# SECTION 12-BLOODBORNE PATHOGENS

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# 12.1 BLOODBORNE PATHOGENS PROCEDURE

#### A. Introduction

The Bloodborne Pathogen Program and corresponding Exposure Control Plan has been developed to eliminate or minimize occupational exposure to blood or bodily fluids. The major intent of the program is to prevent the transmission of blood borne diseases within potentially exposed workplace occupations and specifically to reduce and prevent employee exposure to the Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and other blood borne diseases.

## B. Scope

Current law does not specify which jobs have an occupational exposure. The standard requires the employers evaluate the jobs and make the determination if any such exposures exist.

However, occupational exposure means "reasonably anticipated" contact between skin, eye, mucous membranes, or potential contact with blood or other potentially infectious material that may result from the performance of the employees' job duties. Further, reasonably anticipated includes the <u>potential</u> for exposure as well as actual exposures.

Employees trained in first aid or CPR would not be included simply because they have received medical training. Employees would be covered if they were <u>trained and designated</u> to respond to medical emergencies as <u>part of their job duties</u>.

"Trained and Designated" means that the employer has made an employee responsible for rendering medical assistance as part of the employee's job function.

#### C. References

Department of Labor, Occupational Health and Safety Administration (OSHA) 29 Code of Federal Regulations 1910.1030, Illinois Department of Labor 820 ILCS 225 Health and Safety Act.

#### D. Responsibilities

- The Director, Health Services is responsible for the implementation of the Exposure Control Plan.
- The Manager, Environmental Health & Safety will assist the Director of Health Services in implementation of the program. The Manager, Environmental Health & Safety will maintain and update the written Bloodborne Pathogen Program when necessary.
- The Custodial Supervisor will have the responsibility for written housekeeping protocols and will ensure that effective disinfectants are purchased.
- The Director of Health Services will be responsible for ensuring that all medical actions required are performed and that appropriate medical records are maintained.
- The Director of Health Services, the Manager, Environmental Health & Safety and/or a
  designated training representative shall be responsible for providing training.
- Departmental Supervisors will be responsible for documentation of training and making the written Exposure Control Plan available to employees.
- Each Department Supervisor will maintain and provide all necessary personal protective equipment (PPE), engineering controls (i.e., sharps containers, etc.), labels and red bags as required by the standard.



- Each Department Supervisor will ensure that adequate supplies of the aforementioned equipment are available.
- 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 the Exposure Control Plan.

#### E. Procedures

- The Exposure Control Plan (ECP) shall be made available to employees covered by the plan. The ECP and a copy of the regulations along with training shall be provided to employees.
- Employees with work activities covered in the ECP shall be offered the Hepatitis B vaccination (HBV) along with training on the safety, benefits, and efficiency within 10 days of initial assignment. The HBV shall be administered by Health Services at no cost to the employee. Health Services will keep record keeping of the HBV.
- Department Supervisors shall ensure employees are provided with training and keep records of the annual training on the ECP.
- For questions on the ECP, training or the Bloodborne Pathogen Program contact the Office of Environmental Health & Safety.

# 12.2 EXPOSURE CONTROL PLAN

## A. Objective

To establish Harper College's blood-borne pathogen Exposure Control Plan (ECP), train employees, define management responsibilities, and develop record keeping requirements.

### B. Scope

This Exposure Control Plan (ECP) includes:

- Determination of employee exposure.
- Implementation of various methods of exposure control, including Universal precautions, engineering and work proactive controls, personal protective equipment, and housekeeping.
- Hepatitis B Vaccination.
- Post-exposure evaluation and follow-up.
- Communication of hazards to employees and training.
- Record keeping.
- Procedures for evaluating circumstances surrounding an exposure incident.

