers may be included), airlock, or other access facility that requires passing through two sets of doors before entering the work area.
- The surfaces of doors, walls, floors and ceilings in the work area shall be water resistant so that they can be easily cleaned. Penetrations in these surfaces shall be sealed or capable of being sealed to facilitate decontamination.
- Each work area shall contain a sink for washing hands and a readily available eye wash facility. The sink shall be foot, elbow, or automatically operated and shall be located near the exit door of the work area.
- Access doors to the work area or containment module shall be self-closing.
- An autoclave for decontamination of regulated waste shall be available within or as near as possible to the work area.
- A ducted exhaust-air ventilation system shall be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air shall not be recirculated to any other area of the building, shall be discharged to the outside, and shall be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

E1.4 Additional Initial Training for Employees in Infectious Human Pathogen Laboratories

Employees in infectious human pathogen research laboratories and infectious human pathogen production facilities shall receive the additional initial training in addition to the other training requirements of this program. The department shall:

- Assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with infectious human pathogens.
- Assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with infectious human pathogens.
- Provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

Appendix F – Bloodborne Pathogens Exposure Incident Follow-up

INSERT

Bloodborne Pathogens Exposure Incident Follow up

HERE