1.0 POLICY STATEMENT
It is the policy of Tulane University to protect personnel against occupational exposures to Bloodborne Pathogens (BBPs).

Tulane University (TU) is committed to protecting and providing a safe environment for employees whose work involves a potential for occupational exposure to blood and other potentially infectious materials with the hope of preventing injuries, illnesses, and possibly death. In support of this commitment and in compliance with the Occupational Health and Safety Administration’s (OSHA) Bloodborne Pathogen Standard (29 CFR 1910.1030) designed to protect health care and other workers at risk of occupational exposure to bloodborne pathogens (including but not limited to HBV, HCV, and HIV), this Exposure Control Plan has been developed. Provisions of the OSHA Standard, including universal precautions, is strictly enforced at all campuses and requires that:
1) employees are educated and trained to work safely with blood and other potentially infectious materials,
2) that available vaccines for protection against bloodborne infectious diseases are encouraged and provided without cost to the employee.

2.0 PURPOSE
To ensure hazards associated with bloodborne pathogens use are anticipated, recognized, evaluated, controlled and that information concerning these hazards is communicated to potentially exposed employees consistent with the Federal Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030).

3.0 SCOPE & APPLICATION
This policy applies to Tulane University personnel who use or come in contact with bloodborne pathogens in the course of their job duties. All contracted, temporary, and volunteer employees will
also be expected to follow this Exposure Control Plan in the course of their duties while on Tulane premises.

3.1 Exposure Determination: All employees who may reasonably be expected to be exposed to bloodborne pathogens while performing assigned job duties must participate in this bloodborne program. These duties can include, but are not limited to, the following:

- drawing of blood
- processing blood or body fluids for experimentation
- using unfixed animal or human tissue in preparations or experimentation
- working in an area where HIV or HBV is produced or research is being performed
- cleaning glassware contaminated with blood or OPIM
- disposing of waste contaminated with blood or OPIM
- transporting blood or OPIM
- working in a laboratory area where equipment or work benches can become contaminated
- handling spills or containers of infectious wastes
- cleaning blood spills, including dried blood
- handling laundry soiled with blood, OPIM, or sharps
- performing lifesaving procedures including CPR
- work that may involve first aid, removing bandages or have potential exposure to blood or OPIM in any way

Job classifications in which all employees have occupational exposures are:

NONE

Job classifications in which some employees have occupational exposures are:

- Physicians, Residents, Fellows, Interns, Physician Assistants
- Veterinarians and veterinarian staff
- Nursing Staff such as: Registered Nurses, Licensed Practical Nurses, Nurse Aides/Assistants, Nurse Practitioners, Nurse Managers, Nurse Coordinators
- Program/Research Coordinator (scientific or medical care areas)
- Secretarial staff (scientific departments)
- Laundry staff
- Social workers
- Housekeeping
- Athletic personnel (coaches, assistants, etc.)
- Clinical Instructors/Professors/Faculty
- Environmental Health and Safety staff
- Childcare Workers
- Biomedical department personnel
- Security personnel
Closely related tasks and procedures in which there is the potential for occupational exposure by employees listed include:

- Injections
- Handling refuse
- Housekeeping
- Decontaminating processes
- Lab work/experimentation
- Sharps/Biomedical waste disposal
- Rendering first aid, patient care
- Arrests and other police work
- Handling human tissue/blood products
- Transporting biomedical lab specimens
- Repairing/moving contaminated equipment
- Cleaning blood contaminated equipment/surfaces

4.0 DEFINITIONS

For purposes of this document, the following shall apply:

4.1 **Blood** means human blood, human blood components, and products made from human blood.

4.2 **Bloodborne Pathogens (BBP)** means 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), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

4.3 **Contaminated** means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

4.4 **Contaminated Laundry** means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

4.5 **Contaminated Sharps** means 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.

4.6 **Decontamination** means 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
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capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

4.7 **Engineering Controls** means controls (e.g., sharps disposal containers; self-sheathing needles; safer medical devices such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

4.8 **Exposure Incident** means 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.

4.9 **Handwashing Facilities** means a facility providing an adequate supply of running potable water, soap, and single-use towels or air-drying machines.

4.10 **HBV** means hepatitis B virus.

4.11 **HCV** means hepatitis C virus.

4.12 **HIV** means human immunodeficiency virus.

4.13 **Licensed Healthcare Professional** is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

4.14 **Needleless systems** means a device that does not use needles for: (1) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (2) The administration of medication or fluids; or (3) Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

4.15 **Occupational Exposure** means 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.

4.16 **OEHS** means Tulane’s Office of Environmental Health and Safety.

