Welcome to Midwestern State University Bloodborne Pathogen Manual. For your reading ease, it has been divided into four sections.

Section I is the Midwestern State University Exposure Control Plan mandated by law. You may utilize this document as a guide for a specific plan for your department.

Section II is concerned with Incident Response. In the event that you or an employee at your location is exposed to bloodborne pathogens or other potentially infectious materials, this section will take you through the necessary steps.

Section III is concerned with Record Keeping. To comply with the OSHA Bloodborne Pathogens Standard, a variety of records must be kept by a designated individual at your MSU department.

Section IV is your copy of the OSHA Bloodborne Pathogens Regulations Section 1910.1030.

Section V is your copy of other rules and documents that pertain to Bloodborne Pathogens

Failure to comply with the standard may result in fines and losses to the university.
SECTION I

Midwestern State University
Exposure Control Plan
Occupational Exposures to Bloodborne Pathogens:
Midwestern State University Exposure Control Plan
# Table of Contents

Chapter 1 .................................................................................................................................. 1  
   Introduction to the Bloodborne Pathogen Exposure Control Plan

Chapter 2 .................................................................................................................................. 4  
   Personnel Implementing the Exposure Control Program

Chapter 3 .................................................................................................................................. 7  
   Employee Exposure Determination

Chapter 4 .................................................................................................................................. 10  
   Methods of Compliance with Standard Safety Procedures

Chapter 5 ................................................................................................................................ 28  
   Housekeeping Procedures

Chapter 6 ................................................................................................................................ 34  
   Employee Exposure Situations and Safe Work Practices

Chapter 7 ................................................................................................................................ 65  
   Procedures for Hepatitis B Vaccinations and Medical Evaluations

Chapter 8 ................................................................................................................................ 72  
   Labeling and Marking

Chapter 9 ................................................................................................................................ 74  
   Training Under the Bloodborne Pathogen Standard

Chapter 10 ............................................................................................................................... 77  
   Record-Keeping Procedures

Chapter 11 ............................................................................................................................... 79  
   Schedule for Implementation of the Bloodborne Pathogen Requirements

Chapter 12 ................................................................................................................................ 80  
   Exposure Incident Evaluation

Appendix A ................................................................................................................................. 84  
   Glossary

Appendix B ................................................................................................................................. 88  
   Exposure Incident Forms: A, B, and C

Appendix C ................................................................................................................................ 95  
   Employee Exposure Evaluation Forms
Introduction to the Bloodborne Pathogen Exposure Control Plan
Introduction to the Bloodborne Pathogen Exposure Control Plan

Midwestern State University strives to provide a safe work environment. Employees are trained for their jobs. Insofar as possible, hazards are eliminated or identified. Personal protective equipment is required to be worn whenever it is needed. Safety equipment and supplies are inspected and maintained on a regular basis.

This Exposure Control Plan has been developed in response to both the Federal Occupational Safety and Health Administration's Bloodborne Pathogen Standard (codified under 29 CFR 1910.1030) and this university's concerns for employee safety. It is vital that every employee reads and understands the safety policies and procedures described within this document. An employee only has to be accidentally exposed ONCE to pathogen-contaminated materials to become a carrier of a virus and, to perhaps, eventually become ill with the disease. Accidental exposures often occur because employees are unaware of correct handling procedures or because they choose not to follow standard safety practices.

Employee Exposure Situations

University employees must understand how they are potentially exposed to infectious materials. For example, persons may be exposed through the first aid treatment or the assistance of a injured person. Office staff may occasionally enter areas in which samples containing bloodborne pathogens may be handled or where potentially infectious items are stored. Custodial staff may manage wastes containing contaminated items, or clean toilets and sinks which are potentially contaminated with infectious materials. Medical and research staff may routinely handle samples and materials which contain bloodborne pathogens. Emergency response personnel could
be called on to mitigate an emergency incident involving a biological hazard. Intramural and Athletic Departments personnel may routinely be exposed through the initial treatment of injuries associated with sporting activities. Faculty may be exposed through the initial treatment of student injuries in classroom or field trip settings. Grounds personnel may manage waste that containing contaminated items. Plumbers may come into contact with toilets, sinks and waste traps that are contaminated with infectious materials or contain contaminated items.

To aid you in understanding how you may become exposed to infectious agents, the Exposure Control Plan developed by The Exposure Control Plan contains a chapter entitled "Employee Exposure Determination." The "Employee Exposure Determination" provides an overview of how exposure risks are assessed at this university. Additionally, the chapter of this document entitled "Employee Exposure Situations and Safe Work Practices" describes some job classifications in which occupational exposures to bloodborne pathogens may occur and lists potential occupational exposure situations.

**Elements of the Exposure Control Program**

The OSHA Bloodborne Pathogen Standard requires that specific issues be addressed in Midwestern State University's safety program. These issues are as follows:

- Methods of Compliance (the engineering controls, work practices, and personal protective equipment used to minimize employee exposures).
- Procedures for Hepatitis B vaccinations, post-exposure vaccinations and follow-ups.
- Communication of hazards to employees.
- Record-keeping practices.
Employee Exposure Evaluation

It is vital to the health and safety of employees to thoroughly analyze any exposure incidents, which occur during the performance of work-related duties. A description of this university's process for evaluating circumstances surrounding actual exposure incidents is provided in the chapter entitled "Exposure Incident Evaluation."

Schedule For Review and Implementation of Exposure Control Plan

The specific methods instituted to implement each of these situations of the Exposure Control Plan at Midwestern State University are described in the designated chapters of this Exposure Control Plan. A schedule for program implementation is also provided in this chapter entitled "Schedule for Implementation of the Bloodborne Pathogen Standard." The Exposure Control Plan will be reviewed and updated annually and whenever necessary to reflect new or modified tasks or procedures which affect potential occupational exposure situations.

Availability of the Exposure Control Plan

The University makes the Exposure Control Plan available to all employees during working hours at the following locations:

Facilities Services Daniel Building Room 104
Each Department Office of Midwestern State University
Midwestern State University Web site
Personnel Implementing the Exposure Control Program
The health and safety of each employee is extremely important to the management of Midwestern State University. Employees should bring their concerns to their supervisor or the Mgr., Facilities Information and Univ. Health/Safety. Implementation of the Exposure Control Plan is the responsibility of all personnel. It is the responsibility of all Faculty, Staff and other employees to ensure that students and official visitors of the university comply with the requirements set forth in this document. Titles and associated responsibilities of those directly in charge are given in the following paragraphs.

**President**

This person holds the ultimate responsibility for all biological safety issues at this facility. The University President, in cooperation with other administrators, provides continuing support, both motivational and financial, for the Exposure Control Program.

**Exposure Control Program Administrator / Mgr., Facilities Information and Univ. Health/Safety:**

The Mgr., Facilities Information and Univ. Health/Safety must work with administrators and other employees and implement the policies of Midwestern State University. Duties of the Mgr., Facilities Information and Univ. Health/Safety include:

- Monitoring procedures involving potential occupational exposure to potentially infectious materials;
- Guiding the development of precautionary procedures and assuring that adequate facilities are available for the kind of potentially infectious material to which employees may be exposed;
Knowing the Bloodborne Pathogen Standard requirements concerning potentially infectious materials;

Ensuring that medical practices and training programs are in accordance with the requirements of the Bloodborne Pathogen Standard; and,

Revising, reviewing, and improving the Exposure Control Program.

**Supervisors:**

Supervisors are directly responsible for the safety of those they supervise. Supervisors are accountable to senior management for all safety issues concerning the workers they supervise. Among the supervisor's responsibilities:

- Ensuring workers know and follow the procedures defined in this Exposure Control Plan;
- Ensuring that protective equipment is available and in good working order;
- Determining that training in both the proper procedures and use of personal protective clothing and safety equipment has been provided;
- Providing regular hygiene, housekeeping and equipment maintenance inspections;
- Determining required levels of personal protective equipment;
- Informing the Mgr., Facilities Information and Univ. Health/Safety that an exposure incident has occurred; and,
- Ensuring that facilities and training for tasks involving potential contact with potential infectious materials are adequate.

**Employees**

Midwestern State University wants to provide the safest work environment possible. Ultimately, however:

*You are responsible for your own safety!!!*

The Bloodborne Pathogen Exposure Control Plan
Employees must accept this responsibility and comply with university safety policies described in this Exposure Control Plan and in the associated training program. Everyone is expected to:

- Minimize all potential exposures to infectious materials or contaminated items;
- Avoid unsafe practices;
- Report unsafe conditions;
- Label containers and samples holding potentially infectious materials appropriately;
- Be familiar with all hazards in their work area, biological or otherwise;
- Learn what precautions and protective equipment are needed for specific jobs;
- Practice good hygiene;
- Take responsibility for themselves and co-workers.

In summary, employees need to be familiar with all the procedures, techniques, policies and equipment that are there to help them work safely.
Employee Exposure

Determination
Employee Exposure Determination

One of the most important sections of the Exposure Control Plan is this chapter, "Employee Exposure Determination." This portion of the Exposure Control Plan provides information on the types of jobs in which occupational exposures to bloodborne pathogens could occur and the work-related tasks which could lead to exposure situations. The purpose of the "Employee Exposure Determination" is to make employees aware that:

- They may be exposed to bloodborne pathogens during the performance of certain work tasks.
- Specific job-related duties place them at risk for exposures to potentially infectious materials.
- They must review safety information and safe-work procedures specific to the duties they are performing and the type of pathogens to which they may be exposed.
- They should assess their health status (i.e. if they have open wounds, whether they have had vaccinations for Hepatitis B) before performing duties that could place them at risk of receiving an exposure to bloodborne pathogens.

Employee Exposure Evaluation Form

The form in Appendix C, entitled "Employee Exposure Evaluation Form," can be used by your location supervisor to assess employee exposure risks. This form can be supplied to all employees, and after the completed forms are returned, the information can be analyzed to identify the following information:
1) The employees who have the greatest possibility of exposure to bloodborne pathogens.
2) The job classifications in which exposure situations can occur.
3) The work tasks which present exposure situations and the frequency with which the tasks are performed.

**Employee Exposure Determination Example: Custodial Employees**

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Potential Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custodian</td>
<td>Cleaning sinks, toilets, other bathroom fixtures.</td>
<td>Contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Clean-up of vomit, other bodily fluids.</td>
<td>Contact with potentially infectious fluids and materials.</td>
</tr>
<tr>
<td></td>
<td>Removal of waste.</td>
<td>Contact with feminine sanitary items and other potentially contaminated materials. Handling disposed syringe needles and other potentially contaminated sharps.</td>
</tr>
<tr>
<td></td>
<td>General site clean-up</td>
<td>Contact with disposed syringe needles, disposed personal items, and other potentially infectious materials.</td>
</tr>
</tbody>
</table>

**Safe Work Practices Example: Custodial Employees**
1) Custodial employees must wear waterproof gloves and eye protection whenever they clean toilets, bathrooms, and other facilities.

2) Custodial employees should avoid handling discarded needles, syringes, and other potentially contaminated sharps. If they must handle these items, they should wear puncture-resistant gloves and pay attention to their hands.

3) Custodial employees must wear gloves whenever they handle or expect to handle discarded condoms, sanitary napkins, and other similar items.

4) Surfaces and items contaminated with blood or other bodily fluids should be cleaned with a bleach solution (1:10 diluted of household bleach that should be changed weekly). An anti-bacterial cleaner that has been approved for this use may be used. Proper use and application is to be made the program manager.

The chapter of this document entitled "Employee Exposure Situations and Safe Work Practices" provides examples of exposure situations and safe work practices for other occupations impacted by the regulation.
Methods of Compliance with Standard Safety Procedures
Methods of Compliance with
Standard Safety Procedures

Any potential hazard associated with a job task can be minimized or eliminated by using the appropriate combination of engineering controls, work practices, and personal protective equipment. This basic safety rule applies to all occupational hazards, whether they are routine work hazards (such as slips or falls), chemical hazards, or contact hazards associated with potentially infectious materials. This chapter of the Exposure Control Plan focuses on how this facility protects the employees who may be exposed to biological hazards while performing their work tasks.

This section describes the engineering controls and personnel protective equipment at Midwestern State University for employees who may come in contact with blood, blood products, or other potentially infectious materials. This section also delineates specific safe work practices, which must be followed by every employee who may be exposed to infectious agents.

