



Subject: Bloodborne Pathogens Exposure Control Plan	Published: 06/27/22
EH&S Program: Occupational Safety	Next Review: 06/27/23
Scope: University / Hospital Wide	Original: 1997

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Policy:

To protect University students, faculty and staff from the hazards associated with occupational exposure to pathogenic organisms present in human blood and other potentially infectious materials (OPIM).

Definitions:

Blood: means human blood, human blood components, and products made from human blood.

Bloodborne Pathogens (BBP): Pathogenic microorganisms that are present in blood (as defined above) and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), and human immunodeficiency virus (HIV).

Dilute Bleach: A freshly made 1:10 mixture of household bleach and water.

Decontamination: Use of physical or chemical means to remove, inactivate, or destroy pathogens on a surface so that it is no longer capable of transmitting infectious material and the surface is rendered safe for handling without precautions necessary for infectious materials.

Engineering Controls: Controls (e.g., sharps disposal containers, self-sheathing needles, needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

HBV: Hepatitis B Virus.

HCV: Hepatitis C Virus.

HIV: Human Immunodeficiency Virus.

Needleless Systems: A device that does not use needles for: (A) the collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (B) the administration of medication or fluids; or (C) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Occupational Exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from the performance of an employee's duties.

Other Potentially Infectious Materials (OPIM): 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. Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and Human cell, tissue or organ cultures; and blood, organs, and tissues from experimental animals infected with HIV or HBV. Non-human primate blood and other fluids from them as described above.

Personal Protective Equipment (PPE): Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts, or blouse) not intended to function as protection against a hazard is not considered to be personal protective equipment.

Regulated Medical Waste (RMW): Any waste which is generated in the diagnosis, treatment or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, when listed by the Department of Environmental Conservation (see Section 27-1502 of the Environmental Conservation Law), provided, however, that RMW shall not include any hazardous waste identified or listed by the Department of Environmental Conservation, or any household waste as defined by the Department of Environmental Conservation including the following: Human Blood and Blood Products, Animal Waste, Infectious Agents and cultures and stocks of such agents, Human Pathological Wastes, and Sharps.

Universal Precautions: An approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if 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).

Procedures:

A. Program Administration

- 1. Department of Environmental Health and Safety (EH&S):
 - a. Assist in ensuring that this policy is effectively carried out.
 - b. Provide program oversight, regular review, and update of this policy.
 - c. Provide training to those employees who may potentially be exposed to bloodborne pathogens.
 - d. Investigate and track potential BBP exposure incidents.
 - e. Manage the collection and disposal of regulated medical waste.
 - f. Maintain Sharps Injury Log

2. Departments

- a. Implement and comply with this policy within their department.
- b. Ensure that all job titles with occupational exposure to bloodborne pathogens are identified.
- c. Ensure that staff receives training prior to assignment to jobs with occupational exposure and annually thereafter.
- d. Provide adequate and appropriate engineering controls and personal protective equipment for all employees that may come into contact with Blood or OPIM.
- e. Ensure that department staff complies with all provisions of this policy.
- f. Provide for HBV vaccination, medical surveillance, and other requirements for department employees that have potential exposure to bloodborne pathogens.

3. Department of Occupational Medicine

- Available to provide post exposure evaluations, treatment, and followups during normal business hours.
- b. Maintain any records related to vaccinations, declinations, occupational exposures and post-exposure patient care.
- c. Provide a written statement from the health care provider acknowledging that follow-up care is being provided to the Department for recordkeeping purposes.

B. Universal Precautions

1. Universal precautions are observed throughout the University when required to prevent contact with blood or OPIM. All 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 Control

- Engineering and work practice controls are the preferred means to eliminate or minimize exposure to occupational hazards such as BBP in the workplace. Engineering controls to ensure that they are in good working condition and provide the intended protection to the worker.
- 2. Specific engineering controls and work practice controls used are listed below:
 - a. Disposable Sharps
 - b. Biological Safety Cabinet
 - c. Chemical Fume Hoods
 - d. Mechanical equipment washers
 - e. Mechanical pipetting
 - f. Needleless Systems
 - g. Puncture Resistant sharps disposal containers
 - h. Self-sheathing needles
 - i. Sharps with engineered sharps injury protection
 - j. Splash Guards
 - k. Tongs or other manipulative aids

- 3. Readily accessible hand washing facilities are required for those employees who may incur exposure to blood or OPIM. Where immediate access to hand washing facilities is not feasible, antiseptic cleanser can be made available. And hands are to be washed with soap and running water as soon as possible.
- 4. 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. Departments shall use needleless and engineered sharps injury protection (ESIP) systems to further isolate or remove the bloodborne pathogens hazards where ever possible.

