BOWDOIN COLLEGE
BLOOD BORNE PATHOGEN (BBP)
EXPOSURE CONTROL PROGRAM

Purpose
This document meets the requirements outlined in OSHA 29 CFR 1910.1030 (Blood Borne Pathogen [BBP] Standard) for the development, implementation and maintenance of a written exposure control program. The purpose of the BBP program is to provide information to the employees of Bowdoin College regarding the identification of potential bodily fluid hazards in their workplace, the protective measures to be taken to prevent exposure, and their right of access to occupational health records.

Scope
The BBP program applies to all employees of Bowdoin College (including part-time and student employees) who may be either occupationally or conditionally exposed to blood or other potentially infectious materials (OPIM) in the course of their work.

Program Components
The BBP program consists of the following components:

1. Program Responsibilities
   - The Environmental Health and Safety Office (EHS) is responsible for implementation of the BBP program with assistance from Human Resources. EHS will maintain, review, and update the BBP program at least annually, and whenever necessary to include new or modified tasks and procedures.
   - Employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this BBP program.
   - Supervisors will provide and maintain all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard.
   - Human Resources and EHS will be responsible for ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained.
   - Supervisors will work with EHS to ensure that employees receive training, documentation of training, and making the written BBP program available to employees, OSHA, and NIOSH representatives.

2. Determination of Exposure. Employees of the College will be classified as occupationally exposed, conditionally exposed, or non-classified depending on their potential for BBP exposure in the workplace, as follows:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Personnel</th>
<th>OSHA Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupationally Exposed</td>
<td>Health Services, Children’s Center, Athletic Trainers, Lifeguards</td>
<td>Initial/Annual Training, Hepatitis-B Vaccination</td>
</tr>
</tbody>
</table>
Security Officers  
Housekeeping  
Biology Department Faculty/Staff  
BOC Course Leaders  
Mechanical Services Plumbers  

<table>
<thead>
<tr>
<th>Conditionally Exposed</th>
<th>Dining Services</th>
<th>Initial/Annual Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buildings &amp; Grounds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ice Arena Technicians</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shop Technicians</td>
<td></td>
</tr>
</tbody>
</table>

| Non-Classified | All others | RTK information at new employee orientation |

3. **Hepatitis-B Vaccinations.** OSHA requires that occupationally exposed employees be offered vaccinations for hepatitis-B within 10 days of employment. The vaccination series consists of three shots over a six-month period, and is provided by Occupational Health Associates (OHA). If accepted, the employee must sign a release stating caveats associated with the vaccination.

The vaccination may also be waived by the employee if: (1) they have already completed the series; (2) titer testing has indicated existing immunity; or (3) they choose to do so for medical or personal reasons; a waiver form (attached) must then be signed by the employee in lieu of the release.

4. **Universal Precautions and Exposure Control Methods.**

By following a standard set of universal precautions and exposure control methods, occupational exposure to BBPs can be reduced. Universal precautions include the following:

- Assumption that all fluids are infectious, and avoiding direct contact with bodily fluids or contaminated materials.
- Hazard communication through information, training, signs, and labels.
- Good housekeeping, including thoroughly washing skin, clothing, and surfaces or materials contaminated with bodily fluids with disinfectant, and properly disposing of wastes.
- Use of personal protective equipment (PPE), including gloves, glasses, masks, and protective clothing.

Site-specific exposure controls will be identified by the department or group supervisors, and may include the following:

- Elimination of potential for exposure, by making changes to hazardous tasks or practices.
- Engineering controls, such as sharps containers, medical barriers, and other devices.
- Administrative controls, which include work practices for hazardous tasks, general housekeeping and properly identified hazards through the use of biohazard labeling on containers and storage locations.
- Selection of PPE specific to the workplace or task.
5. Blood or Bodily Fluid Spill Cleanup Procedure

In the Event of a Spill of Blood or Bodily Fluids:

Determine PPE requirements based on size and type of spill.

Large spill of body fluids such as a sewage leak that has a high risk of splash potential, PPE requirements include chemical resistant gloves (vinyl, nitrile, etc.), shoe covers, disposable Tyvek coveralls or gown and mucous membrane protection that includes goggles and a mask.

Small spill of body fluids such as a small pool of blood that has a risk of splashing: PPE requirements at a minimum include waterproof gloves (rubber, nitrile, etc.) and mucous membrane protection with goggles and mask. Protective clothing such as boots and coveralls may be worn depending on the size and potential for splashing during clean-up.