#### C. Employee Exposure Determination

1. The following is a list of all job classifications at Harper College in which **ALL** employees have occupational exposure:

Job Title	Department/Location
Athletic Trainer	Athletics
Assistant Athletic Trainer	Athletics
Equipment Manager	Athletics
Equipment Room Attendant	Athletics
Harper Police Officer	Harper Police
Community Service Officer	Harper Police
Preschool Teacher	Child Learning Center

2. The following is a list of all job classifications at Harper College in which **SOME** employees have occupational exposure:

Job Title	Dept./Location	Task/ Procedure
Custodial Staff	Facilities Management	Cleaning specific areas such as; Dental Hygiene Clinic, Human Performance Lab, Training Room, Laboratories, Bathrooms, and accident sites. Collecting & preparing regular waste for disposal.
Maintenance Mechanics	Facilities Management	Plunging of Toilets, Routing of Sewer Lines, and Water Intrusion Cleanup
Health Career Faculty	Heath Sciences	Those faculty-supervising students in clinical facilities/ areas: Dental Hygiene, EMT, Phlebotomy, Nursing

"Good Samaritan" acts which result in exposure to blood or other potentially infectious materials from assisting a fellow employee (i.e., assisting a co-worker with a nosebleed, giving CPR or first aid) are NOT included in the Bloodborne Standard. However, in such a case, Harper College will offer Post-Exposure Evaluation and Follow-up.

## D. Methods of Implementation and Control

<u>Universal precautions</u> will be observed at all facilities. All blood or other potentially infectious material will be considered to be infectious regardless of the perceived status of the source individual. Engineering and work practice controls will be implemented to eliminate or minimize exposure to employees at all sites. Where occupational exposure remains after implementing these controls, personal protective clothing, and equipment shall also be worn. All equipment will be inspected and maintained on a regular schedule.

A copy of this **Exposure Control Plan (ECP)** shall be provided during the employees' initial training session. It will also be reviewed during their annual refresher training. All employees will have an opportunity to review this ECP at any reasonable time during their work shift by contacting their supervisors. A copy of the ECP will be made available free of charge and within 15 days of the request. The ECP can also be found any time on the EH&S webpage, under **Section 12** – **Bloodborne Pathogens**.

#### E. Engineering Controls and Work Practices

Engineering controls and work practices controls will be used to prevent or minimize exposure to blood borne pathogens. The specific engineering controls and work practice controls that will be used and where they will be used are listed below:

- Locations: Dental Hygiene Clinic, Athletic Department, Harper Police, and Health Career Labs.
- Engineering Controls: Examples could include removing or isolating the hazard or the worker, i.e., self-sheathing needles, puncture-resistant disposal containers for sharps, ventilation devices, bio-safety cabinets, etc.
- Work Practice Controls would include, but are not limited to:
  - Providing readily accessible hand washing facilities.
  - Washing hands immediately or as soon as feasible after removal of gloves.
  - At non-fixed sites which lack hand washing facilities, providing interim hand washing measures, such as antiseptic towelettes and paper towels.



- Washing body parts as soon as possible after skin contact with blood or other potentially infectious materials.
- Prohibiting the recapping or bending of needles.
- Prohibiting shearing or breaking contaminated needles.
- Labeling with Biohazard label.
- o Decontaminating equipment.
- Prohibiting eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses in work areas where there is likelihood of occupational exposure.
- Prohibiting food and drink from being kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials (OPIM) are present.
- Performing all procedures involving blood or OPIM in such a manner as to minimize splashing, splattering, and generation of droplets of these substances.
- Placing specimens of blood or OPIM in a container, which prevents leakage during collection, handling, processing, storage, transport, or shipping.

Departments shall have specific training on necessary engineering controls and work practices in their area. Departments shall also list engineering and work practice controls to be employed in the area (i.e., sharps containers), inspection, and maintenance schedule, and the name of the individual responsible.

## F. Personal Protective Equipment (PPE)

**Personal protective equipment** must be used if occupational exposure remains after instituting engineering and work practice controls, or if controls are not feasible. Training will be provided in the use of the appropriate PPE for the employees' specific job classifications and tasks/procedures they will perform.

PPE will be provided without cost to all occupationally exposed employees and will be selected based on the anticipated exposure to blood or other potentially infectious materials. Protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions and duration of use.

Appropriate PPE is required for the following tasks:

- Routine Patient Care
- First Aid
- Laboratory Procedures
- Cleaning Spills

The type and characteristics of PPE will depend upon the task and degree of exposure anticipated.

