



ENVIRONMENTAL & OCCUPATIONAL HEALTH & SAFETY

Programs & Policies —

BLOODBORNE PATHOGENS

PURPOSE and SCOPE

The purpose of this policy is to protect University students, faculty and staff from the health hazards associated with occupational exposure to pathogenic organisms present in human blood and other potentially infectious materials. Additionally, comply with the Occupational Safety and Health Administration (OSHA) and Public Employment Risk Reduction Program (PERRP) standards that apply to this standard. The policy will ensure Universal Precautions, Engineering and Work Practice Controls, Personal Protective Equipment, Housekeeping, and Sound Infection Control procedures are applied in all University areas where exposure to bloodborne pathogens is possible.

DEFINITIONS

In order to better understand the function of the Bloodborne Standard, it is important employees have a clear understanding of the definitions used by OSHA. The following is a list of the most important definitions.

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

BLOODBORNE PATHOGENS - Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).

CONTAMINATED - The presence of the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

CONTAMINATED SHARPS - Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes and exposed ends of dental wires.

CONTAMINATED LAUNDRY - Laundry which has been soiled with blood or other potentially infectious materials, or may contain sharps.

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

ENGINEERING CONTROLS - Controls (e.g., sharps disposal containers, self-sheathing needles, etc.) that isolate or remove the bloodborne pathogens hazard from the workplace.

YOUNGSTOWN STATE UNIVERSITY



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EXPOSURE INCIDENT - A specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

HANDWASHING FACILITIES - A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV - Hepatitis B Virus

HCV - Hepatitis C Virus

HIV - Human Immunodeficiency Virus

OCCUPATIONAL EXPOSURE - Reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

OTHER POTENTIALLY INFECTIOUS MATERIALS - (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead). (3) HIV-containing cell or tissue cultures, organ cultures and HIV or HBV-containing culture medium or other solutions and blood, organs or other tissues from experimental animals infected with HIV or HBV.

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

REGUALTED WASTE - Liquid or semi-liquid blood or other potentially infectious materials, contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed, items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling, contaminated sharps and pathological and microbiological wastes containing blood or other potentially infectious materials.

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

UNIVERSAL PRECAUTIONS - Treating all blood and certain human body fluids as if they are known to be infectious for HIV, HBV and other bloodborne pathogens.

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



PROCEDURES

A. GENERAL PROGRAM MANAGEMENT

EXPOSURE CONTROL OFFICER

The Exposure Control Officer will be responsible for the overall management of YSU's Bloodborne Pathogens Exposure Control Plan. The Director of Environmental and Occupational Health and Safety (EOHS) will act as YSU's Exposure Control Officer. The Exposure Control Officer is responsible for annual review of the plan and updating as needed. Training will be developed and administered annually.

DEPARTMENT DIRECTORS AND SUPERVISORS

Department chairpersons, department directors, immediate supervisors and faculty are responsible for exposure control in their respective areas. They work directly with the Exposure Control Officer and employees to ensure training is completed and that the proper exposure control procedures are followed. It will be the responsibility of individual faculty to inform students of any hazard associated with the use of blood, blood products or any other infectious materials that may be used in the teaching environment.

EMPLOYEES

Employees are responsible for attending the bloodborne pathogen training sessions and knowing which tasks they perform that have a potential for occupational exposure and then using universal precautions during those tasks. Departments shall solicit input from non-managerial employees who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls and shall document the solicitation in the Exposure Control Plan.

B. UNIVERSAL PRECAUTIONS

Universal precautions will be observed throughout the University when required to prevent contact with blood or OPIM. All blood or OPIM and materials contaminated with blood or OPIM must be treated as if they are infectious, and any individuals coming into direct contact with blood or OPIM must take the necessary precautions to protect themselves regardless of the perceived status of the source individual.

C. ENGINEERING AND WORK PRACTICE CONTROLS

1. Engineering and work practice controls are the preferred means to eliminate or minimize exposure to BBP in the workplace. The following engineering controls will be utilized as appropriate at various facilities or areas within the University.
 - a. Disposable sharps
 - b. Fume hoods
 - c. Mechanical equipment washers
 - d. Mechanical pipetting
 - e. Needleless systems
 - f. Puncture resistant sharps disposal containers
 - g. Self-sheathing needles
 - h. Sharps with engineered sharps injury protection
 - i. Splash guards
 - j. Tongs or other manipulative aids