D. Work Area Restrictions

- In work areas where there is a reasonable likelihood of exposure to blood or OPIM, 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 OPIM are present.
- 2. Mouth pipetting or suctioning of blood or OPIM is strictly prohibited.
- 3. All procedures shall be conducted in a manner which minimize splashing, spraying, splattering, and generation of droplets of blood or OPIM.

E. Specimens

1. Specimens of blood or OPIM shall be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of the specimens.

F. Contaminated Equipment

1. Equipment which has become contaminated with blood or OPIM shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.

G. Personal Protective Equipment (PPE)

- 1. All PPE, repairs and replacements shall be provided at no cost to employees.
- 2. The user shall inspect PPE prior to use.
- 3. The protective equipment shall be considered appropriate only if it does not permit blood or OPIM 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 is used will be used.

Personal protective equipment which are available for use at the University include:

- a. Impervious Nitrile Gloves
- b. Lab Coats / clinic jackets (disposable and reusable)
- c. Face Shields
- d. Protective eyewear (appropriate for the hazards of the operation being performed)
- e. Surgical Gowns
- f. Shoe covers
- g. Utility Gloves
- h. Examination Gloves
- i. Coveralls (Waste Handling staff)
- j. Surgical Hoods
- 4. All garments which are penetrated by blood shall be removed immediately.
- 5. Prior to leaving the work area, all personal protective equipment shall be discarded. And disposed of properly.
 - a. Disposable PPE such as nitrile gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as they become contaminated, torn, punctured or when their ability to function as a barrier is compromised.
 - b. 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 OPIM may be generated and eye, nose, or mouth contamination can reasonably be avoided with such protection.
 - c. Utility gloves shall be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves are 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.
- 6. 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.
- 7. Users shall be trained on the PPE that is required for their jobs.

H. Housekeeping

- 1. University facilities shall be cleaned and decontaminated by University employees or contractors. 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.
- 2. 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 freshly made 10% solution of

household bleach. Disinfectants must be used in accordance with manufacturer's instructions.

- 3. Where spills of blood or OPIM may occur, decontamination shall be performed with an approved disinfectant that is effective for bloodborne pathogens. Spills must be reported to University Police Dispatcher at 333 from any university phone or 631-632-3333.
- 4. Only Regulated Medical Waste containers shall be used to collect RMW and OPIM.
- 5. General waste receptacles shall be 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 the appropriate personal protective equipment assigned.
- 6. 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 OPIM, the broken glass is placed in a sharps container or other impenetrable container and removed as RMW by appropriately trained personnel.

I. Regulated Medical Waste Disposal (RMW)

- 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. Reference Policy EH&S Regulated Medical Waste Management Policy.
- 2. All RMW must be discarded, at the point of generation, as soon as feasible into sharps containers or red biohazard bags and placed in approved biohazard boxes. Sharps containers must be located in all areas where work involving sharps is performed. Pathogens or OPIM Non-sharp items should be placed in bio hazard red bags.
- 3. For questions regarding RMW, please contact the Department of Environmental Health and Safety at 631-632-6410.

J. Hepatitis B Vaccine

- 1. Hepatitis B vaccination is provided at no cost to all Stony Brook University employees who are determined to be at risk of occupational exposure.
- 2. Employees who have occupational exposure to bloodborne pathogens and OPIM are offered hepatitis B vaccination after they have received the required training.
- The complete hepatitis B vaccination series, antibody testing to demonstrate immunity, or that the vaccine is contraindicated for medical reasons should be determined in consultation with Stony Brook Medicine's Center for Occupational

K. Post-Exposure Evaluation and Follow-Up

- 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 can be secured through:
 - a. Center for Occupational Medicine, 181 Belle Mead Road East Setauket, NY 11733, 444-6250 during regular business hours (8:30 AM 4:00 PM) or Stony Brook University Medical Center Emergency Department (24 hours). The most effective treatments should be started within 2 hours of exposure and all treatment should be initiated within 24 hours of exposure.
- Supervisors shall complete an Incident Report Form with complete information on the exposure and forward it to Human Resources Services – Time and Attendance.
 - a. 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 can be provided by Occupational Medicine. All information is kept confidential.

M. Communication of Hazards to Employees

1. 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 OPIM, and to containers of regulated waste, refrigerators, freezers, incubators, etc. used for storage or transport of blood or other potentially infectious material.



N. Training

1. 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 either through EH&S (2-6410) or other qualified training provider. Training for employees includes 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 OPIM at this facility
- f. Control methods which will be used at the facility to control exposure to blood or OPIM.
- 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
- k. Training is provided by someone knowledgeable in the subject matter covered by the elements contained in the training program.
- I. All employees covered under this plan receive annual refresher training through EH&S or other competent training provider.
- m. The outline for the training material is located in the offices of the Department of Environmental Health and Safety, as are all of the training materials.

