



Exposure Control Plan

POLICY

Davidson College is committed to providing a safe and healthful work environment for our employees. In pursuit of this goal, the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with Occupational Safety and Health Administration (OSHA) standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens." The ECP is a key document to assist Davidson College in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:

- Determination of employee exposure
- Implementation of various methods of exposure control, including:
 - Universal precautions
 - Engineering and work practice controls
 - Personal protective equipment
 - Housekeeping
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Communication of hazards to employees and training
- Recordkeeping
- Procedures for evaluating circumstances surrounding exposure incidents

Implementation methods for these elements of the standard are discussed in the subsequent pages of this ECP.

PROGRAM ADMINISTRATION

Davidson College's Environmental, Health and Safety Manager (EHS) is responsible for campus wide implementation of the ECP and will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures. Those 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 ECP.

<u>Departmental Responsibility:</u>	<u>ECP Program Administrator</u>
• Athletics	Beth Hayford, Head Athletics Trainer
• Student Health	Kathy Carstens, Associate Director Student Health
• Campus Police	Julian Coaxum, Chief of Campus Police
• Building Services	Tony Owens, Director Building Services
• All other departments	Allen Stowe, Environmental Health & Safety Manager

Davidson College will provide all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard. The EHS Manager will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes.

EMPLOYEE EXPOSURE DETERMINATION

The following is a list of job classifications at Davidson College in which employees have risk of occupational exposure:

<u>Job Title</u>	<u>Department</u>
Athletic Trainers	Athletics
Nurses / Health Care Workers	Student Health Center
Building Service Workers	Physical Plant
Police Officers	Campus Police

METHODS OF IMPLEMENTATION AND CONTROL

Universal Precautions

All employees will utilize universal precautions. The concept of Universal Precautions is that all human blood and potentially infectious materials must be treated as if they are known to contain HIV, HBV, or other bloodborne pathogens. Other potentially infectious materials (OPIM) that can carry bloodborne pathogens include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Exposure Control Plan (ECP)

Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees can review this plan at any time on the [Davidson College EH&S webpage](#).

Engineering Controls and Work Practices

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering controls and work practice controls used are listed below:

- Sharps disposal containers are inspected and maintained or replaced to prevent overfilling.
- Recapping of needles or other sharps is prohibited
- Pipetting or suctioning by mouth is prohibited
- Waste containers are leak proof.

Personal Protective Equipment (PPE)

PPE is provided to employees at no cost to them. Training in the use of the appropriate PPE for specific tasks or procedures is provided in the annual Bloodborne Pathogen training. The types of PPE available to employees are as follows:

- Gloves
- Safety Glasses
- Disposable coveralls
- Face Shields

PPE may be obtained through the EHS Manager or the Physical Plant warehouse. All employees using PPE must observe the following precautions:

- Wash hands immediately or as soon as feasible after removing gloves or other PPE.
- Remove PPE after it becomes contaminated and before leaving the work area.
- Used PPE must be disposed of in red biohazard/medical waste containers.
- Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
- For gloves that are easily punctured, such as latex, double layer when possible.
- Never wash or decontaminate disposable gloves for reuse.
- Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
- Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.

Housekeeping

Regulated waste is placed in labeled containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see the following section “Labels”), and closed prior to removal to prevent spillage or protrusion of contents during handling.

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms and appropriately labeled or color coded sharps disposal containers are available from the EHS Manager.

Broken glassware that may be contaminated is only picked up using mechanical means, such as a brush and dustpan.



Labels

Labels and signs bearing a red Biohazard warning symbol shall be affixed to locations and containers used to store, transport, and ship blood or other potentially infectious materials.



The following labeled containers are used at Davidson College for medical waste



Red plastic medical waste containers with red liner bags

The EHS Manager is responsible for ensuring that warning labels are affixed or red bags are used as required. Employees are to notify the EHS Manager if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc., without proper labels.

HEPATITIS B VACCINATION

Training will be provided to employees on hepatitis B vaccinations, addressing safety, benefits, efficacy, methods of administration, and availability. The hepatitis B vaccination series is available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of this plan. Vaccination is encouraged unless:

- 1) documentation exists that the employee has previously received the series,
- 2) antibody testing reveals that the employee is immune,
- 3) medical evaluation shows that vaccination is contraindicated

However, if an employee declines the vaccination, the employee must sign a declination form (See attachment 1). Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept at the EHS Manager’s office, located in the Watson B034. Vaccinations will be provided by Davidson College’s Student Health Facility.