4.17 **Other Potentially Infectious Materials** means (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); and (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.

4.18 **Parenteral** means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

4.19 **Personal Protective Equipment** is 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.

4.20 **Production Facility** means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

4.21 **Regulated Waste** means 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.

4.22 **Research Laboratory** means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

4.23 **Sharps with engineered sharps injury protections** means a nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

4.24 **Source Individual** means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the 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.

4.25 **Sterilize** means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

4.26 **Universal Precautions** is 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.

4.27 **Work Practice Controls** means 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).

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**5.0 APPLICABLE REGULATIONS**

- Needlestick Safety and Prevention Act

**6.0 REQUIREMENTS**

6.1 General
In an effort to comply with the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) and the Needlestick Safety and Prevention Act (Pub. L. 106-430), Tulane recognizes that engineering and work practice controls are necessary to eliminate or minimize employee exposure. Tulane University complies with the current standards requiring the (1) annual consideration and implementation of appropriate engineering controls and (2) solicitation of non-managerial health care workers responsible for direct patient care included in the selection and evaluation when choosing devices. When engineering and work practices do not eliminate exposure, the use of personal protective equipment is required. If engineering or work practice controls are to be effective, employee acceptance and employee training are required. All employees are encouraged to assist in evaluation of engineering controls or work practices and to identify opportunities to eliminate or minimize exposures. Tulane University solicits input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls. All employees having a documented occupational exposure incident involving bloodborne pathogens are specifically contacted for their input.

6.2 Engineering and Work Practice Controls

6.2.1 Engineering Controls: Where engineering controls will reduce employee exposure either by removing, eliminating, or isolating the hazard, they must be used. Examples of engineering controls include safer medical devices such as needleless devices, shielded needle devices, plastic capillary tubes, needleless or shielded needle IV line access, blunt suture needles, safer syringes, and safer phlebotomy devices. Engineering controls must be examined and maintained or replaced on a regular schedule to ensure their effectiveness. Supervisors should conduct regularly scheduled inspections to confirm, for instance, that engineering controls such as safer devices continue to function effectively, that protective shields have not been removed or broken, and that physical, mechanical, or replacement-dependent controls are functioning as intended, with concerns being reported to the Office of Environmental Health and Safety for further consideration, review, and recommendations.

Safer medical devices are generally of two types: needleless systems (e.g., needleless IV connectors) and sharps with engineered sharps injury protection (e.g., self-sheathing needles on syringes). Substitution methods such as the use of plastic (instead of glass) capillary tubes are also available. The following design features for needle safety devices are important in preventing percutaneous injury: A fixed safety feature provides a barrier between the hands and the needle after use. The safety feature should allow or require the worker’s hands to remain behind the
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needle at all times. The safety feature is an integral part of the device and not an accessory.
(1) The safety feature is in effect before disassembly and remains in effect after disposal to protect users and trash handlers, and for environmental safety.
(2) The safety feature is as simple as possible, and requires little or no training to use effectively.

6.2.2 Work Practice Controls
Work practice controls to minimize exposure include, but are not limited to, a no-hands procedure in handling contaminated sharps, eliminating hand-to-hand instrument passing, handwashing, no mouth pipetting, no food or drink in areas containing bloodborne pathogens, etc.

Handwashing facilities with soap dispensers are readily accessible to employees. When handwashing facilities with soap dispensers are not feasible, appropriate antiseptic hand cleansers in conjunction with clean cloth/paper towels or antiseptic towelettes are made available. When this is used, hands must be washed with soap and running water as soon as feasible. Employees must wash their hands immediately or as soon as possible after removal of gloves or other PPE. Shearing, breaking, bending, recapping, or removing of contaminated needles or other contaminated sharps is prohibited. If an employee feels that he/she must use these procedures, the employee must give written justification to the Office of Environmental Health and Safety stating that no alternative is feasible or that such action is required by a specific medical or dental procedure. The Office of Environmental Health and Safety must review the circumstances and document with reliable evidence that no alternative is feasible. These exceptions would then be included in the next update of the Exposure Control Plan.

Closable, leak-proof, puncture resistant sharps containers with a biohazard symbol must be available in all areas where contaminated sharps are used. Needles, sharps, or instruments must never be manipulated once placed in the sharps container. Sharps containers must be replaced when the container is 2/3 full.