2. All engineering controls shall be maintained by the department/user according to manufacturer's instructions on a regular basis to ensure that they are in good working condition and provide the intended protection to the worker. All department and division heads have the responsibility to review the effectiveness of the individual controls used in their areas as well as their proper maintenance. The performance of the review may be delegated to an authorized individual, such as the supervisor or manager for a specific work group or lab, however, the department/division head remains responsible to ensure that this is accomplished.
3. Readily accessible hand washing facilities are required for those employees who may incur exposure to blood or other potentially infectious materials. Where immediate access to hand washing facilities is not feasible, as in field emergency medical care, the individual department is to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towels or antiseptic towelettes. If these alternatives are used, then the hands are to be washed with soap and running water as soon as feasible.
4. After removal of personal protective gloves, employees shall wash hands immediately or as soon as feasible with soap and water.
5. Contaminated needles and other contaminated sharps shall not be bent, sheared or purposely broken. Recapping of contaminated sharps is prohibited. Disposable sharps are to be placed in puncture-resistant containers which are provided expressly for this purpose. These containers shall be located strategically in all areas where sharps are or may be used. Sharps containers that are three fourths (3/4) full should be brought to Environmental and Occupational Health and Safety (2120 Cushwa Hall) for proper decontamination and disposal.
6. In addition to engineering controls, such as sharps containers, OSHA mandates the use of needleless and engineered sharps injury protection (ESIP) systems to further isolate or remove the bloodborne pathogens hazards wherever possible. Departments shall use these systems whenever feasible.

D. WORK AREA RESTRICTIONS

1. In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees shall not eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages shall not be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.
2. Mouth pipetting or suctioning of blood or other potentially infectious materials is strictly prohibited.
3. All procedures shall be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. Methods which will be employed at this facility to accomplish this goal include, but are not restricted to: covers on centrifuges, splash guards and use of biosafety cabinets.



E. SPECIMENS

1. Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of the specimens.
2. The container(s) used for this purpose shall be labeled or color coded in accordance with requirements of the OSHA standard (Appendix B). Department/division heads should note that the standard provides for an exemption for specimens from the labeling/color coding requirement of the standard provided that universal precautions are utilized in the handling of all specimens and the containers are recognizable as containing biohazardous specimens. This exemption applies only while the specimens remain in the facility. Any leaking or punctured primary container must be placed within a secondary container which will contain the leak and is puncture resistant.

F. CONTAMINATED EQUIPMENT

Equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible. Equipment that cannot be appropriately decontaminated must be disposed of in accordance with Ohio State and Local waste disposal regulations.

G. PERSONAL PROTECTIVE EQUIPMENT

1. All personal protective equipment used at this facility shall be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment shall be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the wearer's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.
2. A list of some of the personal protective equipment which are available for use at the University:
 - a. Impervious rubber gloves
 - b. Lab coats (disposable and washable)
 - c. Face shields
 - d. Clinic jackets
 - e. Protective eyewear (appropriate for the hazards of the operation being performed)
 - f. Surgical gowns
 - g. Shoe covers
 - h. Utility gloves
 - i. Examination gloves
 - j. Coveralls
 - k. Surgical hoods
3. All required personal protective equipment shall be provided by the University department at no cost to employees. All repairs and replacements shall be made by the University department at no cost to employees.
4. All garments which are penetrated by blood shall be removed immediately or as soon as feasible. Prior to leaving the work area, all personal protective equipment shall be placed at the appropriate areas designated by each department/division head.



5. Appropriate protective clothing, such as lab coats, gowns, aprons, clinic jackets, or similar outer garments, shall be used. Such protective clothing shall be used in any application where a worker's clothing may otherwise have the potential for contamination by blood or other potentially infectious body fluids. This includes most patient care applications other than interviewing or counseling, most lab procedures involving such materials, and cleaning or decontaminating areas which have the potential for exposure. Only disposable outer garments are permitted to be worn when working with blood. Cloth outer garments are permitted in the Dental Hygiene Clinic and are laundered by University employees who are part of the Bloodborne Pathogen Standard.
6. Gloves shall be worn where it is reasonably anticipated that hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes can occur. Gloves will be available from individual department supervision.
7. Disposable gloves used at University facilities are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.
8. Utility gloves shall be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will 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.
9. Double gloving is recommended where the potential for breakage is great or where heavier gauge gloves are not available. Examples include personnel such as ambulance, police or safety personnel operating in a pre-hospital emergency medical treatment setting.
10. Masks in combination with eye protection devices, such as goggles or safety glasses with solid side shields, or chin length face shields, shall be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be avoided with such protection.