POST-EXPOSURE EVALUATION AND FOLLOW-UP

Should an exposure incident occur, contact the EHS Manager at 704-894-2929. A confidential medical evaluation and follow-up will be conducted immediately. Following initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:

- Document the routes of exposure and how the exposure occurred.
- Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
- Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
- If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
- Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
- After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status
- If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW-UP

The EHS Manager ensures that health care professional(s) responsible for employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard. Also, the EHS Manager ensures 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

The employee is provided 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 AN EXPOSURE INCIDENT

The EHS Manager 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

Each responsible department will record all percutaneous injuries from contaminated sharps in a Sharps Injury Log.

EMPLOYEE TRAINING

All employees who have risk of occupational exposure to bloodborne pathogens receive initial and annual training conducted by department ECP program administrators. All employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

- a copy and explanation of the OSHA bloodborne pathogen standard
- an explanation of our ECP and how to obtain a copy
- an explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
- an explanation of the use and limitations of engineering controls, work practices, and PPE
- an explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
- an explanation of the basis for PPE selection
- information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge
- information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
- an explanation of the 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
- information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- an explanation of the signs and labels and/or color coding required by the standard and used at this facility
- an opportunity for interactive questions and answers with the person conducting the training session.

RECORDKEEPING

Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at program administrators' offices. The training records include:

- the dates of the training sessions
- the contents or a summary of the training sessions
- the names and qualifications of persons conducting the training
- the names and job titles of all persons attending the training sessions

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records." The EHS Manager is responsible for maintenance of the required medical records. These confidential records are kept in EHS Manager's office for at least the duration of employment plus 30 years.

OSHA Recordkeeping

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 *CFR* 1904, *Recording and Reporting Occupational Injuries and Illness*). This determination and the recording activities are done by the Human Resources department.

Sharps Injury Log (Attachment 2)

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded 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
- an explanation of how the incident occurred.

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.

Attachment 1



HEPATITIS B VACCINE RECORD

Please complete and return to the department Exposure control Program Administrator. If you have questions contact EH&S at x2929

Department Information

Department

Supervisor

Hepatitis B Vaccine Record (Check only one)

I have previously received the complete Hepatitis B Vaccine series on or about this date:

Month/ Day /Year

I request the Hepatitis B vaccine; I have been given the information on it and have had an opportunity to ask questions. I understand the risks and benefits of the Hepatitis B vaccine and that it is offered to me at no cost. I understand that complete protection requires three injections to be scheduled at 0, 1 month and 6 months.

1ST inj. Date / RN signature

2nd inj. / RN signature

3rd inj. / RN signature

I have read and understand the following statements; and I wish to **decline** the Hepatitis B vaccine at this time. *"I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring the Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with the Hepatitis B vaccine, at no charge to myself. However, I decline 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 to be vaccinated with the Hepatitis B vaccine, I can receive the vaccination series at no charge to me."*

Appendix A to 29 CFR.1910.1030

Acknowledgement

I understand that prior to receiving or declining the Hepatitis B vaccine series, I have reviewed the department's exposure control plan, attended and received training for the following topics: universal precautions, HIV and HBV symptoms and epidemiology, modes of HIV and HBV transmission, HBV vaccine information, the use of personal protective equipment, engineering controls, housekeeping, record keeping and post-exposure evaluations, treatment and follow-up. The information here is accurate and complete.

Employee Name (please print)

Employee Signature

Date

Employee Social Security Number

Position Title

Supervisor Name (please print)

Supervisor Signature

Date

Attachment 2



Sharps Injury Log

Department: _____

Year _____

The Bloodborne Pathogen rule requires that you establish and maintain a Sharps Injury Log to record all contaminated sharps injuries in a facility. The purpose of this log is to help you evaluate and identify problem devices or procedures that require attention.

The Sharps Injury Log needs to do all of the following:

- Maintain sharps injuries separately from other injuries and illness.
- Include ALL sharps injuries that occur during a calendar year
- Be retained for 5 years beyond the completion of that calendar year
AND
- Preserves the confidentiality of affected employees.

Date	Type of Device examples: syringe, suture needle)	Brand Name of Device	Work Area where injury occurred	Brief description of how the incident occurred (examples: procedure being done , action being performed (injection, disposal), body part injured.