Any procedure (use of sprays, brushes, and high pressure in equipment lines) that could generate splashes, sprays, or droplets of blood or OPIM is particularly hazardous and would necessitate the use of eye protection and mask or face shield to prevent contamination of the mucous membranes.
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Eating, drinking, smoking, applying cosmetics, handling contact lenses, or other personal hygiene measures are prohibited in work areas where there is a likelihood of occupational exposure. Food and drink must not be kept in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or other potentially infectious materials are present. Food preparation (cooking, heating food) must not be performed in areas where blood/body fluids are present.

Mechanical pipetting devices must be used for the manipulation of all liquids in the laboratory. Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

6.2.3 Regulated medical waste and all blood/body fluid specimens must be placed in a well-constructed container with a closed secure lid and must be labeled with a biohazard label on the container or the impervious bag during collection, handling, processing, storage, transport, or shipping to prevent leakage. A second container, such as an impervious bag, must be used for transport. If outside contamination of the primary specimen container occurs, this primary container must be placed in a second properly labeled specimen container or an impervious bag to prevent leakage during handling, processing, storage, transport or shipping. If a specimen could puncture the primary container, this container must be placed within a secondary container which is puncture-resistant.

6.2.4 Employees shall dispose of regulated medical waste and other potentially infectious materials contaminated with visible blood in appropriate receptacles and hazardous waste areas designated by Tulane University.

6.2.5 If equipment cannot be decontaminated and cleaned prior to shipping or repair, the equipment must be labeled with a biohazard symbol and a statement describing which portions of the equipment remain contaminated. This information must be conveyed to all involved employees, the servicing representative, and/or the manufacturer prior to handling, servicing, or shipping so that appropriate precautions can be taken.

6.3 Personal Protective Equipment
Tulane University enforces use of personal protection equipment as outlined in Section 14 of the OEHS Policies and Procedure Manual and this ECP. Examples of PPE can include, but are not limited to, gloves, gowns, laboratory coats, faceshields/masks or respirators, eye protection, mouthpieces, resuscitation bags, or other ventilation devices. These are provided at no cost to the employee (paid for by the department) and are chosen based on the anticipated exposure
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to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time in which the protective equipment will be used. Employees must wear protective clothing when there is a risk for occupational exposure.

If an employee exercises professional judgment that, in the specific instance or procedure, the use of personal protective equipment would have posed an increased hazard to the safety of the worker or co-worker, then the supervisor or immediate manager will investigate and document whether to institute changes to eliminate this in the future. A copy of such documentation should be sent to Tulane’s Office of Environmental Health and Safety.

Home laundering of PPE is not permitted. Laundering will be provided at no cost to the employee (paid for by the department). If the employee wishes to wear and maintain his/her own uniform or laboratory coat, then he/she would need to don additional employer-handled and employer-controlled PPE when performing tasks where it is reasonable to anticipate exposure to blood or other potentially infectious materials. Employees must wash up and change any contaminated clothing or PPE before leaving a work area.

If PPE fails to contain exposure to blood/body fluids, the employee should remove the contaminated protective equipment and clothing. Exposed skin or mucous membranes should be washed and cleaned thoroughly. Employees should then follow post-exposure evaluation and follow-up procedures.

6.3.1 Gloves:
Gloves must be used where there is reasonable anticipation of employee hand contact with blood, other potentially infectious materials (OPIM), mucous membranes, non-intact skin or when handling or touching contaminated surfaces or items. Supervisors are responsible for providing appropriate gloves in all areas where blood/body fluids are handled. Disposable gloves must be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. These will be replaced as needed at no cost to the employee. Disposable gloves should not be washed or decontaminated for re-use. Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. Hypoallergenic gloves, synthetic (non-latex) gloves, glove liners, and powderless gloves will be made available for use in any area of Tulane University requiring the use of disposable gloves. Hand washing or using a waterless hand cleaner after glove removal is required.
6.3.2 Masks, Eye Protection, and Face Shields
Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shield, must be worn whenever splashes, spray, spatter, or droplets of blood or other infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

6.3.3 Gowns, Aprons, Lab coats, or Other Protective Body Clothing
Supervisors are responsible for providing various sizes of appropriate clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments for employees to wear in all occupational exposure settings. The type and characteristics will depend on the task and degree of exposure anticipated. Fabric lab coats are not impervious to blood and OPIM and should not be used as personal protective equipment. However, lab coats should be available and should be worn over street clothes while working in the clinical or laboratory areas. Lab coats must be removed before leaving laboratory areas. Non-disposable gowns, aprons, or protective clothing used as personal protective equipment must be laundered through Tulane University or its contracted vendor at no cost to the employee. Contaminated protective clothing must not be taken home to be laundered. Employees must evaluate the task and the type of exposure anticipated and, based upon the determination, select the appropriate protective clothing which would resist penetration.