H. HOUSEKEEPING

1. University facilities where tasks are performed that may involve blood or other potentially infectious materials must continually be cleaned and disinfected. It is the responsibility of the faculty and staff that use the area to perform routine housekeeping in accordance with this section.
2. The cleaning schedule and method of decontamination is based upon the location within the facility, the type of surface to be cleaned, the type of soil present and the tasks or procedures being performed in the area. Cleaning shall be done routinely. All contaminated work surfaces are decontaminated after completion of procedures and immediately, or as soon as feasible in the case of a spill or other release of blood or other potentially infectious materials.
3. Cleaning shall be performed with disinfectants which are registered with the Environmental Protection Agency as being tuberculocidal, bactericidal, viricidal and fungicidal, such as Unicide-128, TBQ, or a 10% solution of household bleach. Disinfectants must be used in accordance with manufacturer's instructions.
4. Where spills of blood or other potentially infectious materials may occur, decontamination shall be performed with an approved disinfectant that is effective for bloodborne pathogens. Spills are the responsibility of the user, but gross spills shall be referred to EOHS Department by calling 330-941-3700.



5. Only Regulated Medical Waste Containers shall be used to collect BBP and OPIM. All bins, pails, cans, and similar receptacles that may unintentionally become contaminated with blood or OPIM shall be inspected and decontaminated on a regularly scheduled basis and shall be cleaned and decontaminated immediately or as soon as feasible when visible contamination is observed. Whenever containers of regulated waste are moved from one area to the disposal area, the containers are immediately closed and placed inside an appropriate secondary container if leakage is possible from the first container.
6. General waste receptacles are normally checked and emptied at least once per day. Liners are removed and replaced with a fresh liner. Employees performing cleaning functions of this type shall wear protective gloves.
7. Mechanical aids, such as forceps, tongs, or brooms and dustpans shall be used for handling broken glassware. The broken glass shall be placed in an impenetrable cardboard container for subsequent disposal and is labeled as containing broken glass. If the glass is potentially contaminated with blood or other potentially infectious materials, the broken glass is placed in a sharps container or other impenetrable container and removed as Regulated Medical Waste by appropriately trained personnel.
8. Biohazard bags containing contaminated materials will not be allowed to overflow. All contaminated material should be brought to Environmental and Occupational Health and Safety (2120 Cushwa Hall) as soon as the container becomes full.
9. Sharps containers that are three fourths (3/4) full should be brought to Environmental and Occupational Health and Safety (2120 Cushwa Hall) for proper decontamination and disposal.
10. Protective clothing, such as disposable coats and gloves are worn whenever potential exposure to the body is anticipated.

I. LAUNDRY

1. Textiles, such as linen or laundry, with unknown body fluids in medical or dental settings where universal precautions are practiced must be considered potentially infectious.
2. Contaminated laundry is handled as little as possible and is not sorted or rinsed where it is used.
3. Contaminated laundry is placed immediately in the appropriate biohazard container. Wet contaminated laundry will be placed in containers which are leak proof to prevent any leakage of fluids to the exterior.
4. If containers are unintentionally opened or leak the employee (janitorial employee(s)) must stop and contact EOHS immediately. Do NOT attempt to clean or handle the spill.
5. University employees who launder or otherwise handle linen contaminated with blood or OPIM (employee(s) in athletic department) would be considered to have reasonably anticipated exposure and would be covered by this plan.
6. The Center for Disease and Control (CDC) has published guidelines for laundering contaminated laundry. The CDC guidelines are not mandatory but should be used as a guideline for the University. They are recommendations written with the intent of enhancing infection control measures in all healthcare facilities, including dental settings.



J. REGULATED MEDICAL WASTE (RMS) DISPOSAL

1. All RMW generated at this University shall be handled, packaged, collected, transported, treated, and disposed of in such a manner as to protect health and safety. Refer to EOHS Infectious Waste Plan for details.
2. All Regulated Medical Waste must be discarded, at the point of generation, as soon as feasible into sharps containers or red/orange biohazard bags placed in approved biohazard boxes. The containers must be closeable and leak proof if there is potential for fluid. Sharps containers must be located in all areas where work involving sharps is performed. Bloodborne Pathogens or OPIM non-sharp items should be placed in the bags.
3. For questions regarding Regulated Medical Waste, please contact the Department of Environmental and Occupational Health and Safety at 330-941-3700.

K. HEPATITIS B VACCINATION

1. Hepatitis B vaccination is provided at no cost to all Youngstown State University employees who are determined to be at risk of occupational exposure. Employees who have occupational exposure to bloodborne pathogens and other potentially infectious materials are offered hepatitis B vaccination after they have received the required training.
2. The Exposure Control Officer is responsible for setting up the vaccination program through YSU's Student Health Clinic. Employees can schedule an appointment with the Clinic to receive all three inoculations.
3. Employees taking part in the vaccination program are listed on file in the department of EOHS. Employees who have declined to take part in the program have been informed of their right to receive the vaccination at a later date if they so choose. Those who have refused the vaccination have a signed Hepatitis B Declination Form found in Appendix A to this program. A listing of those who have refused the vaccination can be found on file in the Department of EOHS.