Dried body fluids or a very small spill of body fluids such as dried blood or blood from a mild nose bleed that have a low risk of splashing: Wearing water-proof gloves (rubber, nitrile, etc.) at a minimum would be required for PPE in this type of spill cleanup. Other PPE may be worn depending on the situation.

Note: In the event of a crime scene or reportable incident, cleanup must not be conducted until after the scene is released by the Incident Commander or agency responsible for investigation.

Clean up Procedures:

1. Don necessary PPE to prevent contact with bodily fluids. Restrict access, and do not walk in the spill area. Be aware of the potential for “sharps” to puncture PPE and potential injection hazards. Pick up sharps with tongs or dustpan and broom before cleanup of liquids, if necessary. Place sharps in the appropriate container to prevent injury during handling and transportation.

2. Use absorbent material to soak up and contain spill, working from the edges. Place spill materials in a trash bag or biohazard bag.

3. Flood the surface with a disinfectant rated efficacy against a broad spectrum of human infectious agents. Bowdoin housekeeping closets have Alpha-Ph, a chemical that works as a disinfectant and can be used for clean-up. This material must be left on the contaminated surface for ten (10) minutes to be effective. A 10% solution of bleach in water is also an effective disinfectant method when used with a 10 minute contact time.

4. Carefully clean up and absorb the body fluid material and disinfectant mixture and place all cleanup material into a trash bag or biohazard bag.

5. Properly disinfect or dispose of any items used in the cleanup, such as tongs, forceps, brooms, dustpans, mops, etc. in a trash bag or biohazard bag.

Basic Hygiene & Accidental Exposures:

- Employees should wash their hands with soap and warm water immediately after removal of gloves and other protective equipment.
- Disinfect all reusable equipment.
- Upon accidental skin contamination, wash the area with copious amounts of soap and water.
- If the eyes or mucous membranes are accidentally contaminated flush with copious amounts of water.
- Report exposures to the supervisor, and complete an Accident/Incident Report per the College’s procedures.
Disposal Procedures:
If body fluids and clean-up materials have been disinfected and absorbed so there are no free liquids, the clean-up material can be double bagged in heavy-duty trash bags and disposed of as normal trash. Exceptions would be if the body fluid spill was large quantities (i.e. pooled blood). If clean up materials are soaked or dripping, use additional absorbent and call EHS for biohazard bags & boxes to package material for off-site medical waste incineration.

6. Biohazard Waste Management. Any saturated clean-up materials from a blood spill or similar cleanup event must be managed according to the Bowdoin College Biomedical Waste Management Plan, specifically:

- No contaminated materials may be mixed or disposed with regular solid wastes.
- All waste containers must be appropriate for the materials stored (i.e., red box for sharps, red bag for softs) and labeled “BIOHAZARD” with the standard symbol.
- Biomedical wastes must be stored in designated and properly labeled locations (Buck Health Center, Farley Field House, or Druckenmiller Science Center) and containers for off-site disposal by a licensed contractor.
- The College’s biohazardous waste storage area is located in Druckenmiller 55-C, and is managed by the Manager of the Bowdoin Science Center and Laboratory Safety.

7. Labels and Signs
In addition to the labeling requirements for all regulated biohazard wastes labeling is required for all:
- Doors to laboratories that use potentially infectious materials.
- Refrigerators that contain biohazards should be labeled.
- No food items should be placed in refrigerators that contain biohazards.
- Any container that may store potentially infectious materials must be adequately labeled.

8. Emergency Response and Incident Investigation. Occupationally exposed employees and their supervisors will be directed in the proper response and cleanup procedures for a blood spill or similar incident, specifically:

- The incident will be reported to the employee’s supervisor, and Security contacted to address any medical or life safety concerns.
- The release area will be secured, and contaminated materials and surfaces isolated for cleanup.
- PPE (i.e., remote respirator, CPR shield) will be used to minimize exposure during delivery of first aid.
- The facilities department will be contacted for cleanup services, and wastes segregated for proper disposal.
- Individuals who may have been exposed will be directed in proper disinfection procedures, and informed of their right to post-exposure evaluation.
- The supervisor will conduct an injury/incident investigation

9. Post-Exposure Evaluation. Employees who have been occupationally or conditionally exposed will be offered a post-exposure medical evaluation. A post-exposure evaluation report must be completed by the employee’s supervisor, using the standard Bowdoin College Accident/Incident Report form.