Universal Precautions

The principle of Universal Precautions is a conservative approach to infection control. Simply stated, the concept behind Universal Precautions is that:

All human blood and body fluids are treated as if they are known to contain Hepatitis B virus, Human Immunodeficiency Virus, or other bloodborne pathogens.

This approach must be used by employees at this facility whenever they handle blood, bodily fluids, or other potentially infectious materials. By making this assumption, employees will stringently avoid all contact with potentially contaminated
items by following standard safety precautions, use proper safety controls, and wearing the appropriate personal protective equipment.

The advantages to this approach are obvious. Employees who come in contact with people or who handle blood, blood products, or other bodily fluids often have no idea whether they may be exposed to Hepatitis B Virus, Human Immunodeficiency Virus (HIV), or other bloodborne viruses. For example, source individuals may show no obvious symptom of carrying the virus. Unconscious accident victims will not be able to inform rescue units of their medical status. Vials of blood or blood products may not have appropriate warning labels, or these items may not have been tested for bloodborne pathogens. Waste containers may hold needles, personal hygiene items, contaminated wastes from laboratories which may be engaged in work with infectious agents. Using Universal Precautions takes the guesswork out of how to respond to potential exposure situations safely.

**Engineering and Work Practice Controls**

It is the policy of Midwestern State University to use engineering controls and work practices whenever possible to eliminate or minimize employee exposures to bloodborne pathogens. Personal protective equipment will be worn when the potentials for occupational exposures remain after these controls and work practices have been implemented. The following sections describe the engineering controls and work practices currently in place at this facility.

**Engineering Controls**

Engineering controls are those devices which isolate or remove the bloodborne pathogen hazard from the work place. These engineering controls are routinely examined as part of a stringent inspection program. Table 3, on the following page, lists the engineering controls which have been implemented, where appropriate, to protect
employees from potential exposure situations. Table 3 also provides information on the inspection schedule for these controls. Table 3 should be completed by designated university employees by entering the appropriate information.
### Table 3
#### Engineering Controls and Inspection Schedule

<table>
<thead>
<tr>
<th>Engineering Control</th>
<th>Inspection Period</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Safety Cabinets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class I</td>
<td>Annually</td>
<td>Inspected and maintained by the individual researcher through an outside contract.</td>
</tr>
<tr>
<td>Class II, Type A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class II, Type B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glove Boxes</td>
<td>Every six months</td>
<td>Inspections routinely performed by Mgr., Facilities Information and Univ. Health/Safety (4032).</td>
</tr>
<tr>
<td>Sharps Disposal Containers</td>
<td></td>
<td>Ensure outer portion of container remains clean while unit is in use.</td>
</tr>
<tr>
<td>Once, before use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly during use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once, before disposal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Sheathing Needles</td>
<td>Once, before use.</td>
<td></td>
</tr>
<tr>
<td>Hand-washing Facilities</td>
<td>Once every six months</td>
<td>By MSU location supervisor.</td>
</tr>
<tr>
<td>Eyewash</td>
<td>Every six months</td>
<td>Inspections routinely performed by Mgr., Facilities Information and Univ. Health/Safety (4032).</td>
</tr>
<tr>
<td>Safety Shower</td>
<td>Every six months</td>
<td>Inspections routinely performed by Mgr., Facilities Information and Univ. Health/Safety (4032).</td>
</tr>
<tr>
<td>Other: __________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Inspection forms in Section 3•Record Keeping.
Hand-Washing Facilities

Hand-washing facilities which are readily accessible are to be or have been made available to all employees, in accordance with the Federal standard. Employees must wash their hands at these facilities every time they come in contact with items containing or contaminated with potentially infectious agents.

Where the construction of hand-washing facilities is not feasible, Midwestern State University provides an antiseptic hand cleanser. Employees must wash their hands with running water as soon as possible after using these antiseptic cleansers.

Site Locations of Hand-Washing Facilities

Vinson Health Center       Gaines Dental Clinic - Bridwell Hall
Nursing Lab - Bridwell Hall Athletic Training Room - Ligon Coliseum
All restroom facilities on campus when approved hand cleaner is used.

Work Practices

Work practices are defined as those procedures which have been developed by Midwestern State University to reduce or eliminate employee exposures to bloodborne pathogens during the execution of their work tasks. In terms of basic safety during potential exposure situations, the chief safety policy of Midwestern State University is to eliminate all exposures. Employees must understand these procedures fully, and they must implement these practices when appropriate.

The Importance of Avoiding Routine Exposures

Majorities of biological contaminations are the result of small sprays, splashes, or mists. Most of these contaminations don't cause an immediate, adverse health effect. Therefore, many workers do not fully appreciate the hazards they face during the completion of certain work tasks. Employees must realize that one accidental exposure
to bloodborne pathogens can result in serious health effects. All the procedures described in this Exposure Control Plan and associated training program must be strictly followed by employees.

**Basic Hygiene**

The following basic hygiene procedures are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

All procedures involving blood or other potentially infectious materials shall be performed in such a manner to prevent or minimize splashing, spraying, spattering, and generation of droplets of these substances. Employees must wash their hands immediately after removal of gloves or other personal protective equipment (or as soon as feasibly possible).

If accidental skin contamination occurs, the area will be washed with copious amounts of soap and water. If the eyes or mucous membranes are accidentally contaminated, they should be flushed with water. All accidental exposures must be immediately reported to the area supervisor. The supervisor must notify the Mgr., Facilities Information and Univ. Health/Safety within 24 hours.

All employees are herein notified that the Texas Workman's Compensation Commission requires that employees who claims a possible work related exposure to a reportable disease, including HIV infection must be tested no later than 10th day after the exposure and must provide their employer with documentation of the test and a sworn affidavit of the date and circumstances of the exposure. The complete article rule is published in Section V of this document.
Additional Safe Work Procedures

The following procedures are prudent practices and are not mandated by the Federal standard. However, these procedures are nonetheless required by Midwestern State University.

Loose hair and clothing should be confined when in work areas where potential exposure to bloodborne pathogens may occur.

Horseplay and other behavior which might confuse, startle, or distract workers, will not be tolerated.

All areas of potentially exposed skin shall be washed before leaving the work area. Water and a mild soap, or an antiseptic cleanser, should be used for skin cleansing. Solvents are not to be used as skin cleansers. They remove the natural protective oils from the skin and can cause irritation and inflammation.

Employees with acne, dermatitis, open wounds, or other skin problems should be extremely cautious when involved in potential exposure situations. Employees with skin problems will review safe work procedures with their supervisors or the Mgr., Facilities Information and Univ. Health/Safety.

Contaminated Needles and Other Sharps Handling Procedures

The following sharps-handling procedures are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed unless no alternative is feasible or such action is required by a specific medical procedure. Contaminated needles and other contaminated sharps will
not be removed, bent, or recapped, unless it is through the use of a mechanical device or a one-handed technique. Shearing or breaking of contaminated needles is forbidden. Contaminated, reusable sharps will be placed in appropriate containers immediately after use (or as soon as reasonable possible) until properly processed. These containers must be puncture resistant, labeled (and/or color coded) in accordance with the Federal standard. For further information, refer to the section entitled "Label Requirements" in this document. All sharps containers must be leak-proof on the sides and bottom.

The following procedures are prudent practices, not mandated by the Federal standard but nonetheless required by Midwestern State University. Employees will contact their supervisor or the Mgr., Facilities Information and Univ. Health/Safety whenever they feel a procedure requires the recapping, bending, or removal of needles or other sharps.

**Action Prohibited in Work Areas**

The following work area policies are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

Eating, drinking, smoking, and applying cosmetics is forbidden in areas where there is reasonable possibility of occupational exposure to potentially infectious materials. Food and beverages must not be kept in refrigerators, freezers, shelves, cabinets, or on bench-tops where blood or other potentially infectious materials are present. Mouth pipetting or suctioning of blood or other potentially infectious materials is prohibited.
Containerization Procedures

The following containerization procedures are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

Specimens of blood or other potentially infectious materials shall be placed in containers which prevent leakage during collection, handling, processing, storage, transport, or shipping. These containers must be closed prior to being stored, transported, or shipped. Containers for storage, transport, or shipping will be labeled in accordance with the standard and the procedures described in the chapter on labels in this document.

*Special Note: According to the Federal standard, facilities that utilize Universal Precautions in the handling of all specimens, the labeling or color-coding of specimen containers is not necessary if these containers are easily recognizable as holding potentially infectious agents. This exemption only applies while such containers remain within the facility. Labeling/color-coding is mandated for those containers when they leave the facility. However, it is prudent practice to label all containers with the contents of the container and their associated hazard.*

If outside contamination of the primary container occurs (or if specimens contained within the primary container could puncture that container), the primary container will be placed within a secondary container which prevents leakage during handling, processing, storage, transport, or shipping. The secondary container has to be puncture-resistant and labeled/color-coded under the requirements of the standard and the section entitled "Label Requirements" in this document.

Equipment-Handling Procedures
The following equipment-handling procedures are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

Equipment which may become contaminated with blood or other potentially infectious materials will be examined prior to servicing or shipping and will be decontaminated, when necessary. A label prepared in accordance with the Federal standard and the section on labels in this document will be attached (if necessary) to the equipment, stating which portions remain contaminated. Designated employees of this university will ensure that appropriate hazard information is conveyed to all affected employees, as well as to servicing and repair representatives.
Special Procedures for Glassware

The following procedures are prudent practices and are not mandatory by the Federal standard. Nonetheless, they are required by Midwestern State University.

Accidents involving glassware are a significant cause of injuries in laboratories and related facilities. Glassware should be handled carefully and stored properly. Damaged items need to be repaired or discarded. Hand protection must be worn when inserting rubber stoppers or corks into glassware, or when placing rubber tubing on glass hose connections.

Proper instruction on the use of specialized glassware must be obtained. Equipment must be used only for its intended purpose. Employees should ask their supervisors if they are unsure how to handle equipment or if they feel items are to be used improperly.

Working Alone and Unattended Operations

The following procedures are prudent practices and are not mandated by the Federal standard. Nonetheless, they are required by Midwestern State University.

Employees should not work alone in a laboratory if the procedures being conducted are hazardous. If employees must work alone, due to the constraints of an experiment or analysis, they should:

- Review the operations with their supervisor to determine if the operations can be conducted alone safely.
- Arrange to have security personnel or another employee check them on a regularly scheduled basis when they work alone.

If a reaction or other operation is to be unattended for any length of time, employees must:
- Leave on the lights in the work place.
- Place an appropriate sign on the door.
• Provide for containment of the materials being used, should an event such as a power failure occur.

Personal Protective Equipment

Midwestern State University provides, at no cost to the employee, appropriate personal protective equipment for personnel who may be exposed to bloodborne pathogens. Table 4, on the following page, lists the personnel protective clothing available at this facility and how to obtain these supplies.

If protective clothing is penetrated by blood or potentially infectious material, these items must be removed immediately (or as soon as feasible). All personal protective equipment will be removed prior to leaving the work area. Laundering, disposal, repair, and replacement of this equipment will be done at no cost to the employee.
<table>
<thead>
<tr>
<th>Item</th>
<th>How to obtain</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Use Gloves</td>
<td>Through Department Stores</td>
<td>Wear latex gloves whenever there is an opportunity for hand-contact with blood, blood products, mucous membranes, non-intact skin, other potentially infectious materials, or contaminated items and surfaces. Check for leaks, tears, punctures before each use. Use gloves only one time. Dispose in appropriate waste container.</td>
</tr>
<tr>
<td>Other Gloves</td>
<td>Through Department Stores</td>
<td>Check for leaks, tears, punctures before each use. Dispose in appropriate waste container.</td>
</tr>
<tr>
<td>Surgical Gowns</td>
<td>Through Department Stores</td>
<td>Check the condition of gown before use. Do not wear gowns which are obviously soiled. Follow standard laundering/disposal procedures for gowns as appropriate.</td>
</tr>
<tr>
<td>Lab Coats</td>
<td>Through Department Stores</td>
<td>Check the condition of lab coat before each use. Do not wear coats which are obviously soiled. Follow standard laundering or disposal procedures for lab coats, as appropriate.</td>
</tr>
<tr>
<td>Masks</td>
<td>Through Department Stores</td>
<td>Wear masks whenever there is a likelihood of splash, sprays, mists, or the production of respirable droplets. Ensure that the mask fits properly. Dispose of masks in appropriate containers.</td>
</tr>
<tr>
<td>Safety Goggles or Safety Glasses</td>
<td>Through Department Stores</td>
<td>Wear eye protection whenever there is an opportunity for exposure to blood, blood products, or other potentially infectious materials. Clean with appropriate antiseptic agents. Dispose of these items in appropriate containers.</td>
</tr>
<tr>
<td>Face Shields</td>
<td>Through Department Stores</td>
<td>Wear face shields whenever there is an opportunity for exposure to large quantities of blood, blood products, or other potentially infectious materials. Wear face shields whenever there is a likelihood of splash, sprays, mists, or the production of respirable droplets. Clean with appropriate antiseptic agents. Dispose of these items in appropriate containers.</td>
</tr>
<tr>
<td>Hoods, Hair Nets</td>
<td>Through Department Stores</td>
<td>Check for leaks, tears, punctures before each use. Dispose in appropriate waste container.</td>
</tr>
<tr>
<td>Shoe Covers, Boots</td>
<td>Through Department Stores</td>
<td>These items should be worn when gross contamination with potentially infectious materials is anticipated.</td>
</tr>
<tr>
<td>Bio Hazard Cleanup Kits</td>
<td>Through Department Stores Or Environmental Safety</td>
<td>These packaged kits are to be used to clean up blood and other body waste spills or discharges. Users will need to check contents to assure whether or not additional PPE is required</td>
</tr>
</tbody>
</table>
Gloves

The routine use of gloves is one of the most basic safety procedures used to protect employees from the hazards associated with infectious agents. Gloves must be worn whenever there is an opportunity for hand-contact with blood, blood products, mucous membranes, non-intact skin, and other potentially infectious materials or contaminated items and surfaces.

