



Bloodborne Pathogens Exposure Control Plan

Northern Illinois University
Environmental Health and Safety
Updated 6/6/19

Review and Updates

Date	Reviewed by	Changes Made
February 4, 2015	Dave Scharenberg	Contact information
February 24, 2016	Dave Scharenberg	Remove Kish. Corp. Health, add Physicians Immediate Care. Update contact information.
October 6, 2017	Dave Scharenberg	Annual Review
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Introduction

Northern Illinois University (NIU) will make every reasonable effort to provide a work and academic environment that is free from significant health hazards for the University community. In pursuit of this endeavor the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

This Exposure Control Plan (ECP) is a key document in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:

- 1) Determination of employee exposure.
- 2) Implementation of various methods of exposure control, including:
 - a. Universal precautions
 - b. Engineering and work practice controls
 - c. Personal protective equipment
 - d. Housekeeping
- 3) Hepatitis B vaccination.
- 4) Post-exposure evaluation and follow-up.
- 5) Communication of hazards to employees and training.
- 6) Recordkeeping.
- 7) Procedures for evaluating circumstances surrounding an exposure incident.

The methods of implementation of these elements of the standard are discussed in the subsequent pages of this ECP.

Program Administration

The Department of Environmental Health and Safety (EHS) is responsible for the implementation of the ECP. EHS will maintain, review and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.

Contact: Dave Scharenberg, 815-753-1093 for Facilities related departments
Michele Crase, 815-753-9251 for Academic related departments

Those employees whose job classifications are determined to have occupational exposure to blood or Other Potentially Infectious Material (OPIM) must comply with the procedures and work practices outlined in this ECP.

Each NIU Department that has employees who are potentially exposed to bloodborne pathogens will maintain and provide all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels and biohazard bags as required by the standard. They will also ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes. See Appendix A for departmental listings of contact information.

The Physician or other Licensed Health Care Provider (PLHCP) will maintain and provide copies of the employee's medical record directly to the employee upon the employee's request. The employee also has the right to complete an "Authorization to Release Medical Records" form so the PLHCP can send the employee's medical records to the employee's primary care physician

Contact information:

Physicians Immediate Care, 2496 DeKalb Avenue, Sycamore IL, 60178

815-754-1122

EHS will provide training to departments/individuals upon request. Each department is responsible for ensuring its employees are current on their training.

Contact: Dave Scharenberg, 815-753-1093.

Employee Exposure Determination

Occupational Exposure is defined as reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious material (OPIM) that may result from the performance of an employee's duties.

Job classifications and associated tasks in which certain employees may have occupational exposure are listed by department in Appendix B.

Methods of Implementation and Control

Universal Precautions

Universal precautions will be observed at Northern Illinois University in order to prevent contact with blood or OPIM. Universal precautions means that all blood and OPIM will be considered infectious regardless of the perceived status of the source individual.

OPIM is defined as amniotic fluid, pericardial fluid, pleural fluid, synovial fluid, cerebrospinal fluid, semen and vaginal secretions, or any body fluid visibly contaminated with blood.

Exposure Control Plan

Employees covered by the bloodborne pathogens standard will receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees have an opportunity to review this plan at any time during their work shifts by contacting the Department of Environmental Health and Safety. If requested, EHS will provide an employee with a copy of the NIU ECP free of charge within 15 days of the request. In addition, the plan will be available on the EHS website at www.ehs.niu.edu.

EHS is responsible for reviewing and updating the ECP annually, or more frequently if necessary to reflect any new or modified tasks and procedures, which affect occupational exposure, and to reflect new or revised employee positions with occupational exposure.

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.