O. Solicitation of Non-Management Employees:

1. 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.

P. Recordkeeping

- 1. All records required by the OSHA standard shall be maintained in accordance with the standard.
- 2. The Department of Environmental Health and Safety has established a Sharps Injury Log. This log—is maintained for the recordkeeping of injuries from contaminated sharps. The information in the Sharps Injury Log is 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 the Center for Occupational Medicine.

Q. Determination of Exposure:

Each department at Stony Brook University shall determine if there are certain
jobs that have the potential to involve contact or mucous membrane exposure
with blood or OPIM, or the potential for spills or splashes. This can include
research, teaching, and clinical activities that involve the use of human
blood or OPIM.

- 2. Job Classifications that include employees who <u>have</u> routine occupational exposures include:
 - a. Emergency Medical Technician
 - b. Ambulance Attendant
 - c. Athletic Trainers
 - d. Campus Public Safety Officer
 - e. University Police Officer/Detective/Supervisor
 - f. Childcare Center Staff
 - g. Clinical Assistant Professor
 - h. Clinical Associate Professor
 - i. Dental Assistant
 - j. Dentist
 - k. Fire Marshal
 - I. Nurse Practitioner
 - m. Physician
 - n. Physician Assistant
 - o. Nurse
 - p. Clinical Nurse Specialist
- Tasks that do not normally involve planned exposure to human blood, or OPIM, but potential exposure may result from unplanned tasks, and may be a condition of employment.
 - a. Some Job Classifications that include employees who <u>may</u> have occupational exposure include:
 - Associate Professor
 - Assistant Professor
 - Campus Bus Driver
 - Certified Social Worker
 - Cleaner/Custodian/Janitor/Housekeeper
 - Co-Supervisor Medical Photography
 - Fellow
 - General Mechanic
 - Graduate Student (where compensated)
 - Instructional Support Associate
 - Instructional Support Specialist
 - Lab Technician
 - Licensed Practical Nurse
 - Mail Room Employees
 - Maintenance Assistant
 - Maintenance Supervisor

- Plumber/Steamfitter
- Post-Doctoral Research Associate
- Principal Investigator
- Professor
- Research Assistant
- Research Assistant Professor
- Research Associate
- Research Fellow
- Research Lab Worker
- Research Project Assistant
- Research Nurse
- Research Support Assistant
- Research Support Specialist
- Research Technician
- Senior Lab Technician
- Senior Research Support Specialist
- Study Nurse
- Visiting Researcher

Forms:

- **A.** Sample Exposure Determination Forms and Instructions
- **B.** Sample Occupational Exposure Survey Forms and Instructions
- **C.** Declination Statement for Hepatitis B Vaccine

Policy Cross Reference: NA

Relevant Standards/Codes/Rules/Regulations/Statutes:

29 CFR 1910.1030 Occupational Exposure to Bloodborne Pathogens

References and Resources: NA



Instructions:

- 1. Employee provides this form to the medical provider.
- 2. Medical provider completes form.
- 3. Employee returns form to own department.
- 4. Department sends copy to EH&S.

Department of Environmental Health and Safety

TO: ENVIRONMENTAL HEALTH AND SAFETY

RE: CONFIRMATION OF HEPATITIS A AND/OR HEPATITIS B VACCINATION

Nar	me:	Title	e: _		
	ployee ID:				
Dep	partment:			TEL:	
	E				
LIC	CENSED HEALTHCARE PRO	OVIDER			
The	The above-named employee has successfully completed (please check all that apply):				
	Hepatitis A Vaccination Se	eries (2 Shots)		Hepatitis B Vaccination Series (3 Shots)	
	Hepatitis B Titer			Hepatitis B Booster	
Con	MMENTS:				
Exa	amining Physician's Name (Print):		Data	
			-	Date:	
Sig	nature:				
Dep	partment:			_	



ENVIRONMENTAL HEALTH AND SAFETY

TO:

RE: HE	EPATITIS B DECLINATION FORM
Name:	Title:
Employee ID):
Department	:TEL:
I understand	that due to my occupational exposure to blood or other potentially infectious
materials I r	nay be at risk of acquiring hepatitis B virus (HBV) infection. I have been given
the opportur	nity to be vaccinated with hepatitis B vaccine, at no charge to myself. However,
I decline the	e hepatitis B vaccination at this time. I understand that by declining this
vaccine, I co	entinue 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 t	to be vaccinated with hepatitis B vaccine, I can receive the vaccination series
at no charge	e to me.
Signature:	
Date:	