Disposable Gloves

Disposable gloves (such as surgical or examination gloves) should be replaced promptly if they are torn, punctured, or their ability to function as a protective barrier is compromised in any way. Disposable gloves will not be washed or decontaminated for re-use.

Gloves that are Re-Used

Utility gloves (gloves designed for use more than a single time) may be decontaminated for re-use if the integrity of the glove is not compromised. Prior to use, to ensure that these gloves have no leaks, employees should blow air into the glove, seal the glove at the neck, and determine if there is a release of air from holes in the glove. Utility gloves must be discarded if they are cracked, peeling, torn, punctures, or exhibit other signs of deterioration.

Hypoallergenic Gloves

Hypoallergenic gloves, glove liners, powderless gloves, or other similar protective gear are available to employees who are allergic to the gloves normally provided. Employees who require such items should contact their supervisor or the Mgr., Facilities Information and Univ. Health/Safety.
Face/Eye Protection

Masks, in combination with eye protection devices (i.e. goggles, safety glasses with shields, face shields) must be worn when splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and contamination of the eyes, nose, or mouth can be reasonably anticipated. Employees with acne, dermatitis, or other ailments involving the facial region should consider wearing face protection while conducting operations where potential exposure may occur.

Other Protective Apparel

Gowns, aprons, lab coats, or other similar outer garments may be worn in occupational exposure situations. The type of garment will be selected based on the degree of anticipated exposure. Employees should contact their supervisor or Environmental Health if they have any questions concerning the type of personal protective apparel appropriate for certain job tasks. Such clothing will not be worn outside of designated work areas.
Surgical caps, hoods, shoe covers, or boots shall be worn in instances when gross contamination can be reasonably anticipated (i.e. autopsies, surgeries, clean-up of a significant release of potentially infectious materials). For routine work situations, close-toed shoes must be worn at all times.

**Use of Personal Protective Equipment**
Employees will use the appropriate personal protective equipment whenever they are potentially exposed to bloodborne pathogens. According to the Federal standard, the employee may temporarily and briefly decline to use this equipment when, in the employee's professional judgement, its use prevents the delivery of health care or poses an increased hazard to the employee or a co-worker. However, Midwestern State University does not encourage this action. When an employee makes this judgement, the circumstances shall be thoroughly investigated in order to determine whether changes can be made to prevent other, similar occurrences.

When an employee makes this judgement, they must submit their decision in writing to their immediate supervisor with a copy sent to the chairperson of the Risk Management / Safety Committee for review and comment.

**Other Safety Equipment**
Other safety equipment which is found in work areas in which employees may be exposed to potentially infectious materials may include the following equipment as determined by the design of the work area:

- ___ An easily accessible drench-type safety shower;
- X A fire extinguisher;
- X An eyewash fountain;
- X A fire alarm, located nearby; and,
- X An easily accessible telephone for emergency use.
Housekeeping Procedures
Housekeeping Procedures
Effective housekeeping is essential to minimize all occupational hazards. Good housekeeping is so important to protect workers from the hazards associated with potentially infectious agents that this section is dedicated to describing the pertinent housekeeping procedures at this facility.

Midwestern State University strives to maintain its work sites in a clean and sanitary condition. To do so, a rigorous cleaning schedule for the various work areas which contain potentially infectious materials has been instituted. Table 5 describes the cleaning protocol used at this facility.

Table 5
Facility Schedule for Cleaning and Method of Decontamination

<table>
<thead>
<tr>
<th>Item or Area</th>
<th>Method of Decontamination</th>
<th>Cleaning Schedule</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bench Tops</td>
<td>Wash with bleach solution or other approved cleanser obtained from stockroom.</td>
<td>After the completion of procedures involving potentially infectious materials. At the end of the work shift, when operations conducted on the bench-top involved potentially infectious materials. When the surface becomes obviously contaminated.</td>
<td>This is an example as to how this particular table should be completed.</td>
</tr>
<tr>
<td>Restrooms</td>
<td>With anti-bacterial cleaning solution as per manufacture's instructions</td>
<td>Restrooms are to be cleaned on a daily basis or on the schedule determined by the custodial supervisor.</td>
<td>Allow plenty of time for the cleanser to achieve a good kill on surfaces treated.</td>
</tr>
<tr>
<td>Walls, Floors and non-porous surfaces</td>
<td>Wash with bleach solution or other approved cleanser obtained from stockroom.</td>
<td>When the surface becomes obviously contaminated.</td>
<td></td>
</tr>
<tr>
<td>Carpet, furniture and other porous materials</td>
<td>Wash with bleach solution or other approved cleanser obtained from stockroom.</td>
<td>When the surface becomes obviously contaminated.</td>
<td>Saturate with cleaning solution and blot with cleaning cloths. Dispose of item as contaminated item if it may not be properly cleaned. Dispose of all cleaning cloths as bio-hazardous waste.</td>
</tr>
</tbody>
</table>
Housekeeping Procedures for Equipment

The following housekeeping procedures for equipment are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

**Decontamination of Equipment**

All equipment and working surfaces will be decontaminated after contact with blood or other potentially infectious materials. Work surfaces will be washed with disinfectant after completion of procedures which lead to contamination of these surfaces.

Work surfaces will be cleaned at the end of the work shift when operations conducted during the shift involve potentially infectious materials. Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and surfaces must be replaced as soon as feasible when they become overtly contaminated or at the end of the work shift. All bins, pails, cans, and similar receptacles intended for reuse which may be expected to become contaminated with blood or other potentially infectious materials will be routinely inspected, cleaned, and decontaminated. These receptacles shall also be immediately decontaminated whenever they become visibly contaminated.
Housekeeping Procedures for Sharps

The following housekeeping procedures for sharps are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

Broken glassware which may be contaminated, will never be picked up directly with the hands. A brush and dustpan, tongs, or forceps will be used to clean up this broken glassware. Employees must wear gloves every time they clean up broken glassware.

Housekeeping Procedures for Waste Materials.

The following housekeeping procedures for waste materials are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens. For disposal of biologically hazardous materials contact Mgr., Facilities Information and University Health/Safety at 4032.

Waste Sharps

Contaminated sharps must be discarded immediately after use. Containers for waste sharps shall be:

- Closable.
- Puncture resistant.
- Leak-proof on sides and bottom.
- Labeled/color-coded according to the Federal standard and the chapter on labels in this document.

The Bloodborne Pathogen Exposure Control Plan
- 30 -
• Easily accessible to personnel (i.e. found close to the work areas where potentially infectious materials are handled).
• Maintained upright throughout use.
• Replaced routinely and not allowed to be overfilled.

When moving containers of contaminated sharps from the area of use, the containers will be closed immediately prior to removal to prevent the accidental release of contents or placed in a secondary container if leakage is possible. This secondary container must be closable, constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping and labeled/color-coded according to the Federal standard and the section designated "Label Requirements" in this document.

**Containers for Other Potentially Infectious Wastes**

Containers for other potentially infectious wastes generated during operations conducted at Midwestern State University must be:

• Closable.
• Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping.
• Labeled/color-coded according to the Federal standard and the section entitled "Label Requirements" in this document.
• Closed prior to removal to prevent the accidental release of materials.

If outside contamination of the waste container occurs, the primary container will be placed in a secondary container. This secondary container must be closable, constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping, labeled/color-coded according to the Federal standard and the
section designated "Label Requirements" in this document, and closed prior to removal to prevent the accidental release of materials.

**Housekeeping Procedures for Laundered Items**

The following housekeeping procedures for items to be laundered are mandatory under the Bloodborne Pathogen Standard, 29 CFR 1910.1030. These procedures have been implemented by this university and must be followed by employees who are potentially exposed to bloodborne pathogens.

Contaminated laundry will be handled as little as possible with a minimum of agitation. Contaminated laundry will be containerized in the area of use and shall not be sorted or rinsed in the location of use. Wet laundry which presents a potential leak problem will be placed in leak-proof containers. Contaminated laundry will be placed in containers which are labeled/color-coded according to the Federal standard and the section on labels in this document.

*Special Note: According to the Federal standard, facilities that utilize Universal Precautions in the handling of all soiled laundry, the labeling or color-coding of laundry containers is not necessary if alternative labeling or color-coding permits all employees to recognize Universal Precautions must be used with these items. This exemption only applies while such containers remain within the facility. Labeling/color-coding is mandated for those containers when they leave the facility. However, it is prudent practice to label ALL containers with the contents of the container and their associated hazard.*

Employees who have contact with contaminated laundry must wear gloves and other appropriate personal protective equipment, as deemed necessary for the safe handling of this laundry. Employees should contact their supervisor or the Mgr., Facilities Information and Univ. Health/Safety if they have any question concerning the type of personal protective apparel appropriate for certain job tasks.
Additional Housekeeping Procedures

The following procedures are prudent practices, not mandated by the Federal standard but nonetheless implemented by Midwestern state University. Floors need to be cleaned regularly. Accumulated dust and other solid particulate may pose respiratory hazards. Stairways and hallways cannot be used for storage. Access to exits and emergency equipment should never be blocked.
Employee Exposure Situations and Safe Work Practices
Employee Exposure Situations and Safe Work Practices

The previous chapters describe strategies for "Employee Exposure Determinations" (these procedures identify employees who are most likely to experience occupational exposures to bloodborne pathogens) and "Methods of Compliance" (procedures which ensure employee protection from occupational exposures to bloodborne pathogens). This chapter combines these two issues to describe typical employee exposure situations and how to address exposure hazards through specific safe work practices.

Job classifications and work tasks for numerous occupations impacted by the standard are provided in a series of tables in this section. Following every table is a description of safe work practices for each group. The aim of safe work practices is to eliminate or reduce the exposure hazards which are associated with the work tasks listed in each table. These procedures are based on the recommendations of the Center for Disease Control.*

Universal Precautions in Safe Work Practices

Since medical history and examinations cannot reliably identify all persons infected with bloodborne pathogens, precautions must be used by employees to prevent any contact with blood and bodily fluids. This approach, which is recommended by the Center for Disease Control, is referred to as "Universal Blood and Bodily Fluid Precautions" or "Universal Precautions."

The following safe work practices for health care workers are advocated by the Center for Disease Control. When the term Universal Precautions is given in the remainder of this chapter, it will refer to the following set of work practices.

1. All health care workers will use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or bodily fluids is anticipated.
2. Gloves must be worn when touching blood, bodily fluids, mucous membranes, or non-intact skin.
3. Gloves must be worn when handling items or surfaces contaminated with blood or bodily fluids.
4. Gloves must be worn while performing venipuncture and other vascular access procedures.
5. Gloves must be changed after contact with each patient.
6. Masks and protective eyewear or face shields should be worn during procedures that are likely to generate droplets of blood or other bodily fluids in order to prevent exposures of the mucous membranes of the mouth, nose, and eyes.
7. Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other bodily fluids.
8. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
9. Hands should be immediately washed after gloves are removed.
10. Employees must take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during or after medical procedures, when cleaning instruments, and during disposal of used needles.