Control	Location
Sharps containers	Health Services exam rooms, laboratory areas which use needle devices, some athletic rooms and student recreation facilities, EHS
Biohazard disposal bags	Health Services exam rooms, laboratory areas that use biological material including rDNA, athletic trainer rooms, student recreation facilities, EHS
Blood spill cleanup kit	EHS, Building Services

Sharps disposal containers are inspected and maintained or replaced by the individual responsible for the exam rooms, laboratories (Responsible Researcher) or athletic trainer rooms (Athletic Department), Student Recreation facilities (Director of Student Recreation). The sharps disposal containers are checked on an ongoing basis by the responsible department or individual and are replaced when necessary to prevent overfilling.

Students, faculty, and staff are encouraged to properly dispose of sharps. Sharps containers are available at EHS. Fliers about the Needle Disposal Program are distributed to new students, posted in various locations (including residence halls)., Used containers will be collected by EHS and properly disposed of within the university Biowaste Program (see Appendix C).

The university identifies the need for changes in engineering control and work practices through EHS review of the Supervisor's Report of Injury or Illnesses form, Employee First Report of Injury Illinois Form 45, employee interviews, or consultation with each department.

Evaluation of new procedures or new products used by each department will include a literature review, information from the supplier and written evaluation of all products considered.

Each Department Chair or Director is responsible for effective implementation of these recommendations. Contact the Department of Environmental Health and Safety for assistance on this matter.

Personal Protective Equipment (PPE)

Personal protective equipment is provided to NIU employees at no cost to them. Training is provided by the supervisor in the use of the appropriate PPE for the tasks or procedures employees will perform.

The types of PPE available to employees are dependent on the jobs they perform. Some examples of PPE are gloves, lab coat or apron, and eye protection.

Necessary PPE is located within each department and may be obtained through the employee's supervisor. If a problem arises in obtaining proper PPE, please contact EHS.

All employees using PPE must observe the following precautions:

1. Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
2. Remove PPE after it becomes contaminated, and before leaving the work area.

- Used PPE may be disposed of in a biohazard bag or appropriately labeled laundry bag.
 - Wear appropriate gloves when it can be 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, 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.
3. 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. Remove in such a way as to avoid contact with the outer surface.

The procedure for handling used PPE is as follows:

Gloves

Gloves should be removed by grasping the outside wrist area of one glove using the other gloved hand. Take care not to touch skin or clothing with contaminated gloves. Pull the grasped glove inside out and hold onto it with the remaining gloved hand. Take the ungloved hand reach inside the wrist part of the remaining glove. Pull the remaining glove inside out. In this way the gloves should be one inside the other and the contaminated surfaces wrapped inside. Place contaminated gloves into the biohazard bag provided.

Utility gloves may be decontaminated with ten percent solution of freshly prepared bleach or an EPA approved disinfectant. However, utility gloves must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration, or when their ability to function as a barrier is compromised.

Eye and Face Protection

Masks in combination with eye protection devices, such as goggle or glasses with solid side shields, or chin-length face shields, are to be decontaminated with a ten percent solution of freshly prepared bleach or an EPA approved disinfectant and replaced in the storage areas.

Gowns/Aprons

Gowns or aprons, which are impervious to fluids, shall be worn when sorting and washing contaminated laundry. Disposable gowns or aprons, if used, are not to be washed or decontaminated for re-use and are to be replaced as soon as they are torn, punctured, or when their ability to function as a barrier is compromised.

Place contaminated gowns/aprons into the biohazard bag provided.

Work Practices

Sharps Containers

Sharp items such as broken glassware, knives, needles, or similar material that may be contaminated shall be discarded immediately or as soon as feasible. Do not pick up sharp items directly with the hands. Sweep or brush the material into a dustpan and dispose of it in a sharps container. All sharps containers shall be closable, puncture-resistant, leak-proof on sides and bottom, and labeled with a biohazard label or red in color. Containers shall be maintained upright throughout use and replaced routinely or when two-thirds full.

Sharps disposal containers may be purchased by responsible departments. Sharps containers must be located in exam rooms, labs, and other areas where sharps are used on a regular basis so they are easily accessible and as close as feasible to the immediate area where sharps are used.