PPE items include, but are not limited to:

- Latex Gloves (or equal type to latex)
- Gowns
- Laboratory Coats
- Face Shields
- Masks
- Eye Protection (splash proof goggles, safety glasses with side shields)
- Resuscitation Bags and Mouthpieces

This equipment will be kept in kits, which will also contain disinfectant towelettes for hand washing and red bags for biohazard-labeled bags. These will be located in all departments where employees are reasonably anticipated to have occupational exposure to bloodborne pathogens.

As a general rule, all employees using PPE must observe the following precautions:

- Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
- Remove PPE before leaving the work area and after a garment becomes contaminated.
- Place used PPE in appropriately designated areas in each department or containers when being stored, washed, decontaminated, or discarded.
- Wear appropriate gloves when contact with blood or OPIM can be reasonably anticipated when handling or touching contaminated items or surfaces. Replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
- Wash your hands and any other exposed skin with soap and water as soon as possible.
   Employees must also flush exposed mucous membranes (eyes, mouth, etc.) with water.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised. The
  decontamination procedure will consist of cleaning with antibacterial soap and 10% bleach
  solution.
- Discard utility gloves when they show signs of cracking, peeling, tearing, puncturing, or deterioration.
- Never wash or decontaminate disposable gloves for reuse or before disposal.
- Wear appropriate face and eye protection such as a mask with glasses with solid side shields
  or a chin-length face shield when splashes, sprays, splatters, or droplets of blood or OPIM
  poses a hazard to the eyes, nose, or mouth.
- If a garment is penetrated by blood and OPIM, the garment(s) must be removed immediately or as soon as feasible. If a garment becomes minimally contaminated, employees should be trained to remove it in such a way as to avoid contact with the outer surface; e.g., rolling up the garment as it is pulled toward the head for removal. However, if the amount of blood exposure is such that the blood penetrates the garment and contaminates the inner surface, not only is it impossible to remove the garment without exposure to blood, but the contamination itself would constitute exposure. It may be prudent to train employees to cut such a contaminated scrub to aid removal and prevent exposure to the face.
- Repair and/or replacement of PPE will be at no cost to the employees.

#### **G.** Training

All employees who have, or are reasonably anticipated to have, occupational exposure to bloodborne pathogens will receive training conducted by the Office of Environmental Health & Safety or a designated training representative. Department supervisors shall ensure employees receive the training and keep documentation of the training.

Lecture, videos, and handouts will be used to inform employees of the epidemiology, symptoms, and transmission of bloodborne diseases. In addition, the training program will cover, at a minimum the following elements:

- 1. An explanation of the OSHA Standard for Bloodborne Pathogens.
- 2. Epidemiology, signs, and symptoms of bloodborne diseases.
- 3. Modes of transmission of bloodborne pathogens.
- 4. The Exposure Control Plan, (i.e., points of the plan, lines of responsibility, how the plan will be implemented, etc.)
- 5. Procedures that might cause exposure to blood or other potentially infectious materials in the workplace.
- 6. Control methods that will be used at the facility to control exposure to blood or other potentially infectious materials.

- 7. Personal protective equipment available on the job and who should be contacted concerning such equipment.
- 8. Post-exposure evaluation and follow-up.
- 9. Signs and labels used at the facility.
- 10. Hepatitis B vaccine program of the college.
- 11. Interactive question and answer session.

Employee Education shall be completed during the New Employee Safety Orientation Training and using Safe Colleges online training platform for each initial training, as well as subsequent refresher training each year.

## H. Hepatitis B Vaccine

All employees who have been identified as having occupational exposure to blood or other potentially infectious materials will be offered the **Hepatitis B vaccine at no cost to the employee**. The vaccine will be offered within 10 working days of their initial assignment to work involving occupational exposure to blood or other potentially infectious materials unless the employee has previously had the vaccine or wishes to submit to antibody testing to prove that the employee has sufficient immunity.

Northwest Community Healthcare (NCH) located in Building M, will provide information on Hepatitis B vaccination, addressing its safety, benefits, efficacy, methods of administration and availability. All employees with occupational exposure are strongly encouraged to receive the Hepatitis B vaccination. NCH will administer the Hepatitis B vaccination to employees who have occupational exposure to blood or OPIM unless:

- The employee has previously received the series.
- Antibody testing reveals that the employee is immune.
- Medical reasons prevent taking the vaccination; or
- The employee chooses not to participate.

