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1.0 Purpose

To ensure adequate protection for University employees, faculty and staff against exposure to potentially infectious blood-borne materials. The requirements of this plan are designed to meet or exceed the Federal requirements defined in 29 CFR 1910.1030.

2.0 Scope

This plan applies to all applicable activities that involve the potential exposure to blood or potentially infectious materials. Potentially infectious materials include all bodily fluids or non-intact tissue of the body. There are a number of occupational positions and laboratory personnel that are covered by this plan. They include:

1. University Health Services employees, including Physicians, Nurses, Nursing Assistants, Housekeeping Staff who are assigned to University Health Services and other medical assistants.
2. Fire Department employees, including Captains, Firefighters and on-call Firefighters.
3. Athletic Department Employees, including Athletic Trainers and Assistant Athletic Trainers.
4. Security employees, including Police Officers and Security Officers.
5. Food Services employees, of any position, who are designated to clean up blood or other potentially infectious material spills or who have First Aid duties. This includes the North Dining Hall, South Dining Hall, Food Service Support Facility and all satellite operations on campus.
6. St. Michael's Laundry employees who may be responsible for handling soiled linens which have a potential to be contaminated with potentially infectious materials or who clean up potentially infectious material spills.
7. Athletic Grounds, Athletic Facilities and Pool Operator employees who are responsible for vomit and bodily fluid clean up duties during or following athletic events.
8. RecSports employees who are responsible for assisting injured guests or who clean up blood or potentially infectious materials at the facility.
9. Custodial and Building Services employees of the University (including those at the Joyce Center, Loftus, Rolf's RecSports Center and LaFortune) who may be responsible for the clean up of blood or other potentially infectious materials at their facility.

10. Laboratory personnel who work with blood or potentially infectious materials through their research. This includes Technicians, Graduate Students, Assistants, Principal Investigators and Undergraduate Students.

3.0 Terminology:

Bloodborne Pathogen:

A bloodborne pathogen is a virus found in human blood which can be transmitted from person to person and causes diseases in humans.

Potentially Infectious Materials:

All bodily fluids and non-intact tissue of the body.

Exposure Incident:

A specific eye, nose, mucous membrane or open lesion contact with blood or other potentially infectious materials.

Occupational Exposure:

An exposure incident which occurs while the person is performing job tasks.

Regulated Waste:

Waste that contains blood, semen or vaginal secretions. These discarded materials shall be labeled as Biohazardous Waste and shall not be discarded into the regular trash. Biohazardous Waste shall also be double bagged.

4.0 Methods of Protection:

Universal Precautions, as defined in Appendix A, shall be practiced to prevent contact with blood or other potentially infectious materials that may result in an occupational exposure. The following methods of prevention are consistent with the Universal Precautions and shall be followed when encountering such substances:

1. Engineering Controls:

Engineering controls shall include, but are not limited to:

- a) The use of devices or equipment for purposes of making physical contact with blood or potentially infectious materials without putting the person at risk of exposure. These devices or equipment will need to be sanitized or discarded following contact with blood or other potentially infectious materials. Examples may include mops, tongs, tweezers, tools, etc.
- b) Hand washing facilities or antiseptic hand cleanser or towelettes and cloth or paper towels. These can be used to ensure proper hygiene.

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- c) Practices following the handling of blood or other potentially infectious materials.
- d) Appropriate sharps containers and storage devices to minimize the risk of accidental cuts or punctures.
- e) Appropriate pipetting devices which minimize potential exposure to the mouth and face and hands.
- f) The use of designated blood clean up kits.

2. Workplace Practices:

Workplace practices should be conducive in minimizing unanticipated exposure to blood or other potentially infectious materials including;

- a) Proper hand washing practices.
- b) Proper identification and awareness of potentially infectious sources.
- c) Proper laundering of contaminated clothing. All contaminated clothing shall be properly labeled and sent to St. Michael's Laundry for safe cleaning.
- d) Treating every bodily fluid and every person as if they were potentially infectious.
- e) Proper communications between people who will be handling potentially infectious sources (signs, labels, etc).

3. Personal Protective Equipment:

When engineering controls are not enough to insure that there is no potential for an exposure incident, personal protective equipment shall be used as a barrier. Personal protective equipment will be provided to employees at no cost to them and shall be selected by Risk Management and Safety. Such personal protective equipment includes, but is not limited to:

- a) Latex, Nitrile or Neoprene Gloves
- b) Goggles
- c) Face shields
- d) Tyvek suites or equivalent
- e) CPR barrier devices

4. Signs and Labels:

Signs and labels shall be used as a communications tool for all people who may come into contact with potentially infectious materials. These signs and labels shall be used when potentially infectious materials are being passed on to another party. Red is the universal color that represents Biohazards. The following circumstances would require the use of signs or labels:

- a) Regulated waste containers.
- b) Items being sent to be laundered that are soiled with potentially infectious materials.

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- c) Items being stored which are potentially infectious.
- d) Evidence items to be analyzed or held for later use.
- e) Items of potentially infectious materials being mailed out or shipped to another person or location.

5. Vaccines:

Currently there are no vaccinations for HIV, Hepatitis C or most other bloodborne pathogens. However, there currently is a vaccination available for protection against Hepatitis B. The University will make available and will pay for the Hepatitis B Vaccination series for all employees who are considered to be at high risk for exposure (those who may be reasonably expected to come into physical contact with people while they perform medical treatment activities, such as healthcare professionals, ambulatory professionals, athletic trainers and law officers). Vaccines will also be available for laboratory personnel who work with bodily fluids or human viruses during their research activities. If such employees elect not to receive the vaccination series, they shall complete the “declination form” (See Appendix B).

- a) Hepatitis B vaccinations will be made available to the “high risk” employees as follows:
 - 1) At no cost to the employee.
 - 2) New employees within 10 days of initial assignment.
 - 3) Antibody testing, when necessary, to determine employee immunology.
 - 4) Supervisors of new employees who are candidates for the vaccination shall contact Risk Management and Safety upon hiring them to initiate the vaccination and training process and to obtain the necessary forms (See Appendix D for the Hepatitis B Vaccination/Titer Authorization Form).

5.0 Occupational Exposure Procedures

- 1. The procedure for employees who experience an occupational exposure is as follows:
 - a) Wash thoroughly the site of the exposure with anti-microbial soap and water immediately following the exposure.
 - b) Notify his/her supervisor and explain what happened.
 - c) Obtain a completed “Supervisors Report of Injury” form his/her supervisor
 - d) Seek medical attention at University Health Services.
- 2. Post Exposure Evaluation and Follow-up shall be consistent with the following:
 - a) The supervisor shall also complete a “First Report of Employee Injury/Illness” form and send it to Risk Management & Safety.

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- b) The supervisor shall insure that he/she provides to University Health Services the identification of the source individual if possible.
- c) It will be at the discretion of the medical professional as to the need for further evaluation, such as follow up testing of the employee's blood and the need for counseling.

6.0 Clean up Responsibilities

1. Each area of the University has an appropriately trained person or person's who are responsible for the clean up of blood or potentially infectious materials based on the following:
 - a) Employees and students who have been through the University's Bloodborne Pathogens Training, provided by Risk Management & Safety or University Health Services, are designated to clean up blood or potentially infectious material spills that occur in their work areas.
 - b) Blood or potentially infectious material spills which occur inside University buildings, in an area outside of a trained person's work or research area, shall be cleaned up by the designated Building Services person (trained custodial employee) who is on duty at that time or who is designated to do so by his/her supervisor.
 - c) Blood or potentially infectious material spills which occur outside of a building, but on University property shall be cleaned up by a trained person in consultation with Risk Management & Safety.
 - d) Blood or potentially infectious materials that are on a person's body shall only be cleaned up by a trained first responder, athletic trainer, University Health Services employee or a designated first aid responder who is trained. Employees who are not trained in bloodborne pathogens protection are not expected to perform CPR or First Aid on accident victims or injured employees.
2. Only approved cleaning products may be used to clean up blood or potentially infectious materials. Specific products and instruction will be provided for Building Service personnel and other designated spill clean up employees during training provided by the department of Risk Management and Safety. All products must be approved by Risk Management & Safety.

7.0 Record Keeping

1. The university will establish and maintain accurate records for each employee with occupational exposures as required in 29 CFR 1910.20(1) and for training as required in 29 CFR 1910.20(2).
2. All vaccination and vaccination declination records will be maintained by University Health Services.

8.0 Training

1. The University will provide information and training as required in 29 CFR 1910.1030(6)(2) to employees and students listed in section 2.0 of this policy. This training will include, but is not limited to the following:
 - a) An accessible copy of this policy shall be made available along with an explanation of it's contents. This policy is available online for all employees who have access to a University computer (www.nd.edu/~riskman/)
 - b) A general explanation of the epidemiology and symptoms of bloodborne diseases.
 - c) An explanation of the modes of transmission of bloodborne pathogens.
 - d) An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
 - e) An explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices, signs and labels and personal protective equipment.
 - f) An explanation of the basis for the selection of personal protective equipment, including when it should be used, how to don, doff, adjust and wear it, it's limitations and the proper care, maintenance and disposal of it.
 - g) Information on the hepatitis B vaccine, including information on it's efficiency, safety, methods of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge to them.
 - h) Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
 - i) An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
 - j) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
 - k) An explanation of the signs and labels and/or color coding required by paragraph (g)(1).
 - l) An opportunity for interactive questions and answers with the person conducting the training session.
 - m) Information on proper collection, handling and disposal of infectious waste (see Appendix C).

Appendix A

Universal Precautions

According to the concept of Universal Precautions, all human blood and certain body fluids are treated as if known to be infectious for HIV (Human Immunodeficiency Virus), HBV (Hepatitis B Virus) and other bloodborne pathogens. These body fluids include semen, vaginal secretions, cerebrospinal fluid (brain and spine), synovial fluid (joint), pleural fluid (lung), pericardial fluid (heart), peritoneal fluid (abdominal), amniotic fluid (pregnancy), saliva, 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.

Even though other body substances are not known to transmit HIV, HBV or other bloodborne diseases, we shall always take the following precautions (an example of these substances may include urine, stool, respiratory secretions, vomit and wound drainage):

- 1. Blood and body fluid precautions must be used consistently for ALL patients and accident victims.*
- 2. Appropriate barrier precautions must be used routinely to prevent skin and mucous membrane exposure when contact with blood or potentially infectious materials is anticipated.*
 - A. Latex or Nitrile gloves must be worn when it is reasonably anticipated that there may be hand contact with blood or other potentially infectious materials, mucous membranes and non-intact skin;*
 - B. Single use latex or nitrile gloves must always be replaced as soon as practical when visibly contaminated, torn, or when their ability to function as a barrier is compromised. They must not be washed or decontaminated for re-use.*
 - C. Masks and protective eyewear or face shields must be worn during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of mucous membranes of the mouth, nose and eyes.*
 - D. Gowns must be worn during procedures that are likely to generate splashes of blood or other potentially infectious materials.*

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- E. Mouthpieces, resuscitation bags and other respiratory equipment must be available so that mouth to mouth resuscitation can be avoided.*
 - F. All contaminated items must be disposed of into designated infectious waste bags.*
- 3. Hands and other skin surfaces must be washed immediately and thoroughly with soap and water or flush mucous membranes with water immediately or as soon as possible following contact with blood or other potentially infectious materials. Hands must also be washed following removal of gloves.*
 - 4. Safety precautions must be followed to prevent injuries caused by needles or other sharp instruments during procedures, when cleaning used instruments, during disposal of used needles and when handling sharp instruments after procedures.*
 - 5. Specimens of blood or other potentially infectious materials must be placed in a container that prevents leakage during collection, handling or transporting. Specimens are considered to be biohazard and the container must be labeled or color coded to identify it as a "Biohazard."*
 - 6. Contaminated laundry must be handled as little as possible.*
 - A. All contaminated laundry must be placed and transported in bags or containers appropriately labeled or color coded.*
 - B. All contaminated laundry must not be rinsed.*
 - 7. All equipment and working surfaces must be cleaned and decontaminated after contact with blood or other potentially infectious materials.*
 - 8. Broken glassware that may be contaminated must not be picked up directly with the hands.*

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In Summary:

- *Every person is a potential source of infection.*
- *Treat all body fluids as if infectious.*
- *Use precautions on everyone.*
- *Protect yourself through workplace practices and personal protective equipment*
- *Protect others through the use of appropriate containers and signs and labels.*
- *Universal precautions must be observed to prevent contact with blood or other potentially infectious materials and are mandatory.*

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Appendix B

Hepatitis B Vaccination Declination (Mandatory)

I understand that due to my potential 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 a hepatitis B vaccine, at no charge to myself. However, I decline the hepatitis B vaccine at this time. I understand that by declining this vaccine, I continue to be at a greater risk of contracting the HBV virus through my occupational exposure to blood or other potentially infectious materials and that this is a serious disease. If, in the future, I continue to have this potential exposure to blood or other potentially infectious materials and I want to be vaccinated with the HBV vaccine, I may receive the vaccination series at no charge to me.

Employee Signature

Date

Employee printed name

Witness Signature

Appendix C

University of Notre Dame's Guidelines For The Collection, Handling and Disposal Of Infectious Waste

The University of Notre Dame, in its continual efforts to protect the health and safety of its employees, students and guests, has instituted an infectious waste disposal program. The program is required under Indiana State Board of Health regulations, Title 410.

The University recognizes that the various researchers and departments involved with infectious materials and waste go to great extremes to insure that the material is handled as safely as possible and protection is afforded at all times. The University also recognizes that the disposal of infectious waste has become a national problem and, with this understanding, adopts the following guidelines as related to infectious waste. These guidelines are instituted in order to additionally safeguard employees and students who handle infectious waste products, and includes the responsibilities of individuals, researchers and departments in the safe handling and disposal of infectious waste.

Infectious waste, while a very broad term, is generally accepted to include waste that epidemiological evidence indicates is capable of transmitting communicable diseases. This definition includes but is not limited to:

1. Cultures and stocks of infectious agents and associated biologicals, including:
 - a. Cultures from medical and pathological laboratories;
 - b. Cultures and stocks of infectious agents from research and industrial laboratories;
 - c. Waste from the production of biologicals;
 - d. Discarded live and attenuated vaccines and
 - e. Culture dishes and devices used to transfer inoculated and mixed cultures
2. Pathological wastes (body tissues and their containers)
3. Human or animal blood and blood products, including:
 - a. Liquid waste human and animal blood;
 - b. Products of blood;
 - c. Items saturated or dripping with human or animal blood;
 - d. Items that were saturated or dripping that are now caked with dried human or animal blood, including serum, plasma and other blood components and their containers which were used or intended for use either in patient care, testing, lab analysis, research or the development of pharmaceuticals. Intravenous bags are also included in this category.

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4. Used and unused sharps, including;
 - a. Sharps that have been used in animal or human patient care, treatment or medical research or industrial labs, including hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing and culture dishes (regardless of presence of infectious agents) and;
 - b. Other types of broken or unbroken glassware that was in contact with infectious agents such as used slides and cover slips.
5. Contaminated animal carcasses, including;
 - a. Contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research and;
 - b. Production of biologicals and;
 - c. Testing of pharmaceuticals.
6. Other waste that has been intermingled with infectious waste, including;
 - a. Any material (ie; paper products, plastic products, disposables), that has at any time been in contact with or believed to have been in contact with any infectious agent.

Responsibilities

1. Infectious Waste Generators

It shall be the responsibility of the infectious waste generator to adhere to the following collection and handling guidelines and procedures as listed:

- A. The individual generator shall be required to render innocuous all infectious waste through autoclaving prior to discarding as infectious waste when possible.
- B. The individual generator upon autoclaving shall be required to separate the infectious waste as follows:
 - 1) Used and unused sharps should be placed in the container identified as "Used" or "Unused Sharps."
 - 2) Infectious cultures and stocks, pathological waste and human blood and blood products shall be placed in containers labeled as "Cultures", "Pathologicals", "Blood", etc, after autoclaving.
 - 3) Contaminated animal bedding shall be placed in the container labeled "Animal bedding."
 - 4) Contaminated animal carcasses should be properly protected and frozen.
- C. It shall be the individual department's responsibility to provide protective garments as necessary to persons involved in infectious agent research or infectious waste handling.

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- D. The individual generator has the responsibility to ensure that the infectious wastes are located in the appropriate container, that the container lids are kept on, and that the general area is maintained in a clean and sanitary condition.

3. Risk Management and Safety

It is the responsibility of the Department of Risk Management and Safety to collect, treat (if necessary) and dispose of infectious waste generation at the University of Notre Dame. Representatives of the Department of Risk Management and Safety shall collect the various containers of infectious waste and animal carcasses on a scheduled basis and transport these materials to the department's waste processing facility.

It is also the responsibility of the department of Risk Management and Safety to maintain records indicating the amount of each class of waste material and notation of researcher or department prior to final disposal. The department of Risk Management shall maintain the responsibility for final disposal of the infectious waste of the following means:

- A. The department may contract with a licensed infectious waste disposer to dispose of infectious waste materials.
- B. The department may utilize other technology possible and approved means available.

The department of Risk Management and Safety will provide, at a cost, adequate containers with appropriate labeling to be located in secured building or department areas (as selected upon mutual agreement between Risk Management and Safety and the researcher or department). The biohazard symbol will be displayed at all storage areas. As required, the containers will be as follows:

- A. Sharps containers:
 - 1) Leakproof, rigid and puncture resistant.
 - 2) Labeled with the biohazard symbol or be colored red.
- B. Other infectious waste containers:
 - 1) Impervious to moisture
 - 2) Of sufficient strength
 - a. Secured
 - b. Labeled with the biohazard symbol

At all times prior to disposal, infectious waste will be stored in a secure area, protected from adverse environmental conditions and identified with the biohazard label.

Appendix D

Hepatitis B Vaccination/Titer Authorization Form

This form authorizes the below named employee to receive a Hepatitis B Vaccination or Titer from the University of Notre Dame due to their potential occupational exposure to blood or other potentially infectious materials.

Employee Name

Signature

Department

Authorizing Supervisor

Date

Risk Management and Safety Representative

Please check one:

Vaccine

Titer