L. POST EXPOSURE EVALUATION AND FOLLOW UP

1. Following an exposure to blood or other potentially infectious material, the exposed employee shall thoroughly wash the exposed skin well with soap and water and/or flush mucous membranes with copious amounts of water, for example, in eyewash.
2. Employees are required to immediately report their exposure to their supervisor. Immediate medical treatment is available through Mercy Health St. Elizabeth Hospital, 1044 Belmont Ave Open 24 hours (330) 746-7211. The most effective treatments should be started within 2 hours of exposure and all treatment should be initiated within 24 hours of exposure.
3. Supervisors must complete an Incident Report Form with complete information on the exposure and forward it to EOHS Department.
4. All employees who incur an exposure incident shall be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. Post-exposure evaluation and follow-up will be provided by Mercy Health. All information is kept confidential.



M. EXPOSURE DETERMINATION

Youngstown State University has determined certain job-related tasks or procedures that have the potential to involve contact or mucous membrane exposure with blood or other potentially infectious materials, or the potential for spills or splashes. This can include research, teaching, and clinical activities that involve the use of human blood or other potentially infectious materials. It would be assumed that if your job title is not listed in this section that you would not have work-related exposure to blood or OPIM.

Below are listed the job classifications that include employees who may have routine contact with human blood or other potentially infectious materials.

- Athletic Trainers
- Athletic Laundry Services
- Campus Public Safety Officer (University Police Chief, Lieutenant, Sergeant, Officer)
- Childcare Center Caregivers/Directors
- Clinical Assistant Professor
- Clinical Associate Professor
- Clinical Nurse Specialist
- Nurse
- Nurse Practitioner

Below are listed the job classifications where employees do not normally come into contact with human blood or other potentially infectious materials but may be a risk do to the tasks they perform.

- Campus Recreation Staff
- Health Professions and Nursing Assistant Professor
- Health Professions and Nursing Associate Professor
- Health Professions and Nursing Instructor
- Health Professions and Nursing Professor
- Health Professions and Nursing Student Assistant
- Janitorial Staff

N. LABELS AND SIGNS

Warning labels, that include the word "BIOHAZARD", and the universal biohazard symbol, shall be affixed to doors, leading to areas where work is conducted with blood and other potentially infectious materials, and to containers of regulated waste, refrigerators, freezers, incubators, etc. used for storage or transport of blood or other potentially infectious material.

O. INFORMATION AND TRAINING

1. In order to minimize employee exposure to bloodborne pathogens, it is extremely important to have well-informed and educated employees. Therefore, all employees who have the potential for exposure to bloodborne pathogens are required to attend a comprehensive training program. This program provides employees with as much information as possible on bloodborne pathogens.
2. Employees receive initial training and will be required to attend annual refresher training sessions. Additionally, all new employees, as well as employees changing jobs or job functions, will be given any additional training their new position requires at the time of their new job assignment.



3. If a new employee is hired or if an existing employee changes job descriptions in which the potential for exposure to bloodborne pathogens is present, he/she will be trained at the time of employment in the appropriate work practice controls.
4. Training for all employees shall be conducted prior to initial assignment to tasks where occupational exposure may occur. It is the responsibility of supervisors to ensure that staff receives this training through EOHS. Training for employees will include at least the following:
 - a. The Occupational Safety and Health Administration (OSHA) standard for Bloodborne Pathogens and how to get access to a copy of the standard
 - b. Epidemiology and symptomatology of bloodborne diseases
 - c. Modes of transmission of bloodborne pathogens
 - d. The University's Exposure Control Plan, including key points of the plan, lines of responsibility, means by which the plan is implemented, etc.
 - e. Procedures which might cause exposure to blood or other potentially infectious materials at this facility
 - f. Control methods which will be used at the facility to control exposure to blood or other potentially infectious materials
 - g. Personal protective equipment available at this facility and how it may be obtained, used and decontaminated
 - h. Post-Exposure evaluation and follow-up
 - i. Signs and labels used at the University
 - j. The University's Hepatitis B vaccine program
5. Training is provided by qualified safety training professionals within the Department of Environmental Occupational Health and Safety or other qualified personnel or vendor. All employees covered under this plan will receive annual refresher training. The outline for the training material is located in the EOHS department, as are all of the training materials.
6. Training records will be kept in the EOHS office and will be made available to employees as requested.

P. RECORDKEEPING

1. All records required by the OSHA standard shall be maintained in accordance with the standard.
2. The Department of Environmental Occupational Health and Safety has established a Sharps Injury Log. This log will be maintained for the recordkeeping of injuries from contaminated sharps. The information in the Sharps Injury Log will be recorded and maintained in such a manner as to protect the confidentiality of the injured employee.
3. Vaccination, treatment and other medical records shall be maintained by Human Resources.