Once a sharps container is two-thirds full the lid is closed and the container is placed in a lined Biohazard box. The boxes are collected and properly disposed of by an outside contractor. Manifests of all pickups are available at Environmental Health and Safety.

Other Regulated Waste

Blood, OPIM, and recombinant DNA waste shall be placed in containers that are closeable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transportation or shipping.

The container must be lined with a biohazard disposable bag. Biohazard disposable bags shall be closable and leak proof. The container and bag will be either red or red-orange in color or have a biohazard label affixed to it. The container must be closed before removal to prevent spillage or protrusion of contents during handling, storage, transport.

The container is transported to the nearest biohazard waste box. The bag insert is tied closed and placed in the box. The boxes are collected and properly disposed of by an outside contractor. Manifests of all pickups are available at Environmental Health and Safety.

NOTE: Disposal of all PIMW shall be in accordance with applicable federal, state and local regulations. Check with the Department of Environmental Health and Safety for more information on disposal regulations.

Hand Washing Facilities

Hand washing facilities are available to the employees who incur exposure to blood or OPIM. OSHA requires that these facilities be readily accessible after incurring exposure.

Contaminated Equipment and Work Surfaces

The manager, supervisor, or designee on duty is responsible for ensuring that equipment which has become contaminated with blood or OPIM shall be decontaminated as necessary, unless the decontamination of the equipment is not feasible.

All contaminated surfaces will be decontaminated as soon as feasible after any spill of blood or OPIM, as well as the end of the work shift if the surface may have become contaminated since the last cleaning.

Decontamination can be accomplished using a ten percent solution of household bleach, or other EPA approved disinfectant.

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

Laundry Procedures

University Recreation Services may have gym towels that are potentially contaminated. These towels will be laundered at the Recreation Services.

Laundry Handling Procedures – Recreation Services:

- a. Minimize personal contact with the laundry.

- b. Put on an apron and vinyl or latex gloves prior to coming into contact with the dirty laundry.
- c. Agitate laundry as little as possible when removing it from the designated bins.
- d. Follow instructions posted on the dryer for doing the laundry. This includes the use of bleach. Place the apron in with the soiled laundry after you have placed all of the laundry in the washer.
- e. Spray all containers and surfaces that have come into contact with soiled laundry with the bleach solution bottle. You must make up a fresh solution daily. Instructions will be found on the spray bottle.
- f. When removing the gloves, follow the appropriate procedure as recommended in your first aid training so as to not come into contact with the exterior surface of the gloves.
- g. Dispose of the vinyl or latex gloves in the hazardous material bin located in the key closet.
- h. Wash your hands immediately each time you do the laundry and when you come into contact with surfaces that soiled laundry may touch.

The Department of Public Safety has a cleaning service for their uniforms. When the uniforms are contaminated with blood or OPIM, the contaminated laundry is placed in a bag that is properly labeled or color-coded. This alerts the cleaners to use proper precautions when cleaning the garment.

Labels

All biohazard containers must have a biohazard label and/or be color coded red or red-orange, this includes specimen transporters, waste containers, laundry bags containing contaminated materials, and sharps containers. Employees are to notify EHS, if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc., without proper labels. (See Appendix D for an example of the biohazard label.)

Hepatitis B Vaccine

General

The University makes available the Hepatitis B vaccine to all employees who have potential occupational exposure. A post-exposure follow-up will be given to employees who have had an exposure incident.

The University shall ensure that all medical evaluations and procedures for the Hepatitis B vaccine and post-exposure follow-up, including protective measures are:

1. Made available at no cost to the employee.
2. Made available to the employee while on duty, at a reasonable time and place.
3. Performed by/under the supervision of a licensed physician or by/under the supervision of another licensed health care professional (PLHCP).
4. Provided according to the recommendations of the U.S. Centers for Disease Control and Prevention.

An accredited laboratory shall conduct all laboratory tests at no cost to the employee.