EHS ensures that health care professional(s) responsible for employee's hepatitis B vaccination, post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard.
Once the Supervisor and Employee fully complete an Incident Report, Human Resources will ensure that the health care professional evaluating an employee after an exposure incident receives the following:

- a description of the employee's job duties relevant to the exposure incident
- route(s) of exposure
- circumstances of exposure
- if possible, results of the source individual's blood test
- relevant employee medical records, including vaccination status

Human Resources provides the employee with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

**Procedures for Evaluating the Circumstances Surrounding and Exposure Incident:**

Human Resources and/or EHS will review the circumstances of all exposure incidents to determine:

- engineering controls in use at the time
- work practices followed
- a description of the device being used (including type and brand)
- protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
- location of the incident
- procedure being performed when the incident occurred
- employee's training

Human Resources will record all injuries from contaminated sharps in a Sharps Injury Log. All incidences must include at least:

- date of the injury
- type and brand of the device involved (syringe, suture needle)
- department or work area where the incident occurred
- explanation of how the incident occurred.

10. **Employee Information and Training.** Occupationally and conditionally exposed employees shall receive initial and annual training specific to their work areas, including at least the following:

- Location and availability of the written BBP exposure control program and associated regulations;
- Epidemiology and symptoms of blood borne diseases, and routes of potential exposure;
- Hazard recognition in the workplace;
- Protective measures to be taken to prevent adverse effects, including the use of personal protective equipment (PPE), engineering controls, and good work practices;
- Availability and administration of hepatitis-B vaccination;
- Emergency procedures, reporting, and post-exposure evaluation;
- Warning signs and labels; and
- The right to access their occupational health records.

Training may be conducted with written, video, or web-based materials, so long as it meets the minimum requirements listed and addresses the specific conditions of the workplace. Supervisors within each department or group are responsible for ensuring that initial and annual training is conducted; contact EHS for information.

11. **Recordkeeping.** Copies of employee waiver/release forms and training attendance logs will be provided by the supervisors to the EHS and Human Resources, and will be maintained for 3-years. Employee medical records, from vaccinations and post-exposure evaluations, will be kept confidential and maintained for 30-years.
Each exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by the Human Resources department.

In addition to the 1904 Recordkeeping Requirements, all injuries from contaminated sharps are also recorded in a Sharps Injury Log.

This log is reviewed as part of the annual program evaluation and maintained for at least five years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

Program Review

The BBP program will be reviewed annually by the EHS and Human Resources, and updated as needed to maintain regulatory compliance and meet the perceived needs of the College’s workplaces.

Attachments

Hepatitis-B Vaccine Waiver and Release Forms
HEPATITIS B VACCINE WAIVER

I understand that due to my Occupational Exposure to blood or other potentially infectious materials that I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccine 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 to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at that time at no charge to me.

<table>
<thead>
<tr>
<th>Name of Employee (print)</th>
<th>Signature of Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Have you previously declined the hepatitis B vaccination series?</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you declining now because you have had the series before?</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Are you declining now because you have tested positive for immunity?</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
</tbody>
</table>

Receipt by EHS Manager/HR Administrator:

<table>
<thead>
<tr>
<th>Name, Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HEPATITIS B VACCINE RELEASE

As an employee classified for Occupational Exposure to bloodborne pathogens (BBP), and having completed an informational training session on BBP, I hereby request and give my consent to be vaccinated against hepatitis B virus (HBV). I understand: (1) that the vaccine is prepared from yeast cultures, and is free of association with human blood or blood products; (2) that this vaccination consists of a series of three injections given on Day 1, 30 and 180; (3) that not all people will develop antibodies to HBV upon completion of the vaccination series; (4) that the most frequent adverse reactions from the vaccine series may be pain or swelling at the site of injection, slight elevation of temperature, and general malaise; and (5) that other less common reactions may occur, and I have been given the opportunity to ask about these. To the best of my knowledge, I am not pregnant at this time, nor do I have an allergy to yeast or yeast products.

Name of Employee (print) ____________________________ Signature of Employee ____________________________

Job Title ____________________________ Date ____________________________

Have you previously declined the hepatitis B vaccination series? Yes No NA

Are you requesting the vaccine now due to a potential exposure? Yes No NA

Receipt by EHS Manager/HR Administrator:

Name, Title ____________________________ Date ____________________________

<table>
<thead>
<tr>
<th>Date</th>
<th>Lot #</th>
<th>Administered By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injection 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Results</th>
<th>Administered By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titer Test</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>