11. To prevent needle-stick injuries, needles should not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand.

12. After they are used, disposable syringes, needles, scalpel blades, and other sharp items must be placed in puncture-resistant containers for disposal. These containers should be as close as practical to the area where disposable sharps are used.

13. Mouth pieces, resuscitation bags, or other ventilation devices should be available for use in areas in which the need for resuscitation procedures is reasonably anticipated.

14. Health care workers who have exudative lesions or weeping dermatitis must refrain from handling patients and patient-care equipment until the condition is resolved.

**Exposure Determination for Midwestern State University**

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency.
At this facility the following job classifications are in this category:

<table>
<thead>
<tr>
<th>Job Classifications (Employees expected to incur occupational exposure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinson Health Center Medical Staff</td>
</tr>
<tr>
<td>Health Sciences Faculty and Staff</td>
</tr>
<tr>
<td>Dental Hygiene Faculty and Staff</td>
</tr>
<tr>
<td>Athletics Faculty and Staff</td>
</tr>
<tr>
<td>University Police</td>
</tr>
</tbody>
</table>

In addition, OSHA requires a listing of job classifications which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows:
<table>
<thead>
<tr>
<th>Job Classification (Employees who may incur occupational exposure)</th>
<th>Tasks/Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education (Kinesiology) Faculty and Staff</td>
<td>First aid treatment of student injured during training</td>
</tr>
<tr>
<td>Physical Plant Custodial Staff</td>
<td>When cleaning restrooms, cleaning up blood and other bodily fluids, handling waste, cleaning up broken glass.</td>
</tr>
<tr>
<td>Auxiliary Services Custodial Staff</td>
<td>When cleaning restrooms, cleaning up blood and other bodily fluids, handling waste, cleaning up broken glass.</td>
</tr>
<tr>
<td>Housing Custodial Staff</td>
<td>When cleaning restrooms / rooms, cleaning up blood and other bodily fluids, handling waste, cleaning up broken glass.</td>
</tr>
<tr>
<td>Plumbers</td>
<td>When working on restroom fixtures, dislodging foreign objects from drainage lines, repair or maintenance of medical suction system at Bridwell Hall.</td>
</tr>
<tr>
<td>Grounds Keepers</td>
<td>When handling waste from campus and sporting activities.</td>
</tr>
</tbody>
</table>
Potential Exposure Situations for Medical Staff

The following descriptions are geared toward the general duties associated with nursing, physical-care, and other medical activities. Activities associated with specialized medical fields may not be fully represented. The MSU location supervisor should review the following table and make the appropriate additions and corrections.
### Potential Exposure Situations for Medical Staff

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Staff: Nurses, Physicians, etc.</td>
<td>Handling patients.</td>
<td>Contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Handling syringes, needles.</td>
<td>Accidental self-inoculation, needle-sticks.</td>
</tr>
<tr>
<td></td>
<td>Handling vials, other containers of blood and bodily fluids.</td>
<td>Breakage of containers may lead to contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Working with medical hand pieces and equipment containing blood or bodily fluids.</td>
<td>Cuts and pricks from equipment; contact with infectious materials from spills, splashes, and routine equipment-handling procedures.</td>
</tr>
<tr>
<td></td>
<td>Preparing samples of blood or other bodily fluids for microscopic examination.</td>
<td>Cutting finger on sharp edges of slide/cover slip. Exposure through non-intact skin.</td>
</tr>
<tr>
<td></td>
<td>Pulmonary function test administration.</td>
<td>Aerosol droplet contamination.</td>
</tr>
<tr>
<td></td>
<td>Administration of Cardio-Pulmonary Resuscitation.</td>
<td>Contact with saliva, open wounds of the mouth, aerosol droplets.</td>
</tr>
<tr>
<td></td>
<td>Cleaning and disposal of incontinent stool, urine emesis.</td>
<td>Contact with bodily fluid, accidental spillage.</td>
</tr>
<tr>
<td></td>
<td>Involvement in invasive procedures. (Invasive procedures are defined as surgical entry into tissues, cavities, or organs and repair of major traumatic injuries).</td>
<td>Contact with large amounts of blood or other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Assisting with births.</td>
<td>Contact with blood, placental fluids, other bodily fluids.</td>
</tr>
</tbody>
</table>
Safe Work Practices for Medical Staff

The following safe work practices apply to the general duties associated with nursing, physician-care, and other medical activities. Practices which should be implemented during activities associated with specialized medical fields may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Follow Universal Precautions at all times.
2. Health care workers who participate in invasive procedures must wear gloves and surgical masks.
3. Protective eyewear or face shield should be worn for invasive procedures that commonly result in the generation of droplets, splashing of blood, other bodily fluids, or bone chips.
4. Gowns or aprons should be worn during invasive procedures that are likely to result in the splashing of blood or other bodily fluids.
5. All health care workers who assist in vaginal or cesarean deliveries should wear gloves and gowns when handling the placenta or infant until the blood and amniotic fluid have been removed from the infant's skin and should wear gloves during post-delivery care of the umbilical cord.
6. If a glove is torn, the glove must be removed, hands washed, and replaced promptly.
7. If needle-stick or other instrument-related injury occurs, the needle or instrument involved in the incident should be removed from the sterile field.
The following descriptions are geared toward the general duties associated with dentistry. Activities associated with specialized dental fields may not be fully represented. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

**Potential Exposure Situations for Dental Staff**

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentists and Dental Staff</td>
<td>Handling patients.</td>
<td>Contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Handling syringes, needles.</td>
<td>Accidental self-inoculation, needle-sticks.</td>
</tr>
<tr>
<td></td>
<td>Handling materials to make dental impressions, bite registrations, etc.</td>
<td>Contact with blood and blood-contaminated saliva.</td>
</tr>
<tr>
<td></td>
<td>Working with equipment containing blood or bodily fluids.</td>
<td>Accidental contact with potentially infectious materials from spills, splashes, and routine equipment-handling procedures.</td>
</tr>
<tr>
<td></td>
<td>Involvement in invasive procedures.</td>
<td>Contact with large amounts of blood or other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>General dental work.</td>
<td>Accidental bites; contact with blood-contaminated saliva; contact with open mouth sores.</td>
</tr>
<tr>
<td></td>
<td>Cleaning teeth with dental picks and scrapers.</td>
<td>Finger prick from blood contaminated pick or scraper.</td>
</tr>
<tr>
<td></td>
<td>Using drills, polishers, and other handpieces.</td>
<td>Contact with handpieces that are contaminated with blood, saliva, other bodily fluids.</td>
</tr>
</tbody>
</table>
**Safe Work Practices for Dental Staff**

The following safe work practices apply to the general duties associated with dentistry. Practices which should be implemented during activities associated with specialized dental fields may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Follow Universal Precautions at all times.
2. Dental staff participating in invasive procedures must wear gloves and surgical masks.
3. Protective eyewear or face shield should be worn for invasive dental procedures that commonly result in the generation of droplets, splashing of blood, or other bodily fluids.
4. Rubber dams, high-capped evacuation, and proper patient positioning should be used to minimize generation of droplets and spatter during dental procedures.
5. Gowns or aprons should be worn during invasive dental procedures that are likely to result in the splashing of blood or other bodily fluids.
6. If a glove is torn, the glove must be removed, hands washed, and replaced promptly.
7. If needle-stick of other instrument-related injury occurs, the needle or instrument involved in the incident should be removed from the immediate area.
8. Handpieces (i.e. drills, polishers) must be sterilized after use with each patient, because blood, saliva, or gingival fluid of patients may be aspirated into the handpiece or the water line.
9. Handpieces that cannot be sterilized should be flushed, the outside surface wiped with a germicidal agent, and then rinsed.
10. Handpieces should be flushed at the beginning of the day and after use with each patient.

11. Ultrasonic scalers and air-water syringes should also be flushed with germicidal agents at the beginning of the day and after use with each patient.

12. Blood and saliva must be thoroughly cleaned from materials that have been used in the mouth (i.e. impression materials, bite registration), especially before polishing and grinding intra-oral devices.

13. Contaminated materials, impressions, and intra-oral devices should also be cleaned and disinfected before being handled in the dental laboratory and before they are placed in the patient's mouth.

14. Dental equipment and surfaces that are difficult to disinfect (i.e. light handles, X-ray unit heads) and that may be contaminated should be wrapped with impervious-backed paper, aluminum foil, or clear plastic wrap. The coverings should be removed and discarded, and clean coverings should be put in-place after use with each patient.
Potential Exposure Situations for Medical and Dental Laboratory Staff

The following descriptions are geared toward the general duties associated with work in medical and dental laboratories. Activities associated with specialized research or diagnostic procedures may not be fully represented. The MSU location supervisor should review the following table and make the appropriate additions and corrections. Though there are no specific laboratories that deal with human tissues and fluids, the potential for medical and dental personnel to be exposed to the hazards associated with the laboratory setting may still exist.
## Potential Exposure Situations for Medical and Dental Laboratory Staff

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical and Dental Laboratory Staff</td>
<td>Handling syringes, needles.</td>
<td>Accidental self-inoculation, needle-sticks.</td>
</tr>
<tr>
<td></td>
<td>Handling vials, other containers of blood and bodily fluids.</td>
<td>Breakage of containers may lead to contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Working with equipment containing blood or bodily fluids.</td>
<td>Accidental contact with potentially infectious materials from spills, splashes, and routine equipment-handling procedures.</td>
</tr>
<tr>
<td></td>
<td>Preparing samples of blood or other bodily fluids for microscopic examination.</td>
<td>Cutting finger on sharp edges of slide/cover slip.</td>
</tr>
<tr>
<td></td>
<td>Collecting and testing specimens of blood, other bodily fluids.</td>
<td>Accidental self-injection. Spillage of fluids. Aerosol droplet contamination.</td>
</tr>
<tr>
<td></td>
<td>Separating serum fractions using centrifuge.</td>
<td>Splashing blood by opening centrifuge lid before rotor has stopped spinning.</td>
</tr>
<tr>
<td></td>
<td>Handling materials to make dental impressions, bite registrations, etc. or medical impressions to develop prosthetic devices.</td>
<td>Contact with blood and blood-contaminated saliva.</td>
</tr>
<tr>
<td></td>
<td>Working with specialized glassware and other apparatus during experiments.</td>
<td>Breakage of glassware, leakage from lines, or other problems can lead to contact with, other bodily fluids, or solutions containing high concentrations of bloodborne pathogens.</td>
</tr>
<tr>
<td></td>
<td>Working at laboratory benches and other areas where potentially infectious materials are handled.</td>
<td>Contact with blood, other potentially infectious materials which may or may not be obviously contaminated.</td>
</tr>
<tr>
<td></td>
<td>Using blenders and sonicators.</td>
<td>Generation of body fluid droplets.</td>
</tr>
</tbody>
</table>
Safe Work Practices for Medical and Dental Laboratory Staff

The following safe work practices apply to the general duties associated with research and diagnostic activities in dental and medical laboratories. Practices which should be implemented during activities associated with specialized diagnostic and research activities may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Follow Universal Precautions at all times.

2. Protective eyewear should be worn or protective shield worn in laboratories when working with blood or other potentially infectious materials.

3. Face shields should be worn for procedures that commonly result in the generation of droplets, splashing of blood, or other bodily fluids.

4. Laboratory coats should be worn when conducting laboratory procedures. Additional protection, such as gowns or aprons, should be worn during procedures in which the splashing of blood or other bodily fluids can be reasonably anticipated.

5. Gloves should be worn during all procedures which involve the handling of items containing or contaminated with blood, or in areas where there may be places (such as benches) which could be contaminated with potentially infectious materials.

6. If a glove is torn, the glove must be removed, hands washed, and replaced promptly.

7. Gloves should be changed and hands washed after completion of specimen processing.
8. All specimens of blood and bodily fluids should be put in a well-constructed container with a secure lid to prevent leaking during transport.

9. Care should be taken when collecting each specimen to avoid contaminating the outside of the container and laboratory form accompanying the specimen.

10. For routine procedures, such as histologic and pathologic studies or microbiological culturing, a biological safety cabinet is not necessary.

11. Biological safety cabinets should be used whenever procedures are conducted that have a high potential for generating droplets.