Hepatitis B Vaccination Procedure

Physician's Immediate Care (PIC), in cooperation with Environmental Health and Safety, are responsible for the Hepatitis B Vaccination Program.

The Department of Environmental Health and Safety will provide training to employees on Hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.

The hepatitis B vaccination series is available at no cost, after training and within 10 days of initial assignment, to employees identified in the exposure determination section of this plan. Vaccination is encouraged except when:

Documentation exists that the employee has previously received the series.

1. Antibody testing reveals that the employee is immune.
2. Medical evaluation shows that vaccination is contraindicated.

However, if an employee chooses to decline vaccination, the employee must sign a declination form (See Appendix E). Employees who decline may request and obtain the

vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept in the employee's department personnel file.

Post-Exposure Evaluation and Follow-up

Should an exposure incident occur contact Dave Scharenberg at 815-753-1093. Give the name of the employee, department, supervisor, and supervisor's phone number. If during off hours leave a message. In addition, the supervisor will obtain a Workers' Compensation packet. The employee will fill out the Employee's Notice of Injury. The supervisor must complete the Supervisor's Report of Injury or Illness.

NIU will provide transportation, in a timely manner, for a medical evaluation. Physicians Immediate Care will conduct an immediately available confidential medical evaluation and follow-up. Their hours of operation are Monday – Friday 8:00 am to 8:00 pm, Saturday and Sunday 8:00 am to 5:00 pm. During off hours the initial treatment will be done by Kishwaukee Community Hospital Emergency Department. Follow-up will be done by Physicians Immediate Care.

Physicians Immediate Care
2496 DeKalb Avenue
Sycamore, IL 60178
815-754-1122

Kishwaukee Community Hospital
One Kish Hospital Drive
DeKalb, IL 60115
815-756-1521

Following the initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:

1. Document the routes of exposure and how the exposure occurred.
2. Identify and document the source individual (unless the employer can establish that the identification is infeasible or prohibited by state law).
3. 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. Specimen for testing can be brought to Physicians Immediate Care with the employee.

4. If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
5. 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).
6. After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.
7. 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 Department of Environmental Health and Safety 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.

The Department of Environmental Health and Safety, in cooperation with the employee's supervisor, ensures that the health care professional evaluating an employee after an exposure incident receives the following:

1. A description of the employee's job duties relevant to the exposure incident.
2. Route(s) of exposure.
3. Circumstances of exposure.
4. If possible, source individual's blood test results. *
5. Relevant employee medical records, including vaccination status. *

*HIPPA regulations may apply.

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

Evaluation of Exposure Incident

The Department of Environmental Health and Safety will review the circumstances of all exposure incidents to determine:

1. Engineering controls in use at the time.
2. Work practices followed.
3. A description of the device being used at time of exposure (including type and brand).
4. Protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.).
5. Location of the incident (HS, Public Safety, Athletics', etc.).
6. Procedure being performed when the incident occurred.
7. Employee's training.

The Department of Environmental Health and Safety will record all percutaneous injuries from contaminated sharps in the Sharps Injury Log.

If it is determined that revisions need to be made, the Department of Environmental Health and Safety will work with the specific department to ensure that appropriate changes are made to this program. (Changes may include an evaluation of safety devices, adding employees to the exposure determination list, etc.)

Employee Training

All employees who have occupational exposure to blood borne pathogens receive training conducted by the Department of Environmental Health and Safety or a qualified person within their own department.

All employees who have occupational exposure to blood borne pathogens receive training on the epidemiology symptoms and transmission of blood borne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

1. A copy and explanation of the standard.
2. An explanation of NIU's ECP and how to obtain a copy.

3. An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
4. An explanation of the use and limitations of engineering controls, work practices, and PPE.
5. An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
6. An explanation of the basis for PPE selection.
7. 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.
8. Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
9. 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.
10. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
11. An explanation of the signs and labels and/or color-coding required by the standard and used at NIU.
12. An opportunity for interactive questions and answers with the person conducting the training session.