6.3.4 Shoes constructed of solid leather or equivalent material that tends to shed liquid and completely enclose the foot are recommended for work involving possible bloodborne pathogen exposure.

6.3.5 Respiratory Equipment shall be readily available and accessible to employees who can reasonably be expected to perform resuscitation procedures or other potential exposures. Only trained personnel should use this equipment.

6.4 Housekeeping
6.4.1 General
Contaminated work surfaces should be decontaminated with an EPA approved disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

Contaminated instruments shall be decontaminated after completion of procedures with an EPA approved disinfectant and autoclaved when necessary.
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Protective coverings, such as plastic wraps, aluminum foil, imperviously-backed absorbent paper, or other materials used to cover equipment or work surfaces should be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the work shift if they become contaminated during the shift.

All bins, pails, trash cans, and similar receptacles intended for re-use which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials must be inspected daily and cleaned and decontaminated immediately or as soon as feasible when visibly contaminated.

Broken glassware which may be contaminated should not be picked up directly with the hands. Broken glass should be removed by mechanical means such as a brush and dust pan, tongs, or forceps while wearing gloves.

Reusable sharps that are contaminated with blood/body fluids should not be stored or processed in a manner that requires employees to manipulate these sharps by hand or reach by hand into the containers where these sharps have been placed.

6.4.2 Regulated Waste
Employees shall dispose of regulated medical waste or OPIM in containers which are: closable; constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping; labeled as biohazard or color-coded as indicated in this Exposure Control Plan; and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping. If outside contamination of the regulated waste container occurs, it must be placed in a secondary container with the same specifications as stated for the primary container.

Regulated medical waste or OPIM waste generated at the Tulane University will be appropriately disposed of in accordance with federal, state, and local regulations. Contaminated sharps should be discarded immediately or as soon as feasible in containers that are: closable; puncture resistant, leak-proof on sides and bottom, and labeled as biohazard and color-coded as indicated in this Exposure Control Plan. Self-sheathing needle products must be disposed of in a proper sharps container. The needle sheath is not to be considered a “waste container.”
Sharps containers must be maintained in an upright position as close as feasible to where sharps are used or can reasonably be anticipated to be found (e.g., laundry area).

Sharps containers must be replaced when the container is 2/3 full. Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

When transporting or moving sharps containers from the area of use, the sharps container should be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping. If sharps are protruding from the mouth of the container, never manipulate the sharps by hand. Place the container on a surface where you can have complete visualization of the mouth of the container, then use an intermediate instrument (i.e., forceps) to manipulate or remove the sharps so the container can be closed and sealed. Sharps containers should be placed in a second container with a biohazard symbol that is puncture resistant, leakproof, and closable.

6.4.3 Laundry
Laundry that is contaminated PPE must be properly laundered, cleaned, or disposed. This must be provided at no cost to the employee with the individual department accepting the necessary charges. Contaminated PPE must be properly laundered even when performed by any outside laundry facility. Employees who have contact with contaminated laundry must follow universal precautions and wear appropriate PPE.

Contaminated laundry should be handled as little as possible with a minimum of agitation. It should be bagged where it is used and should not be sorted or rinsed in the location of use.

Contaminated laundry that is shipped off-site will be placed and transported in appropriate bags that are labeled with the biohazard symbol and that prevent liquid seepage when such a potential exists.

6.5 Hazard Communication
A biohazard symbol should be affixed to containers of regulated waste; refrigerators and freezers containing blood/body fluids; and other containers used to store, transport, or ship blood/body fluids. The biohazard symbol should be fluorescent orange or orange-red or predominantly so, with letters and symbol in contrasting color.
Biohazard symbols should be affixed as close as feasible to the container by methods that prevent their loss or unintentional removal.

Red bags or red containers may be substituted for the biohazard labels.

Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion, administration, or other clinical use are exempt from biohazard labeling requirements.

Individual containers of blood/body fluids that are placed in a labeled container during storage, transport, shipment or disposal are exempt from the biohazard labeling requirements.

Contaminated equipment should also have a biohazard symbol affixed to it and should state which portions of the equipment remain contaminated. Contaminated equipment that is to be repaired, returned to vendor, calibrated, loaned to another person, or disposed of must be properly decontaminated before doing so.

6.6 Hepatitis B Vaccination

6.6.1 Hepatitis B vaccine and vaccination series is available free of charge to all employees who have occupational exposure. Antibody tests (conducted by an accredited laboratory) and additional doses of vaccine, if indicated, are also available at no cost to occupationally exposed employees. Hepatitis B vaccine will be made available after the employee has completed Bloodborne Pathogen training and within 10 days of initial assignment to a position with occupational risk.