12. Mechanical pipetting devices should be used for manipulating all liquids in the laboratory. Mouth pipetting should never be done.

13. Use of needles and syringes should be limited to situations in which there is no alternative.

14. Laboratory work surfaces should be decontaminated with an appropriate chemical germicide after a spill of blood or other bodily fluids and when work activities are completed.

15. Scientific equipment that has been contaminated with blood or other bodily fluids should be decontaminated and cleaned before being repaired in the laboratory or transported to a repair firm.

16. All equipment should be cleaned with a chemical germicide immediately after completion of laboratory procedures. Contaminated equipment should never be stored without the appropriate Biohazard label (an example is given in the chapter entitled "Label Requirements" in this document).

17. All laboratory staff must wash their hands after completing activities and must remove protective clothing before leaving the laboratory.
Potential Exposure Situations for Research Staff at Other Laboratory Facilities

The following descriptions are geared toward the general duties associated with work in research laboratories in which materials containing bloodborne pathogens may be handled. Activities associated with specialized research procedures may not be fully represented. The MSU location supervisor should review the following table and make the appropriate additions and corrections.
### Potential Exposure Situations for Research Staff at Other Laboratory Facilities

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Laboratory Staff at Midwestern State University</td>
<td>Handling syringes, needles.</td>
<td>Accidental self-inoculation, needle-sticks</td>
</tr>
<tr>
<td></td>
<td>Handling vials, other containers of blood and bodily fluids.</td>
<td>Breakage of containers may lead to contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Working with equipment containing blood or bodily fluids.</td>
<td>Accidental contact with potentially infectious materials from spills, splashes, and routine equipment-handling procedures.</td>
</tr>
<tr>
<td></td>
<td>Preparing samples of blood or other bodily fluids for microscopic examination.</td>
<td>Cutting finger on sharp edges of slide/cover slip. Exposures through non-intact skin.</td>
</tr>
<tr>
<td></td>
<td>Collecting and testing specimens of blood, other bodily fluids.</td>
<td>Accidental self-injection. Spillage of fluids. Aerosol droplet contamination.</td>
</tr>
<tr>
<td></td>
<td>Work with centrifuges, sonicators, blenders.</td>
<td>Splashes and sprays of blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>General animal work with specimens infected with bloodborne pathogens.</td>
<td>Accidental bites; contact with blood and other animal body fluids; handling animal tissue samples.</td>
</tr>
<tr>
<td></td>
<td>Working with specialized glassware and other apparatus during experiments.</td>
<td>Breakage of glassware, leakage from lines, or other problems can lead to contact with, other bodily fluids, or solutions containing high concentrations of bloodborne pathogens.</td>
</tr>
<tr>
<td></td>
<td>Working at laboratory benches and other areas where potentially infectious materials are handled.</td>
<td>Contact with blood, other potentially infectious materials at sites which may or may not be obviously contaminated.</td>
</tr>
</tbody>
</table>
Safe Work Practices for Research Staff at Laboratory Facilities

The following safe work practices apply to the general duties associated with research activities in laboratories. Practices which should be implemented during activities associated with specialized research procedures may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Follow Universal Precautions at all times.
2. Protective eyewear should be worn in laboratories at all times.
3. Face shields should be worn for procedures that commonly result in the generation of droplets, splashing of blood, or other bodily fluids.
4. Laboratory coats should be worn when conducting laboratory procedures. Additional protection, such as gowns or aprons, should be worn during procedures in which the splashing of blood or other bodily fluids can be reasonably anticipated.
5. Gloves should be worn during all procedures which involve the handling of items containing or contaminated with blood, or in areas where there may be places (such as benches) which could be contaminated with potentially infectious materials.
6. If a glove is torn, the glove must be removed, hands washed, and replaced promptly.
7. Gloves should be changed and hands washed after completion of specimen processing.
8. All specimens of blood and bodily fluids should be put in a well-constructed container with a secure lid to prevent leaking during transport.
9. Care should be taken when collecting each specimen to avoid contaminating the outside of the container and laboratory form accompanying the specimen.

10. For routine procedures, such as histologic and pathologic studies or microbiological culturing, a biological safety cabinet is not necessary.

11. Biological safety cabinets should be used whenever procedures are conducted that have a high potential for generating droplets.

12. Mechanical pipetting devices should be used for manipulating all liquids in the laboratory. Mouth pipetting should never be done.

13. Use of needles and syringes should be limited to situations in which there is no alternative.

14. Laboratory work surfaces should be decontaminated with an appropriate chemical germicide after a spill of blood or other bodily fluids and when work activities are completed.

15. Scientific equipment that has been contaminated with blood or other bodily fluids should be decontaminated and cleaned before being repaired in the laboratory or transported to a repair firm.

16. All equipment should be cleaned with a chemical germicide immediately after completion of laboratory procedures. Contaminated equipment should never be stored without the appropriate Biohazard label (an example is given in the chapter entitled "Label Requirements" in this document).

17. All laboratory staff must wash their hands after completing activities and must remove protective clothing before leaving the laboratory.

18. If large-scale studies are done, restricted access facilities should be made available.
19. Procedures for animal work can be developed which minimize the formation and dispersal of contaminated aerosols, including those from food, urine, and feces. Such procedures may include using HEPA filtered vacuum equipment for cleaning and moistening contaminated bedding before removing from cage.

20. Workers who handle animals should wear plastic or runner gloves, fully buttoned laboratory coat or jumpsuit, and any other safety apparel appropriate.

21. Disposal procedures for contaminated animal tissue, feces, and urine are the same as those for other potentially infectious materials.
Potential Exposure Situations for Employees of Law Enforcement Agencies

The following descriptions are geared toward the general duties associated with law enforcement. Procedures specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement Employees: Police Officers</td>
<td>Contact with drug paraphernalia during raid.</td>
<td>Accidental self-inoculation and needle-sticks.</td>
</tr>
<tr>
<td></td>
<td>First-aid on victims of accidents, violence, or those experiencing medical emergencies.</td>
<td>Contact with blood or other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Administration of Cardio-Pulmonary Resuscitation.</td>
<td>Contact with saliva, open wounds of the mouth, aerosol droplets.</td>
</tr>
<tr>
<td></td>
<td>Handling uncooperative individuals.</td>
<td>Getting bitten. Contact with blood, other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Contact with knives and other weapons.</td>
<td>Cuts from potentially contaminated items.</td>
</tr>
<tr>
<td></td>
<td>Processing of crime scene during investigations.</td>
<td>Contact with blood, other bodily fluids, potentially contaminated item or surfaces.</td>
</tr>
</tbody>
</table>
Safe Work Practices for Employees of Law Enforcement Agencies

The following safe work practices apply to the general duties associated with law enforcement operations. Practices that should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Gloves must be worn by law enforcement employees whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they conduct their operations.
2. Gloves must be worn when handling items or surfaces obviously contaminated with blood or bodily fluids.
3. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands should be immediately washed after gloves are removed.
5. Employees must take precautions to prevent injuries caused by needles, syringes and other sharp objects. Law enforcement employees should always pay attention to their hands whenever they handle needles, syringes, and other sharp objects.
6. Mouthpieces, resuscitation bags, or other ventilation devices should be available to those officers who may reasonably be expected to perform CPR.
7. Clothing which becomes contaminated with blood or other bodily fluids during operations should be removed immediately (or as soon as possible) and separated from the clothing until properly laundered.
8. Areas and equipment which become contaminated with blood or other bodily fluid should be cleaned immediately with a bleach solution (1:10 dilution of household bleach, changed weekly).
9. Whenever employees handle uncooperative individuals, they should attempt to keep the individual's back towards themselves. This way, the opportunity to be bitten is minimized because the individual is facing away from the employee. Employees should always obtain additional assistance whenever they handle an uncooperative individual.
Potential Exposure Situations for Instructors, Coaches, Trainers and Life-Guards

The following descriptions are geared toward the general duties associated with Instructors, coaches, trainers and life-guards. Procedures specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructors, Coaches, Trainers and Life-Guards</td>
<td>First-aid on accident victims or those experiencing medical difficulties.</td>
<td>Contact with blood, other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Administration of Cardio-Pulmonary Resuscitation (CPR) on victims or drowning victims.</td>
<td>Contact with saliva, open sores in and around mouth, and other bodily fluids.</td>
</tr>
</tbody>
</table>

Safe Work Practices for Instructors, Coaches, Trainers and Life-Guards

The following safe work practices apply to the general duties associated with life-guard operations. Practices which should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.
1. Gloves must be worn by life-guards whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they provide life-saving services.

2. Gloves must be worn when handling items of surfaces obviously contaminated with blood or bodily fluids.

3. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.

4. Hands should be immediately washed after gloves are removed.

5. Employees must take precautions to prevent injuries caused by needles, syringes, and other sharp objects.

6. Mouthpieces, resuscitation bags, and other ventilation devices should be available to those employees who may reasonably be expected to perform CPR.

7. Clothing which becomes contaminated with blood or other bodily fluids during responses should be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.

8. Areas and equipment which become contaminated with blood or other bodily fluids should be cleaned immediately with a bleach solution (1:10 dilution of household bleach, changed weekly).

Potential Exposure Situations for Designated First Aid and CPR Responders

The following descriptions are geared toward the general duties associated with individuals tasked by Midwestern State University to be Designated First Aid/CPR Responders. Procedures specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.
### Potential Exposure Situations for
Designated First Aid and CPR Responders

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designated First Aid and CPR</td>
<td>First-aid on accident victims of those experiencing medical difficulties.</td>
<td>Contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td>Responders</td>
<td>Performing Cardio-Pulmonary Resuscitation on patients.</td>
<td>Contact with saliva, open sores in and around mouth, and other bodily fluids.</td>
</tr>
</tbody>
</table>

### Safe Work Practices for Designated First Aid/CPR Responders

The following safe work practices apply to the general duties associated with first aid and CPR practices. Practices that should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Gloves must be worn by Designated First Aid/CPR Responders whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they provide first aid or CPR procedure.
2. Gloves must be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands should be immediately washed after gloves are removed.
5. Employees must take precautions to prevent injuries caused by needles, syringes, and other sharp objects.
6. Mouthpieces, resuscitation bags, and other ventilation devices should be available to those employees who may reasonably be expected to perform CPR.
7. Clothing which becomes contaminated with blood to other bodily fluids during responses should be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.

8. Areas and equipment which become contaminated with blood or other bodily fluids should be cleaned immediately with a bleach solution (1:10 dilution of household bleach, changed weekly).
Potential Exposure Situation for Employees of Custodial Services

The following descriptions are geared toward the general duties associated with custodial services. Procedures specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

**Potential Exposure Situations for Employees of Custodial Services**

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custodian</td>
<td>Cleaning sinks, toilets, other bathroom fixtures.</td>
<td>Contact with blood and other bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Clean-up of vomit, other bodily fluids.</td>
<td>Contact with potentially infectious fluids and materials.</td>
</tr>
<tr>
<td></td>
<td>Removal of waste.</td>
<td>Contact with feminine sanitary items and other potentially contaminated materials. Handling disposed syringe needles and other potentially contaminated sharps.</td>
</tr>
<tr>
<td></td>
<td>General site clean-up.</td>
<td>Contact with disposed syringe needles, disposed personal items, and other potentially infectious materials.</td>
</tr>
</tbody>
</table>
Safe Work Practices for Custodial Employees

The following safe work practices apply to the general duties associated with custodial services. Practices which should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Gloves must be worn by employees whenever they anticipate touching blood, bodily fluids, and mucous membranes while they conduct their operations.
2. Gloves must be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands should be immediately washed after gloves are removed.
5. Employees should wear eye protection whenever they are cleaning toilets, sinks, or other facilities.
6. Employees must take precautions to prevent injuries caused by needles, syringes, and other sharp objects.
7. Clothing which becomes contaminated with blood to other bodily fluids during responses should be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.
8. Areas and equipment which become contaminated with blood or other bodily fluids should be cleaned immediately with a bleach solution (1:10 dilution of household bleach, changed weekly) or a designated cleaner.
Potential Exposure Situations for Employees of Linen and Laundry Services

The following descriptions are geared toward the general duties associated with linen and laundry services. Procedures specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

### Potential Exposure Situations for Employees of Linen and Laundry Services

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees at linen and laundry service facilities</td>
<td>Handling linens, uniforms, etc.</td>
<td>Contact with blood, bodily fluids.</td>
</tr>
<tr>
<td></td>
<td>Sorting linens, uniforms, etc.</td>
<td>Accidental needle-sticks from improperly discarded needles and syringes.</td>
</tr>
</tbody>
</table>

### Safe Work Practices for Employees of Linen and Laundry Services

The following safe work practices apply to the general duties associated with linen and laundry services. Practices which should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Gloves must be worn by employees whenever they anticipate working with laundry and linen items from medical and dental facilities. Gloves must be worn when handling items obviously contaminated with blood or other bodily fluids.
2. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids. Hands should be immediately washed after gloves are removed.
3. Employees must take precautions to prevent injuries caused by needles, syringes, and other sharp objects.
4. All soiled linen should be bagged at the location where it was used. Linen should not be rinsed or sorted in patient-care areas.

5. Soiled linen should be handled as little as possible and with minimum agitation to prevent gross microbial contamination of the air and of employees handling the linen.

6. Employee clothing which becomes contaminated with blood to other bodily fluids during responses should be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.

7. If hot water is used to launder linen, the linen should be washed with detergent in water that is at least 71°C (160°F). If the linen is laundered at lower temperatures, laundry services must use appropriate low-temperature detergents.
Potential Exposure Situations for Employees of Waste Disposal Services

Safe Work Practices for Employees of Waste Disposal Services

The following descriptions are geared toward the general duties associated with waste disposal services. Practices specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

Potential Exposure Situations for Employees of Waste Disposal Services

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Removal and Disposal Service Employees</td>
<td>Re-containerizing materials.</td>
<td>Accidental stick and cuts from improperly discarded needles, syringes, and other sharps.</td>
</tr>
<tr>
<td></td>
<td>Handling waste materials labeled with &quot;Biohazard&quot; symbol.</td>
<td>Contact with blood, bodily fluids, and other potentially infectious materials.</td>
</tr>
<tr>
<td></td>
<td>Handling waste containers.</td>
<td>Contact with potentially infectious materials contaminating the outside of the container.</td>
</tr>
</tbody>
</table>

Safe Work Practices for Employees of Waste Disposal Services

The following safe work practices apply to the general duties associated with waste disposal. Practices which should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.
1. Gloves must be worn by employees whenever they anticipate touching wastes marked with a "Biohazard" symbol, or wastes from medical, dental, or biotechnology facilities.
2. Gloves must be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands should be immediately washed after gloves are removed.
5. Employees should wear eye protection whenever they handle waste containers.
6. Employees must take precautions to prevent injuries caused by needles, syringes, and other sharp objects.
7. Clothing which becomes contaminated with blood to other bodily fluids during waste disposal operations should be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.
8. Areas and equipment which become contaminated with blood or other bodily fluids should be cleaned immediately with a bleach solution (1:10 dilution of household bleach, changed weekly).
Potential Exposure Situations for Employees of Plumbing Services

**Safe Work Practices for Employees of Plumbing Services**

The following descriptions are geared toward the general duties associated with plumbing services. Practices specific to certain operations may not be fully described. The MSU location supervisor should review the following table and make the appropriate additions and corrections.

**Potential Exposure Situations for Employees of Plumbing Services**

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Work Task</th>
<th>Exposure Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumbers</td>
<td>Dislodging obstructions from drain lines.</td>
<td>Accidental stick and cuts from improperly discarded needles, syringes, and other sharps.</td>
</tr>
<tr>
<td></td>
<td>Replacement or repair of restroom fixtures</td>
<td>Contact with blood, bodily fluids, other potentially infectious materials.</td>
</tr>
<tr>
<td></td>
<td>Service and repair of the medical evacuation system plumbing and associated waste plumbing in Bridwell Hall</td>
<td>Contact with potentially infectious materials contaminating the plumbing system of the system, the vacuum pump assembly and the waste line through which the waste is disposed into the sewer.</td>
</tr>
</tbody>
</table>
**Safe Work Practices for Employees of Waste Disposal Services**

The following safe work practices apply to the general duties associated with waste disposal. Practices which should be implemented during specific situations may not be fully represented. The MSU location supervisor should review the following list of procedures and make the appropriate additions and corrections.

1. Gloves must be worn by employees whenever they anticipate touching wastes marked with a "Biohazard" symbol, or wastes from medical, dental, or biotechnology facilities.
2. Gloves must be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces should be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands should be immediately washed after gloves are removed.
5. Employees should wear eye protection whenever they are working on waste or vacuum lines where the potential for a spray or splatter exist.
6. Employees must take precautions to prevent injuries caused by needles, syringes, and other sharp objects.
7. Clothing which becomes contaminated with blood to other bodily fluids during plumbing operations should be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.
8. Areas and equipment which become contaminated with blood or other bodily fluids should be cleaned immediately with a bleach solution (1:10 dilution of household bleach, changed weekly).
Procedures for Hepatitis B Vaccinations and Medical Evaluations
Hepatitis B Vaccinations

Hepatitis B vaccinations are an important part of the Exposure Control Program which has been instituted at this facility. In keeping with the university's concerns for employee safety and the criteria that this facility must meet under the Bloodborne Pathogen Standard, Midwestern State University has implemented the guidelines described in this chapter for the Hepatitis B vaccination program.

The Hepatitis B vaccine and vaccination series are available to all employees who have occupational exposures to potentially infectious materials. These vaccinations are provided at no cost to the employee and are provided by or under the supervision of a licensed physician (or another licensed healthcare professional).

Booster Vaccinations

If routine booster doses of Hepatitis B vaccine are recommended by the U.S. Public Health Service, these booster shots will be made available to Midwestern State University employees. These vaccinations are provided at no cost to the employee and are provided by a licensed physician (or other licensed healthcare professional).

Obtaining Hepatitis B Vaccinations

In accordance with the requirements of the standard, the Hepatitis B vaccination will be provided to employees after the appropriate information on the Hepatitis B virus is reviewed during training programs. Such training is described in the chapter on training. Vaccinations are provided within 10 working days of initial assignment to all employees who have occupational exposures. Records are maintained at the Environmental Safety Office.
Hepatitis B vaccinations are provided at no cost to all MSU employees at risk of a bloodborne pathogen exposure within 10 working days of their initial assignment to the work areas involving the potential exposure. To schedule your vaccination series contact the Vinson Health Center. Employees who are covered by the HEALTHSELECT or HUMANA Group Benefits Plans receive the vaccination series through their primary care Physician with a reimbursement of out of pocket fees from the department. Employees who are not covered still receive the series at no cost; however, the department must cover the expense. The vaccination series is administered by the Vinson Health Center or employee's Primary Care Physician. The employee is allowed to receive the series and follow-up during work hours. If termination or reassignment of duties to an area without exposure potential occurs prior to completion of the series, it becomes the employee's responsibility (and expense) to complete the series if he or she chooses to.

Exemptions to the Hepatitis B Vaccination Program

Employees who have already completed the Hepatitis B vaccination series are exempt from the university's vaccination requirements. Employees for whom antibody testing has revealed an immunity to the Hepatitis B virus or for whom vaccination is contraindicated for medical reasons are also exempt from the vaccination requirements.

Employees who Decline the Hepatitis B Vaccination Series

Employees may decline the Hepatitis B vaccination. When an employee elects not to participate in the Hepatitis B vaccination program, the employee declining treatment must sign the following statement (forms located in Record Keeping section of manual).
Mandated Hepatitis B Vaccination Declination Statement and Sample

I understand that due to my occupation exposure to blood or other potentially infectious materials I may be at risk of acquiring the Hepatitis B Virus infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccination, I continue 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 to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to myself.

_____________________________________   _____________  ______________________
Signature of the Employee                                     Date                Printed / Typed Name

As indicated by the above statement, employees who decline Hepatitis B virus vaccination may receive the vaccination series at a later date. These vaccinations will be provided at no cost to the employee at that time. These vaccinations will be also provided by or under the supervision of a licensed physician (or another licensed health care professional).

Post-Exposure Vaccinations and Medical Evaluations

Post-exposure vaccinations and medical evaluations following an exposure incident are essential to an effective Exposure Control Program. In keeping with this university's concerns for employee safety and the criteria that this facility must meet under the Bloodborne Pathogen Standard, these guidelines have been developed to provide post-exposure evaluations and vaccinations to employees.

Post-exposure vaccinations and medical evaluations are available to all employees who have had an exposure incident. These vaccinations and evaluations are provided at no cost to the employee and are provided by or under the supervision of a
licensed physician (or another licensed health care professional) at a reasonable time and place.

All necessary laboratory tests are conducted by an accredited laboratory. Accreditation of these facilities will be confirmed by the Mgr., Facilities Information and Univ. Health/Safety.

**Availability of Evaluations and their Results**

Confidential medical evaluations and follow-ups will be made available to all affected employees following the report of an exposure incident. These medical evaluations will include the following elements (in accordance with the Bloodborne Pathogen Standard and the university's concerns for employee health and safety):

- Documentation of the routes of exposure and circumstances by which exposure occurred.
- Identification and documentation of the source individual, unless such identification is not possible or prohibited by state or local law.
  - The source individual's blood will be tested as soon as feasible after consent is obtained in order to obtain the person's HIV/HBV status.
  - When the source individual's consent is not required by law, this individual's blood will be tested to determine HIV/HBV status.
  - Then the source individual is already known to be infected with Hepatitis B Virus or Human Immunodeficiency Virus, testing for the person's HIV/HBV status need not be repeated.

Results of the source individual's testing will be made available to the exposed employee. The employee will then be informed of the applicable laws concerning disclosure of the identity and infectious status of the source individual.
Obtaining Post-Exposure Evaluations

Post-exposure evaluations are conducted by physicians at Clinics of North Texas, Industrial Medicine. Midwestern State University location supervisors contact the Mgr., Facilities Information and Univ. Health/Safety to arrange counseling with the Clinics of North Texas, Industrial Medicine. This process is also identified on "Exposure Incident: Form A" located in Section 2 of this manual.

Post-exposure measures designated to prevent the spread of the disease or development of disease symptoms will be made available to the employee, when medically indicated. This program follows the recommendations of the U.S. Public Health Service and includes counseling and evaluation of reported illnesses.

Collection and Testing of Employee Blood Samples

A sample of the employee's blood will be collected as soon as possible after the exposure incident. The sample shall be tested for HIV/HBV status as soon as employee consent is obtained.

If the employee consents to baseline blood collection, but does not give consent at that time for Human Immunodeficiency Virus serological testing, the sample shall be preserved for at least 90 days. If the employee elects to have the baseline sample tested within this 90 day period, such testing will be done as soon as possible after the decision has been made.

The employee is to be counseled in the regard to Workman's Compensation coverage in regard to HIV and other infectious diseases by the Workman's Compensation Coordinator within 36 hours of the incident. The Workman's Compensation Coordinator may be contacted at (940) 397-4827.
Health care Professional's Written Opinion

Workman's Compensation Coordinator will obtain a copy of the evaluating health care professional's written opinion within 15 days of completion of the evaluation. This written opinion will be immediately made available to the employee. The written opinion will then be assigned to the Personnel office for filing.

In terms of Hepatitis B Virus evaluations, the health care professional's written opinion for Hepatitis B vaccination will be limited to whether Hepatitis B vaccination is indicated for the employee, and if the employee has received such vaccination. Written opinions concerning other results of post-exposure evaluations are limited to the following information, in accordance with the regulation:

- An indication that the employee has been informed of the results of the evaluation.
- An indication that the employee has been told about medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

All other findings or diagnoses not specified in the above paragraphs will remain confidential and cannot be included in the written report.

Medical Record-Keeping

The personnel office maintains accurate medical records (in accordance with 29 CFR 1910.20) for employees with occupational exposures. These records include:

- The name and social security number of the employee.
- A copy of the employee's Hepatitis B vaccination status, including the dates of all Hepatitis B vaccinations and any medical records related to the employee's ability to receive such vaccination.
- A copy of all results of examinations, medical testing, and follow-up procedures.
- A copy of the health care professional's written opinion.
- A copy of the exposure information supplied to the health care professional.
These medical records will be kept confidential and will not be disclosed without the employee's expressed written consent to any person within or outside the workplace (except as may be required by law). Personnel Department maintains these records for the duration of an employee's employment plus 30 years thereafter.
Labeling and Marking
Communication of Hazards to Employees

Communication of the hazards associated with blood, blood products, or other potentially infectious materials is extremely important. Midwestern State University provides such hazard information to employees through the use of labels and signs. This university also provides information and training programs which review the hazards associated with bloodborne pathogens. Information on training is provided in the next chapter in training.