Training materials for this facility are available at the Department of Environmental Health and Safety.

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 the employee's Department and the Department of Environmental Health and Safety.

The training records include:

1. The dates of the training sessions.
2. The contents or a summary of the training sessions.
3. The names and qualifications of the persons conducting the training.
4. The names and job titles of all persons attending the training sessions.

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to the employee's department or the Department of Environmental Health and Safety.

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."

For the time period up to December 31, 2004, the records are maintained at NIU Health Services. From January 1, 2005 until December 31, 2015 records are maintained at Midwest Orthopedic Institute (Kishwaukee Corporate Medical). Records created after January 1, 2016 will be on file with Physicians Immediate Care. These **confidential** records are kept for at least the **duration of employment plus 30 years**.

Employee medical records are provided upon the request of the employee or to anyone having written consent of the employee, within 15 working days. Such requests should be sent to the Department of Environmental Health and Safety, Northern Illinois University, DeKalb IL 60115.

OSHA Recordkeeping

An 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 Human Resource Services, Assistant Manager.

Sharps Injury Log

In addition to the 29 CFR 1904 Recording keeping requirements, all percutaneous injuries from contaminated sharps are also recorded in the Sharps Injury Log. All incidences must include at least:

1. The date of the injury.
2. The type and brand of the device involved.
3. The department or work area where the incident occurred.
4. An explanation of how the incident occurred.

This log is reviewed at least annually as part of the annual evaluation of the program, and is maintained for at least five years following the end of the calendar year that it covers.

If a copy is requested by anyone, the copy must have all personal identifiers removed from the report.

Appendix A

Department Listings and Contact Information

Department	Contact	Telephone
Athletic Training	Head Trainer, Phil Voorhis	815-753-0211
Biology	Chair, Barrie Bode	815-753-0433
Building Services	Tammie Pulak Rich Carter	815-753-1147 815-753-1147
Campus Child Care	Kristin Schulz	815-753-0125
Chemistry and Biochemistry	Chair, Ralph Wheeler	815-753-1181
Medical Laboratory Sciences	Coordinator, Ellen Olsen	815-753-6300
NIU Health Services	Director, Andrew Digate	815-753-9766
Dept. of Public Safety	Donald Rodman	815-753-1212
School of Nursing	Chair, Nancy Valentine	815-753-1231
Recreation Services	Director, David Lochbaum	815-753-9420
Lorado Taft	Director, Melanie Costello	815-753-0205

Appendix B

Job Classifications: All Employees Have Occupational Exposure

<u>Job Title</u>	<u>Department</u>
See department specific information	NIU Public Safety
See department specific information	Athletics
See department specific information	Lab Schools

Job Classifications: Some Employees Have Occupational Exposure

<u>Job Title</u>	<u>Department</u>
See department specific information	Building Services
See department specific information	Grounds
See department specific information	Lorado Taft

Appendix C

Sharps Program Flier



Used Needle Disposal Program

Department of Environmental Health and Safety

Plastic containers for **disposal of used syringes and needles** are available at Environmental Health and Safety for use by **STUDENTS**.

Those students who are diabetic or otherwise using syringes and needles for medical purposes are invited to call **Dave Scharenberg at 815-753-1093**. The needle container and the disposal of full containers is **free to students**. There are no forms to fill out and no personal information needs to be given to receive the containers.

The purpose of this program is to provide a **safe means for students to dispose of used medical syringes**.

Dave Scharenberg 815-753-1093

dscharenberg@niu.edu

Environmental Health and Safety

Northern Illinois University

Appendix D

Biohazard Label



BIOHAZARD

Appendix E

HEPATITS B VACCINE DECLINATION (MANDATORY)

I understand that due to my occupational exposure to blood or other potentially infectious material 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 hepatic 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.

Signed: _____

Date: _____