The employee who chooses <u>not</u> to accept the vaccine must sign the statement of declination of Hepatitis B vaccination (See *Section 12.4 - HBV Declination* below). The statement can only be signed by the employee following appropriate training regarding Hepatitis B, Hepatitis B vaccination, the efficacy, safety, method of administration, and benefits of vaccination, and that the vaccine and vaccination are provided free of charge to the employee. *This statement is not a waiver*, employees can request and receive the Hepatitis B vaccination at a later date if they remain occupationally at risk for Hepatitis B.

## Post-Exposure Evaluation and Follow-Up

Should an exposure incident occur, it should be reported immediately to Environmental Health and Safety, Human Resources, and their Supervisor. An Exposure Incident Report (see Section 12.5 of the BBP Program) shall be completed by the employee who incurred an exposure and signed off by the employee's Supervisor.

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA Standard. This follow-up will include the following:

- 1. Documentation of the route of exposure and the circumstances related to the incident.
- If possible, the identification of the source individual and, if possible, the status of the source individual. The blood of the source individual will be collected as soon as possible and will be tested, if consent is obtained, for HIV and HBV infection, unless prohibited by State law.
- 3. If possible, results of the source individual's testing will be made available to the exposed employee who will also be informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.

- 4. If the exposed employee consents to having the employee's blood collected but does not consent to HIV serological status testing, the blood sample will be preserved for at least 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing should be conducted, then the appropriate actions shall be taken.
- 5. The employee will be consulted as to the prevention of, or protective treatment for, disease in accordance with current recommendations of the U.S. Public Health Service.
- 6. Appropriate counseling concerning precautions to take during the post-incident period will be provided by NCH to the employee along with information on symptoms for and the need to report any related experiences to appropriate personnel.

#### J. Interaction with Health Care Professionals

A written opinion shall be obtained from NCH that evaluates employees of the college.

Written opinions will be obtained in the following instances:

- When the employee is sent to receive the Hepatitis B Vaccine
- Within 15 days from when an employee is sent to NCH following an exposure incident

NCH will be instructed to limit their opinions to:

- Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident
- That the employee has been informed of the results of the evaluation
- That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials
- The written opinion to the college is not to reference any personal medical information or test results

## K. Housekeeping

**Regulated waste** shall be placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled, or color-coded (red bags with biohazard symbol), 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 the sides and bottoms, and labeled or color-coded appropriately. Sharps containers shall be provided in the same room that syringes are being used. Sharps containers shall never be manually opened, emptied, or cleaned.

**Custodial services** will pick up regulated waste containers, clean and decontaminate work surfaces. The Custodial Supervisor has developed and implemented a written housekeeping schedule, method of decontamination and location of cleaning supplies. The Custodial Supervisor shall further select the appropriate type of disinfectant. When a commercial disinfectant is not available, a solution of freshly made 10% bleach in water solution should be used.

**Broken glassware** that is contaminated shall be picked up by mechanical means such as tongs, forceps, or a brush and dustpan; never pick up with hands, even if gloves are worn.

**Disposal of regulated waste** shall be coordinated by Facilities Management according to all federal, state, and local regulations. Contaminated objects (i.e., clothing, equipment, and objects), which have been decontaminated by disinfectant, may be reused, or disposed in regular trash.

#### L. Laundry

The following contaminated articles will be laundered:

- Athletic Department Towels and Uniforms
- Staff Lab Coats

Laundering will be performed by Equipment Room staff in Building M (according to the following requirements and procedures):

- Handle contaminated laundry as little as possible and with minimum of agitation.
- Use appropriate personal protective equipment (PPE) such as gloves and other PPE (i.e., aprons, mask, eye protection) when handling and/or sorting contaminated laundry.
- At the location of contamination, place wet contaminated laundry in leak-proof, biohazard labeled or red bag-colored containers before transporting.
- If laundry must be sent off campus to be cleaned, it must be determined if the receiving facility is prepared to handle biohazards by using universal precautions.
- Sharps containers shall be readily accessible due to the incidence of needles and sharps being unintentionally mixed with the laundry.
- Linen soiled with blood or body fluids shall be placed and transported in bags that
  prevent leakage. If hot water is used, linens should be washed with detergent in
  water at least 140F-160F for 25 minutes. If low temperature (<140F) water is used, a
  chemical suitable for disinfectant shall be used.</li>