Label Requirements

Warning labels will be affixed to containers of regulated waste, refrigerators, and freezers containing blood to other potentially infectious materials. Labels should also be affixed to containers used to store, transport, or ship blood to other potentially infectious material.

Labels must include the universal biohazard symbol and be fluorescent orange or orange-red, with lettering or symbols in a contrasting color. The figure on the right depicts the universal biohazard symbol.

Labels are also required for equipment that has been contaminated with potentially infectious materials. Such labels will meet the requirements described in the previous paragraph. Labels can be obtained through your MSU location supervisor.
**Materials Exempt from Label Requirements**

Red bags or red containers may be substituted for labels. Containers of blood or blood products that are labeled as to their contents and have been released for transfusion of other clinical use, are exempt from these requirements (i.e. the bag does not require the biohazard symbol).

Individual containers placed in a labeled container during storage, transport, shipment, or disposal are also exempt from the label requirements. Regulated waste that has been decontaminated need not be labeled or color-coded. However, it is prudent to label all containers holding potentially infectious materials with the contents and the hazards associated with the materials.
Training Under the Bloodborne Pathogen Standard
Information and Training

Midwestern State University provides all potentially exposed employees with appropriate training, in accordance with the Federal regulation and the university's concerns for employee health and safety. Such training shall be provided:

- At the time of initial assignment to tasks where occupational exposure may occur.
- Within 90 days after the effective date of this program.
- Refresher training is provided annually. Additional refresher training may also be provided to employees on the recommendation of Faculty/Staff Wellness Program or supervisors.

Additional training will be provided when changes in equipment, tasks, or procedures create new potential exposure situations. This additional training will be provided to employees on the recommendation of the supervisor or the Mgr., Facilities Information and Univ. Health/Safety.

Topics Covered During Training

The training programs offered by Midwestern State University include the following elements:

- A general explanation of the modes of transmission of bloodborne pathogens.
- An explanation of the Exposure Control Plan.
- An explanation of the appropriate methods for recognizing tasks that may involve exposure to potentially infectious materials.
- Information on the types, proper use, location, removal, handling decontamination and disposal of personal protective equipment.
- Information on the Hepatitis B vaccine.
- Information on the appropriate actions to take in an emergency involving potentially infectious materials.
• Information on emergency incident reporting procedures and medical evaluations which will be made available.
• Information on post-exposure evaluations and vaccinations that are provided after an exposure incident.
• An explanation of the signs and labels used to convey hazard information.
• An opportunity for interactive questions and answers with the person conducting the training session.

Employees should contact their supervisor or the Mgr., Facilities Information and Univ. Health/Safety if they have any questions concerning these training subjects or when they feel they need additional training.

Training Records

Training records for this facility are kept in the following location(s):
Office of Mgr., Facilities Information and Univ. Health/Safety

These records include the following items:

• The dates of the training session.
• A summary of the training session.
• The names and qualifications of all persons conducting the training.
• The names and the job titles of all persons attending the training sessions.

The training records are maintained for at least three years from the date on which the training occurred.
Record-Keeping Procedures
Record-Keeping Procedures

The OSHA Bloodborne Pathogen Standard describes stringent requirements for the maintenance of medical and training records. This information can be extremely vital in assessing the exposure and health history of the employee. Detailed reviews of the record-keeping procedures specific to medical and training records that are used at Midwestern State University (and required by the Bloodborne Pathogen Standard) are provided in the chapters on medical evaluations and training in this manual. Additional information concerning medical/training records is given in the following sections.

Employee Medical Records

Employee medical records are provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, and to designated representatives of the Federal Occupational Health and Safety Administration. Should an employee leave this facility and be hired by another university, their medical records will be transferred in accordance with the procedures set forth in 29 CFR 1910.20.

Employee Training Records

Employee training records are provided to the subject employee for examination upon request and to anyone having written consent of the subject employee, and to designated representatives of the Federal Occupational Health and Safety Administration.
Maintenance of Records

Table 6 summarizes the record-keeping procedures in place at Midwestern State University for the records required by the Bloodborne Pathogen Standard, as well as other records which may be pertinent to employee health and safety.

**Table 6**

**Record-Keeping Procedures**

<table>
<thead>
<tr>
<th>Record</th>
<th>Location</th>
<th>Responsible Personnel</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>Environmental Safety</td>
<td>Mgr., Facilities Information and Univ. Health/Safety</td>
<td>Required by Bloodborne Pathogen Standard</td>
</tr>
<tr>
<td>Medical</td>
<td>Personnel Office</td>
<td>Director of Personnel</td>
<td>Required by Bloodborne Pathogen Standard</td>
</tr>
<tr>
<td>Inspection</td>
<td>Environmental Safety</td>
<td>Mgr., Facilities Information and Univ. Health/Safety</td>
<td></td>
</tr>
<tr>
<td>Exposure Investigation</td>
<td>Personnel Office</td>
<td>Director of Personnel</td>
<td></td>
</tr>
<tr>
<td>Other: ______</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Schedule for Implementation of the Bloodborne Pathogen Requirements
Schedule for Implementation of the Bloodborne Pathogen Requirements

Table 7, below, outlines the schedule for Midwestern State University's implementation of the applicable elements of the Bloodborne Pathogen Standard. The MSU location supervisor should complete Table 7 by entering the requested information.

**Table 7**

**Schedule for Implementation of Exposure Control Plan**

<table>
<thead>
<tr>
<th>Element of the Standard</th>
<th>Federal Implementation Date</th>
<th>Slated Implementation Date at the MSU Location</th>
<th>Actual Implementation Date at the MSU Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure Control Plan</td>
<td>May 5, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training and Information</td>
<td>June 4, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record-Keeping</td>
<td>June 4, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Controls</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Practices</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Protective Equipment</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housekeeping</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B Vaccination Program</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Exposure Vaccinations and Medical Follow-ups</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labels and Signs</td>
<td>July 6, 1992</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exposure Incident Evaluation
Exposure Incident Evaluation

Exposure incident investigation is a necessary and effective technique for preventing future occurrences. When an exposure occurs, it is vital that supervisors and employees take the opportunity to determine the causes of an incident and to determine how to eliminate them. This section of the Exposure Control Plan describes the incident investigation policies for Midwestern State University.

Exposure Incident Reporting

All exposure incidents must be reported. Employees and supervisors must regard near misses as representing warnings of future exposure incidents. All accidents and incidents should be investigated and the underlying causes determined. An "Exposure Incident Investigation" form is provided in Appendix B of this document.

Immediate Actions to Take in the Event of the Exposure

The safety and health of employees and visitors is of primary concern. Supervisors must insure exposed employees receive the medical attention appropriate to the exposure they received. Call MSU location supervisors to initiate the appropriate exposure incident response procedures.
Secure the Site of the Exposure Incident

During certain incidents, the site of the exposure incident may be isolated for the duration of emergency response procedures and subsequent investigation. Nothing should be removed from the exposure site without approval from the personnel in charge of the situation. Investigations will be more effective if the site is maintained as it was when the exposure occurred, insofar as is possible.

Preserving Evidence

Area supervisors may be required to gather evidence quickly and efficiently. Observing and recording fragile or perishable evidence, reviewing environmental conditions, the use of photography and interviewing witnesses are all techniques used to other data for the subsequent exposure investigation.

Reports

The purpose of exposure incident reporting is to alert and inform people about the circumstances of an accident. The report should be clear an concise and describe the events and details of the investigation. Some of the information that should be in an exposure incident evaluation report (based on the Federal Occupational Safety and Health Administration's Form 101), includes the following items:

- Name of personnel exposed.
- Social Security Number(s).
- Sex and age of exposed personnel.
- Home address.
- Date of exposure incident.
- Occupation at time of exposure.
- Employment category (regular, seasonal, etc.)
- Length of employment.
- Time in occupation or job assignment at time of exposure.
• Specific location of exposure.
• Pathogen (if known) to which personnel were exposed.
• Phase of employee's work day at time of exposure.
• Description of how exposure occurred.
• Sequence of exposure incident.
• Task and activity at time of exposure.
• Posture of employee (i.e. standing at lab bench).
• Supervision at time of exposure.
• Causal factors.
• Nature of exposure part of body contaminated.
• Time of exposure.
• Quantity of material to which personnel were exposed.
• Name and address of physician and hospital performing post-exposure examinations.
• Names of others potentially exposed in same incident.
• Date of subsequent diagnosis of illness resulting from incident.
• Corrective actions.

The form used for Exposure Incident Investigation within this university is given in Appendix B of this document. Exposure incident investigation forms can be found in Mgr., Facilities Information and Univ. Health/Safety Office. All exposure incident investigation records are maintained by the Personnel Department and are located in Hardin Building, Room 210.
Correction of Unsafe Work Conditions

Any hazard or problem identified through employee complaints, routine inspections, or exposure incident investigations are reported to the area supervisor and the Mgr., Facilities Information and Univ. Health/Safety.

When an imminent hazard exists which cannot be immediately abated without endangering employees and/or property, all exposed personnel will be removed from the area except those designated and trained to correct the existing condition.

Exposure incidents which occur at this facility will be reviewed during the training sessions. Items to be discussed during this portion of the training will include:

- Pathogen (if known) to which personnel were exposed.
- Specific location of exposure and description of how exposure occurred.
- Sequence of exposure incident.
- Task and activity at time of exposure.
- Causal factors.
- Nature of exposure and part of body contaminated.
- Corrective actions.
## Appendix A
### Glossary

The following is a summary of important terms which can be found in the OSHA Bloodborne Pathogen Standard and reference materials that are provided to employees as part of this university's information and training programs. Supervisors and employees may wish to review and become familiar with these definitions.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibody:</td>
<td>A molecule made by lymph tissue that defends the body against bacteria, viruses, or other foreign bodies. Also called immunoglobulin.</td>
</tr>
<tr>
<td>Antigen:</td>
<td>A substance foreign to the body that causes the body to produce antibodies.</td>
</tr>
<tr>
<td>Bacteria:</td>
<td>A one-celled microorganism that can cause infection.</td>
</tr>
<tr>
<td>Bloodborne Pathogen:</td>
<td>Pathogenic microorganisms present in human blood and that can cause disease in humans.</td>
</tr>
<tr>
<td>Chain of Infection:</td>
<td>The sequence of events that must occur for an infection to spread.</td>
</tr>
<tr>
<td>Clinical Laboratory:</td>
<td>A workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.</td>
</tr>
<tr>
<td>Communicable:</td>
<td>Capable of being transmitted from person to person.</td>
</tr>
<tr>
<td>Communicable Disease:</td>
<td>Any disease carried from one person or animal to another by direct or indirect contact.</td>
</tr>
<tr>
<td>Contaminated:</td>
<td>Presence or reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.</td>
</tr>
<tr>
<td>Contaminated Laundry:</td>
<td>Laundry which has been soiled with blood or other potentially infectious materials on an item or surface.</td>
</tr>
</tbody>
</table>
Contaminated Sharps: Any contaminated object that can penetrate skin.
Decontamination: The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point they are no longer capable of transmitting infectious particles.
Disease: A condition of abnormal function involving any structure, part, or system of an organism that may or may not stem from an infection.
Engineering Controls: Controls that isolate or remove bloodborne pathogens from the work place.
Exposure Incident: Specific eye, mouth, mucous membrane, non-intact skin, or parenteral contact with blood or potentially infectious materials that result from the performance of an employee's duties.
Hand-Washing Facilities: A facility providing an adequate supply of running potable water, soap, and single use towels or hot air drying machines.
HBV: Hepatitis B Virus.
HIV: Human Immunodeficiency Virus.
Host: Person who becomes diseased by being infected by bacteria, viruses, or fungi.
Infection: The invasion of the body by organisms that reproduce and cause disease.
Infectious Agent: An organism responsible for a disease.
Licensed Health care Professionals: Persons whose legally permitted scope of practices allows them to perform Hepatitis B vaccinations, post-exposure evaluations, and medical follow-ups.
Mode of Transmission: The way in which organisms are carried from reservoirs to hosts.
Occupational Exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of duties.
| Other Potentially Infectious Materials: | These materials include the following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, and saliva in dental procedures. Potentially infectious materials also include any body fluid visibly contaminated with blood and all body fluids in situation where it is difficult to differentiate between body fluids. Other potentially infectious materials also include any unfixed tissue or organ (other than intact skin) from a human (living or dead); 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 Human Immunodeficiency Virus or Hepatitis B Virus. |
| Parenteral: | The action of piercing mucous membranes of the skin barrier through which such events as needle sticks, human bites, cuts, and abrasions. |
| Personal Protective Equipment: | Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (i.e. uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment. |
| Production Facility: | A facility engaged in industrial-scale, large-volume or high concentration production of Human Immunodeficiency Virus or Hepatitis B Virus. |
| Regulated Waste: | Liquid or semi-liquid blood or other potentially infectious materials and contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed. |
Regulated wastes also include items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps, pathological and microbiological wastes containing blood or other potentially infectious materials.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Laboratory</td>
<td>Laboratory producing or using research laboratory-scale amounts of Human Immunodeficiency Virus or Hepatitis B Virus.</td>
</tr>
<tr>
<td>Reservoir</td>
<td>A place where organisms can survive and multiply without necessarily causing or exhibiting disease in a potential host population.</td>
</tr>
<tr>
<td>Route of Entry</td>
<td>The way in which an organism enters a host.</td>
</tr>
<tr>
<td>Source Individual</td>
<td>Any individual, living or dead, whose blood or other potentially infectious fluids may be a source of occupational exposure to the employee.</td>
</tr>
<tr>
<td>Sterilize</td>
<td>The use of physical or chemical procedures to destroy all microbial life.</td>
</tr>
<tr>
<td>Universal Precautions</td>
<td>An infection control approach in which all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.</td>
</tr>
<tr>
<td>Virus</td>
<td>Extremely small microorganisms that can only grow in the cells of other organisms.</td>
</tr>
</tbody>
</table>
Appendix B

Exposure Incident Forms A, B, C
Appendix B: Form A Sample
Bloodborne Pathogen
Exposure Incident Evaluation and Follow Up
Note: all testing is confidential and done at no cost to the employee.

Employee Name:            SSN: __________________________
MSU Location: ________________________________
Describe circumstances of exposure incident: ______________________________________
________________________________________________________

Personal Protective Equipment Used: ___________________________________________

I. Route of Exposure
   ____ needlestick, puncture, laceration
   ____ body fluid contact to skin with breaks, cuts, sores, rashes, etc.
   ____ body fluid contact with eyes, nose, or mouth

II. Source of exposure
   A. Treated/Untreated Waste
      ____ treated medical waste (autoclave/incinerator); requires first aid only
      ____ untreated or unknown status medical waste
   B. Source Individual
      ____ unknown - go to Section III
      ____ known
         ____ refuses to be tested
         ____ consents to testing (HB S AG & HIV)
            ____ HIV neg/HB S AG neg
               Employee gets initial, 3 month, and 6 month HIV
               Employee has HB S AB checked
               If positive (>10), okay
               If negative (<10), give booster & recheck in 1 month
            ____ HIV positive/HB S AG positive - Go to Section III
               Employee has HB S AB checked
               If positive (>10), okay
               If negative (<10), give booster & recheck in 1 month
            ____ HIV negative/HB S AG positive
               Employee gets initial, 3 month, and 6 month HIV
               Employee has HB S AB checked
               If positive (>10), okay
               If negative (<10), give booster & recheck in 1 month
               HIV positive/HB S AG negative - Go to Section III
               Employee has HB S AB checked
               If positive (>10), okay
               If negative (<10), give booster & recheck in 1 month

If employee is a known non-responder to the HB vaccine series & at least 4 have been given, employee
should be given 2 doses of HBIG (0.06mL/kg), 1 as soon as possible after exposure and the second 1
month later.
If employee is unvaccinated, administer HBIG x 1 & initiate the vaccine series.

The Bloodborne Pathogen Exposure Control Plan
- 88 -
III. Exposure Protocol

A. First Aid - immediately clean wound and protect

B. Exposure Incident Counseling
   (conducted by MSU Student Health Service physicians; contact the Faculty/Staff Wellness Program to arrange counseling.)
   1. Employee is informed of:
      ______ potential risk of HIV or HBV infection is extremely low.
      The rate of transmission of HIV from an exposure to blood from an unknown source is extremely low. It is far less likely to become infected with HIV than with HBV; the concentration of the HIV virus is significantly lower than the concentration of HBV virus in blood from infected persons.
      ______ test results from source individual (if tested)
      ______ results of blood tests and medical evaluations.
      ______ any medical condition(s) resulting from the incident that would require further evaluation or treatment.
      ______ in all phases of the follow up, medical information will be needed for HIV blood testing and immunization therapy (both

   2. Employee is advised during the follow up period:
      ______ report any illness that occurs--particularly if fever, rash, fatigue, to refrain from donating blood, semen, or body organs.
      ______ to abstain from or use protective measures during sexual (if female employee) not to breast feed.
      ______ contact the Student Health Service if questions/concerns arise.
      ______ to keep all follow up and/or scheduled appointments.

C. Employee Consent to Baseline Testing
   ______ refuse testing (document; see Form B)
   ______ refuse testing, allows blood sample taken - preserve for 90 days
   ______ consent to test - proceed

D. Follow Up Procedures
   1. HIV precaution - Access current status - ELISA test. If reactive, perform Western Blot Test to confirm.

<table>
<thead>
<tr>
<th></th>
<th>Scheduled Date</th>
<th>Actual Date</th>
<th>Results</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. HBV Precautions
   a. Assess current status (vaccination, pre-existing immunity)
      ■ immunity confirmed
      ■ confirmation unavailable - test for Anti-HBs
         (Antibodies to HB Surface Antigens)
         ■ immunity confirmed
         ■ immunity not confirmed
         (a) give HB Immune Globulin (Gluteal i.m.)
            Date          Signature
         (b) Initiate Vaccine Series

<table>
<thead>
<tr>
<th></th>
<th>Scheduled Date</th>
<th>Actual Date</th>
<th>Given in Deltoid</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Tetanus Precautions
   a. Assess current status
      ■ booster received within last ten years - no action
      ■ booster required
      Date          Signature
      ■ never received tetanus/diphtheria primary series

<table>
<thead>
<tr>
<th></th>
<th>Scheduled Date</th>
<th>Actual Date</th>
<th>Given in Deltoid</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-12 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mail this form to the **Mgr., Facilities Information and Univ. Health/Safety.**
This is confidential information.
Seal and mail this form.
Give the employee a copy.
Appendix B: Form B sample

Employee Informed Refusal of Post-Exposure Medical Evaluation

I, __________________________, am employed by Midwestern State University as a ____________________. My employer has provided training to me regarding infection control and the risk of disease transmission in the ________________________ Department of Midwestern State University.

On _____,_______, I was involved in an exposure incident when I

_____________________________

describe details of needle stick, etc.). My employer has offered to provide follow-up medical evaluation for me in order to assure that I have full knowledge of whether I have been exposed to or contracted an infectious disease from this incident.

However, I, of my own free will and volition, and despite my employer's offer, have elected not to have a medical evaluation. I have personal reasons for making this decision.

_____________________________

Signature

Witness

_____________________________

Name

_____________________________

Address

_____________________________

City State Zip Code

_____________________________

Date

Note: maintain this record for duration of employment plus 30 years. Mail this form to the Mgr., Facilities Information and Univ. Health/Safety.
Appendix B: Form C sample
Exposure Incident Investigation Report for Bloodborne Pathogen Exposure

MSU Location: ____________________________________________

Investigator: ____________________________________________

Date of Exposure Incident: __________ Date Report Completed: __________

Employee Information:

<table>
<thead>
<tr>
<th>Name(s)</th>
<th>Home Address</th>
<th>Age &amp; Sex</th>
<th>Social Security Number</th>
<th>Length of Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Time and location of incident: ____________________________________________

Employee task and activities at time of incident: ____________________________________________

Description of incident/illness: ____________________________________________

Supervisor at time of incident: ____________________________________________

Part(s) of body contaminated: ____________________________________________

The Bloodborne Pathogen Exposure Control Plan
- 92 -
Quantity of potentially infectious materials to which personnel were exposed:
________________________________________________________________________

Name and address of physician and hospital providing post-exposure care:
________________________________________________________________________

What work place condition, practice, or personal protective equipment contributed to the incident?
________________________________________________________________________

Describe corrective actions:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Have corrective measures been taken? ________________________________________

Date of the last area inspection: ____________________________________________

Name of inspector: _________________________________________________________

Was a university safety policy violated? _____________________________________

Which policy: __________________________________________________________________

Will a new safety policy need to be adopted? _________________________________

Provide new policy recommendations: _________________________________________
________________________________________________________________________
________________________________________________________________________

Additional Comments: _______________________________________________________
________________________________________________________________________
________________________________________________________________________

The Bloodborne Pathogen Exposure Control Plan
- 93 -
Appendix C

Employee Exposure Evaluation Form
Employee Exposure Evaluation Form

Please complete this form to the best of your ability. The information you provide will be used in the university's review of employee exposure hazards, in regard to bloodborne pathogens (i.e. the Hepatitis B Virus, the Human Immunodeficiency Virus). The information requested in this document ONLY refers to occupational exposures that you may experience during your work for this university. The information you provide will be kept confidential and will be reviewed ONLY by designated university employees.

All questions concerning this form should be directed to Faculty/Staff Wellness Program.

Name: __________________ Job Title: ________________________________

Brief description of job duties: ______________________________________

PLEASE CIRCLE THE APPROPRIATE RESPONSES:

How often do you come in direct contact with a human body by handling a person (living or dead) as a routine part of your work duties?

Never    Daily    Weekly    Monthly    Other: ___________

What types of biological materials do you have the greatest potential to come in contact with on the job?

Human:    Blood    Plasma Synovial Fluid    Pleural Fluid    Saliva    Semen    Pericardial Fluid    Peritoneal Fluid

Vomit    Vaginal Secretions    Cell/Tissue Cultures    Serum    Cerebrospinal Fluid    Amniotic Fluid

Other: ____________________________  All of the above

Animal:    Blood    Organ    Tissue    Other: ____________________________  All of the above

Have these animals been infected with Human Immunodeficiency Virus or Hepatitis B Virus?

yes   no

Are you:  a) A member of an emergency response team?
b) Trained in first aid and authorized to practice first aid on the job?
c) Trained in Cardio-Pulmonary Resuscitation (CPR) and authorized to perform CPR on the job?
d) A health care worker?
e) A police officer, fire-fighter, emergency medical technician, or other person who may come in contact with a human body (living or dead) during an emergency situation?

Do you ever see the following symbol on containers you handle or in areas that you enter?

yes   no

Have you received immunization for the Hepatitis B Virus?  yes   no

The Bloodborne Pathogen Exposure Control Plan
- 95 -
Are you likely to handle the following items during the performance of your work duties? How often?

<table>
<thead>
<tr>
<th>Item</th>
<th>Do You Handle Item?</th>
<th>Frequency of Contact</th>
<th>Item</th>
<th>Do You Handle Item?</th>
<th>Frequency of Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syringes</td>
<td></td>
<td></td>
<td>Discarded diapers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needles</td>
<td></td>
<td></td>
<td>Infectious waste containers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uniforms</td>
<td></td>
<td></td>
<td>Other waste containers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linens</td>
<td></td>
<td></td>
<td>Equipment containing blood, bodily fluids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discarded condoms</td>
<td></td>
<td></td>
<td>Potentially contaminated broken glass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feminine sanitary products</td>
<td></td>
<td></td>
<td>Vials, test tubes, bags, other containers holding blood, other bodily fluids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discarded bandages</td>
<td></td>
<td></td>
<td>Other: __________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Have you ever been sprayed or splashed with blood or other bodily fluids?  yes  no
Provide a brief description of the incident:

Have you ever been pricked by a needle while performing work-related duties?  yes  no
Provide a brief description of the incident:

Have you ever been cut by broken glass or other objects potentially contaminated with infectious materials while performing work-related duties?  yes  no
Provide a brief description of the incident:

Have you ever been bitten by a person during the performance of your work duties?  yes  no
Provide a brief description of the incident:

Do you perform housekeeping or maintenance in areas where potentially infectious materials are used?  yes  no

Have you ever cleaned up blood or other bodily fluids?  yes  no

Have you cleaned areas (i.e. sinks) obviously contaminated with blood, other bodily fluids?  yes  no

The Bloodborne Pathogen Exposure Control Plan
- 96 -