6.6.2 Hepatitis B vaccine is made available to all employees who have occupational exposure unless the employee has proof that he/she has previously received the complete hepatitis B vaccination series, or antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons. Employees who refuse HBV vaccination must document this in the records filed with Tulane’s Living Well Occupational Health Clinic or TNPRC Occupational Health Clinic by completing the Hepatitis B Vaccine declination form. Prescreening for hepatitis B antibody activity is not a prerequisite for receiving the hepatitis B vaccine.

6.6.3 If the employee initially refuses the hepatitis B vaccine but decides to receive the vaccine at a later date, the hepatitis B vaccine will be provided at that time free of charge.
6.6.4  TUHSC and the Uptown campus employees: Hepatitis B vaccine for occupationally exposed employees will be provided free of charge to the employee at the Tulane Living Well Occupational Health Clinic. The employee is not responsible for the cost of the Hepatitis B vaccine or for antibody titer testing at the Tulane Living Well Occupational Health Clinic, or any other costs relating to hepatitis B vaccination as described by the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030). Employees encountering any obstacles in obtaining the hepatitis B vaccine or any associated testing described in this section should immediately contact the Office of Occupational Healthcare Surveillance at (504)314-2737 for assistance.

6.6.5  TNPRC: The hepatitis B vaccine is available from the Occupational Health Nurse in Auxiliary Building 5. Employees should call in advance to set up an appointment at (985) 871-6475 or ohtnprc@tulane.edu.

6.7  Post-Exposure

Follow-up post-exposure evaluation and follow-up for an occupational bloodborne pathogens exposure are free of charge to the employee. All laboratory tests will be conducted by an accredited laboratory at no cost to the employee. All medical evaluations and follow-up procedures will be performed by or under the supervision of a licensed healthcare professional in accordance with the recommendations from the U.S. Public Health Service and Centers for Disease Control. In no instance should report completion and medical evaluation be delayed for occupational bloodborne exposures.

6.7.1  TUHSC and Uptown Campus employees:

**CLEANSE:** Following a bloodborne exposure incident, the employee is to immediately wash skin with soap and water or flush mucous membranes with water when such areas have had contact with blood or other potentially infectious materials.

**NOTIFY:** The employee who has sustained an exposure incident is to report such incident to his or her supervisor as soon as possible. The supervisor will assist the employee in contacting the Tulane Living Well Occupational Health Clinic.

**REPORT COMPLETION:** Following an exposure incident, a “First Report of Occupational Injury/Illness Form” must be completed by the employee. The employee is responsible for bringing this form to the evaluating healthcare provider when reporting for a bloodborne pathogens injury. Through direct input by the employee, the evaluating healthcare provider is best able to understand exactly what exposure occurred and therefore direct treatment appropriately.
**MEDICAL EVALUATION:** The employee should seek medical attention as soon as possible. It must be realized that any bloodborne pathogens exposure incident is an event for which immediate attention must be sought, as the effectiveness of prophylaxis depends on the immediacy of its delivery. All employees are instructed to seek medical attention at the Tulane Living Well Occupational Health Clinic during business hours (7:30-5:30). After hours the employee should seek care at the nearest emergency room. If the injury occurs after business hours, it is highly recommended that if the injured employee report to the employee health department or the emergency department of the healthcare facility where the injury occurred for initial evaluation. Usually, these departments are equipped to handle bloodborne exposures for injuries sustained at their facility and should have the easiest access to obtaining the source blood lab results which is necessary in evaluating the post-exposure prophylaxis that might be recommended. You should inform the healthcare provider that you are employed by Tulane University. The Tulane’s Workers’ Compensation Specialist can be reached by email workcomp@tulane.edu or phone (504) 247-1716 for further instructions about billing. If follow-up care is needed, the employee should schedule an appointment with the Tulane Living Well Occupational Health Clinic.

6.7.2 **TNPRC:**
All bloodborne exposures must be reported to the occupational health. If an occupational exposure should occur:

- **CLEANSE:** Following a bloodborne exposure incident, the employee is to immediately wash any skin with soap and water or flush mucous membranes with water when such areas have had contact with blood or other potentially infectious materials for 15 minutes.

- **NOTIFY:** The employee who has sustained an exposure incident is to report such incident to his or her supervisor as soon as possible and complete a “First Report of Occupational Injury/Illness Form”. Employees suffering a potential Herpes B-virus exposure should refer to TNPRC Policy #5.3 for instructions following exposure. Employees suffering a potential SIV exposure should refer to TNPRC Policy #5.4 for instructions following exposure.

- **REPORT & MEDICAL EVALUATION:** All bloodborne exposures must be reported to the occupational health nurse in Auxiliary Building 5 (Occupational Health Clinic) so that confidential medical evaluation and/or treatment can be provided. If the injury is severe the nurse can be reached at TNPRC extension 6600. The nurse will decide if it is necessary to call 911 in the event of an emergency situation. After hours, the nurse is on call.
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24/7 and may be reached at (985) 966-6515 on weekends or on 2nd or 3rd shift. The nurse will make appropriate referrals to ensure employee safety and medical care. Injured employees must complete a First Report of Injury/Illness Form in the nurse’s office within 24 hours of the incident or as soon as is practical after receiving treatment.

6.7.3 The injured employee shall receive counseling with regards to the occupational injury, risk of bloodborne infections, and available medical treatments. Post-exposure counseling must be consistent with the current U.S. Public Health Service Guidelines.

6.7.4 Documentation of the route of occupational exposure and circumstances under which the incident occurred should be done using the First Report of Occupational Injury/Illness Form. If known, the individual source should be identified and documented.

6.7.5 The source individual's blood should be tested as soon as possible after consent is obtained in order to determine HBV, HCV, and HIV infectivity.

6.7.6 When the source individual is already known to be infected with HBV, HCV, and/or HIV, testing the source individual's HBV, HCV, or HIV status need not be repeated.

6.7.7 Results of the source individual's testing shall be made available to the exposed employee. The exposed employee should be informed of the requirements of disclosure and confidentiality of the identity and infectious status of the source individual.

6.7.8 All treatment will adhere to the CDC’s postexposure monitoring and prophylaxis treatment guidelines for all bloodborne pathogens exposures. Medical evaluation and prophylaxis will be given immediately or as soon as possible after exposure.

6.7.9 The exposed employee's blood should be collected and tested as soon as possible after consent is obtained. Reportable diseases will be reported as indicated by state law and U.S. Public Health Service requirements.

6.7.10 The healthcare professional evaluating an employee after an occupational exposure shall be provided with the following: a copy of OSHA’s Bloodborne Pathogens Standard which includes a description of the exposed employee's duties.
as they relate to the exposure incident, documentation of route(s) of exposure and circumstances under which exposure occurred, results of source individual’s blood testing if available, and all medical records relevant to the appropriate treatment of the employee including vaccination status which are the employee's responsibility to maintain.

6.7.11 The employee will be provided with notification of the treating healthcare professional’s opinion within fifteen (15) days after the medical evaluation. A written copy of the healthcare professional’s opinion will be made available to the employee within fifteen (15) days after the medical evaluation.

6.7.12 All other findings or diagnoses excluding the following two should remain confidential and not be included in the written report: the written opinion in relation to the hepatitis B vaccine should be limited to and include whether the vaccine is indicated or if the employee has received the vaccine previously; the written opinion in relation to the post-exposure evaluation and follow-up should be limited to and include that the employee was informed of the evaluation results and that the employee was informed of any medical condition resulting from the exposure to blood/body fluids which will require further medical evaluation or treatment.

6.8 HIV and HBV Laboratories and Production Facilities
This section refers to research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV. It does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissue, and organs. These requirements apply in addition to the other requirements of this Exposure Control Plan.

The research labs and production facilities must meet the following criteria:
6.8.1 Standard microbiological practices. All regulated waste from work areas and from animal rooms must be incinerated or decontaminated by a method such as autoclaving known to be effective in destroying bloodborne pathogens.

Special Practices.
6.8.2 Laboratory doors must be kept closed when work involving HIV or HBV is in progress.
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6.8.3 Contaminated materials that are to be decontaminated at a site away from the work area must be placed in a durable, leak-proof labeled or color-coded container that is closed before being removed from the work area.

6.8.4 Access to the work area must be limited to authorized persons. Only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures will be allowed to enter the work areas and animal rooms.

6.8.5 When potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol (BBP Appendix 2) must be posted on all access doors.

6.8.6 All activities involving potentially infectious materials must be conducted in biological safety cabinets or other physical containment devices within the containment module. No work with potentially infectious materials shall be conducted on the open bench.

6.8.7 Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing must be used in the work area and animal rooms. Protective clothing must not be worn outside of the work area and must be decontaminated before being laundered.

6.8.8 Special care must be taken to avoid skin contact with potentially infectious materials. Gloves must be worn when handling infected animals and when hand contact with infectious materials is unavoidable.

6.8.9 The supervisor must ensure that vacuum lines are protected with liquid disinfectant traps and HEPA filters or filters of equivalent or superior efficiency and that these are checked routinely and maintained or replaced as necessary.

6.8.10 Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) are to be used for the injection or aspiration of potentially infectious materials. Extreme caution must be used when handling needles and syringes. A needle must not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe must be promptly placed in
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a puncture resistant container and autoclaved or decontaminated before reuse or disposal.

6.8.11 All spills must be immediately contained and cleaned by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials. Contact the Office of Environmental Health & Safety for assistance at (504)988-5486 or the Office of Biosafety at (504)988-0300.

6.8.12 A spill or accident that results in an exposure incident must be immediately reported to the laboratory supervisor and/or director and the Office of Environmental Health & Safety (504) 988-5486.

6.8.13 A biosafety plan, issued from the Office of Biosafety, is reviewed and updated at least annually and advises personnel of potential hazards. Employees must read these instructions on practices and procedures and follow them.

Containment Equipment

6.8.14 Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, must be used for all activities with infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

6.8.15 Biological safety cabinets must be certified when installed, whenever they are moved, and at least annually by the Office of Biosafety.

6.8.16 Each HIV and HBV research laboratory must contain a facility for hand washing and an eyewash facility which is readily available within the work area, and must have available an autoclave for decontamination of regulated waste.

HIV and HBV production facilities must meet the following criteria:

6.8.17 The work areas must be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors must be the basic requirement for entry into work area from access corridors or other contiguous areas. Physical separation of the high containment work area from access corridors or other areas or activities may also be provided by a double-door clothes-change room (showers may be included), airlock, or other access
facility that requires passing through two sets of doors before entering the work area.

6.8.18 The surfaces of doors, walls, floors, and ceilings in the work area must be water resistant so that they can be easily cleaned. Penetrations in these surfaces must be sealed or capable of being sealed to facilitate decontamination.

6.8.19 Each work area must contain a sink for washing hands and a readily available eyewash facility. The sink must be foot, elbow, or automatically operated and must be located near the exit door of the work area.

6.8.20 Access doors to the work area or containment module must be self-closing.

6.8.21 An autoclave for decontamination of regulated waste must be available within or as near as possible to the work area.

6.8.22 A ducted exhausted-air ventilation system must be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air must not be recirculated to any other area of the building, must be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

6.8.23 Initial training requirements for employees in HIV or HBV research laboratories or production facilities, in addition to those outlined previously in this Exposure Control Plan, include:

- Employees must demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.
- Employees must have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.
- Employees who have no prior experience in handling of human pathogens must undergo a training program. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. Employees can participate in work activities involving infectious agents only after proficiency has been demonstrated.
- It is the supervisor’s responsibility to see that their employees have the initial training, experience and proficiency required in order to work in a HIV or HBV research laboratory or production facility.
7.0 RESPONSIBILITIES

7.1 Tulane Office of Environmental Health and Safety is responsible for:
   • Developing and maintaining this exposure control plan per OSHA 1910.1030.
   • Participating as a representative during an OSHA or other regulatory inspection.
   • Assisting in monitoring engineering and work practice controls, personal protective equipment, housekeeping, waste disposal, decontamination, and communication of hazards to employees (signs and labels).
   • Providing orientation and annual education and training (in-service and/or web-based) when required on bloodborne pathogens regulations and keeping appropriate training records.

7.2 Tulane Living Well Occupational Health Clinic or TNPRC Occupational Health
   • Ensuring that the HBV vaccine and post-exposure follow up is available and in compliance with the requirements outlined in OSHA 1910.1030.
   • Monitoring the recordkeeping and management of occupational exposures and post-exposure follow-up to bloodborne pathogens.

7.3 Tulane University Managing Supervisors (hereafter referred to as Supervisors) can include, but are not limited to, supervisors, department/unit heads, directors, managers or Principal Investigators. Supervisors are responsible for:
   • Ensuring respective unit personnel comply with this policy.
   • Notifying Tulane’s Office of Environmental Health and Safety immediately of known violations or when contacted by a regulatory agency regarding this policy.
   • Ensuring that their occupationally exposed employees receive the HBV vaccine series or sign the declination as soon as possible for existing employees and at the time of assignment for new or transferring employees.
   • Identifying employees who have occupational exposure to bloodborne pathogens (this may be done through Human Resources job descriptions, Personnel Action Forms, or OEHS needs assessment, etc.). This must be done for all occupationally exposed employees, at the time of transfer to occupationally exposed positions or at the time of employment for new employees.
   • Ensuring that their occupationally exposed employees are trained in bloodborne pathogens procedures and that this training is documented as soon as possible for existing employees, prior to job assignment for new or transferring employees, and annually thereafter if continued to be employed by Tulane in an occupationally exposed position.
   • Following and enforcing universal precautions.
   • Ensuring that employees are fully trained and follow procedures and use the appropriate equipment correctly. Supervisors must make certain that personal protective equipment
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(PPE) is available, appropriate, and provided free of charge to employees. They must ensure that contaminated PPE is properly laundered, cleaned, disposed of, and/or replaced as necessary at no cost to the employee.

- Following-up exposure incidents with a signed First Report of Occupational Injury/Illness Form and directing exposed employees to an appropriate facility for medical evaluation and treatment.
- Assisting in the evaluation of work practices and engineering controls to determine the appropriateness of same.
- Ensuring that safer needle devices are provided, if applicable.
- Ensuring that employees adhere to current DOT and Tulane policies and guidelines for transporting or shipping hazardous materials.
- Ensuring that equipment is decontaminated and that spill cleanup is appropriate in their respective areas.

7.4 Tulane personnel with occupational exposure are responsible for:

- Completing training as required.
- Following the practices and guidelines outlined in this Exposure Control Plan.
- Obtaining the hepatitis B vaccine or signing the Hepatitis B Vaccine Declination form.
- Reporting exposure incidents to their supervisor, completing the First Report of Injury/Illness Form, and pursuing follow-up care at an appropriate healthcare facility following an exposure incident.

7.5 EHS Operations Committee is responsible for annual review, assessment, and approval of the Exposure Control Plan, and for assisting in solving any problems with its implementation.

7.6 Tulane Campus Services Department must ensure any laundering or other support services comply with this Exposure Control Plan.

7.7 Tulane Workers Compensation Program is responsible for ensuring that a post-exposure evaluation and follow-up is documented and provided, free of charge, to all employees who have an exposure incident through Tulane Workers Compensation program.

7.8 Tulane Office of Biosafety is responsible for:

- Assisting with biological spill cleanup as needed.
- Arranging certification for biological safety cabinets when installed, whenever they are moved, and at least annually.
- Providing a biosafety plan for all Tulane supported/sponsored research activities and facilities.
- Arranging for the management and disposal of regulated medical waste at Tulane University.
8.0 TRAINING
All employees with the potential for occupational exposures will be provided training/education on methods of preventing nosocomial transmission of bloodborne pathogens at no cost to the employee. The training will be provided during working hours by a competent person knowledgeable in the area of bloodborne pathogens, or through Tulane’s computerized training program. Training material appropriate in content and vocabulary to educational level, literacy, language of employees, and appropriate to assigned duties will be used.

Training will be provided as follows: at the time of initial employment and assignment to job tasks where occupational exposure may occur, as soon as possible for all existing employees, within one year of the employee's previous training and annually thereafter, when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's potential for occupational exposures, and as new standards for safe work practices evolve.

At minimum, training shall include: an explanation of the OSHA Bloodborne Pathogens Standard and contents, the epidemiology of HIV, HCV, and HBV infection within the U.S. with emphasis on healthcare workers, signs, symptoms, and incubation periods of HIV, HBV, and HCV infections modes of transmission of HIV, HBV, and HCV pathogens, an explanation of the Exposure Control Plan, how to obtain the plan, methods for recognizing tasks or procedures that may involve exposure to blood/body fluids, an explanation of universal precautions, explanation of selection, usage, and limitations of methods to reduce exposure including appropriate engineering controls, work practices, and personal protective equipment, location, usage, handling, and disposal of personal protective equipment, discussion of the efficacy, safety, administration, and benefits of the HBV vaccine and its availability to employees without charge, actions to take and persons to contact in an emergency involving blood/body fluids, procedures for exposure incidents, methods of reporting, and provision of medical follow-up, information on post-exposure evaluation and follow-up, explanation of the biohazard symbol, color coding, and corresponding requirements, opportunity for interactive discussion and answers session and/or directions for contacting the OEHS Help Desk (OEHS@tulane.edu) to answer any questions.

9.0 DOCUMENTS
The following Tulane University documents are related to this policy and may serve as additional references for information regarding this policy:

- Tulane University Shipping Hazardous and Infectious Materials Policy
- [First Report of Occupational Illness Injury Form](#)
- [Hepatitis B Vaccine Declination Form](#)
Bloodborne Pathogens Exposure Control Plan

10.0 RECORD RETENTION

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11.0 ATTACHMENTS

11.1 Biohazard Symbol

![Biohazard Symbol](image)

12.0 REVISION HISTORY

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