#### M. Labeling

The following labeling method(s) will be used at Harper College:

- Fluorescent Orange "Biohazard" (word or symbol warning) Labels
- Red Bags/ Containers

Facilities Management will ensure warning labels are affixed or red bags are used as required. Employees are to notify Facilities Management if they discover unlabeled regulated waste.

#### N. Recordkeeping

**Medical Records** are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.20. The Health Service staff is responsible for maintenance and storage of the required medical records.

The medical records will include:

- Employee name and Harper number.
- A copy of the employee's Hepatitis B vaccination and any medical records relative to the employee's ability to receive the vaccination.
- A copy of all results of examinations, medical testing and follow-up procedures as required by the Standard.
- A copy of all health care professional's written opinion(s) as required by the Standard.

All employee medical records will be kept confidential and will not be disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by the Standard or as may be required by law.

Employee medical records shall be maintained for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.20.

Employee medical records shall be provided upon request of the employee or to anyone having written consent of the employee within 15 working days.

The Department Head or a designated representative shall maintain Training Records. The records shall contain the following:

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

Training Records shall be maintained for a minimum of three (3) years from the date on which the training occurred.

Employee's training records will be provided upon request to the employee or the employee's authorized representative within 15 working days.

# 12.3 DEFINITIONS

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

<u>Bloodborne Pathogens -</u> Pathogenic microorganisms that are present in human blood and can infect and cause diseases in humans. These pathogens include, but are not limited to: Hepatitis B virus (HBV) and Human Immunodeficiency Virus (HIV).

<u>Contaminated -</u> The presence or the reasonably anticipated presence of blood or Other Potentially Infectious Materials (OPIM) on an item or surface.

**Exposure Incident -** A specific eye, mouth, other mucous membrane, non-intact skin, or potential contact with blood or OPIM that results from the performance of an employee's duties.

<u>Occupational Exposure - Reasonably anticipated skin, eye, mucous membrane, or potential contact with blood or OPIM that may result from the performance of an employee's duties.</u>

Other Potentially Infectious Materials (OPIM) – The following body fluids: 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, any body fluid in situations where it is difficult or impossible to differentiate between body fluids.

#### Regulated Waste - Any of the following:

- 1) Liquid or semi-liquid blood or OPIM;
- 2) Contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed;
- 3) Items that are caked with dried blood or OPIM and are capable of releasing these materials during handling;
- 4) Contaminated sharps; and
- 5) Pathological and microbiological wastes containing blood or OPIM.

<u>Universal Precautions</u> – System of infection control where the use of engineering and work practice controls are used whenever a person may come in contact with blood or OPIM.

# **12.4 HBV DECLINATION**

#### **DECLINATION STATEMENT**

I understand that due to my occupational exposure to blood or other potentially infectious materials 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 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 Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature Date

The wording in this declination statement is absolute and may not be changed or amended in any way.

# 12.5 EXPOSURE INCIDENT REPORT

# **Routes and Circumstances of Exposure Incident** Name of Employee: Date of Report: Address: Harper Number: D/O/B Home Phone: **Business Phone:** Vaccination Status (HBV, Td) Antibody Status: Date of Exposure: Time of Exposure: Where did the incident occur? Nature of the Incident (Auto accident, Patient Care, Medical Emergency) - Be Specific Describe what task(s) you were performing when the exposure occurred – Be Specific: Were you wearing Personal Protective Equipment (PPE)? Yes \_\_\_\_\_ NO \_\_\_\_\_ If yes, list: Yes \_\_\_\_\_ Did the PPE Fail? NO If Yes, Explain How: What Body Fluid(s) were you exposed to (Blood or Other Potentially Infectious Materials)? Be Specific: Supervisor Signature: Date: Forward to Health Services – Date: