INTRODUCTION

The Occupational Safety and Health Administration (OSHA) has a variety of regulations that all employers must follow to ensure the health and safety of employees in the workplace.

This safety program is designated to comply with Title 29 of the Code of Federal Regulations Part 1910.1030 that says that when first aid is given to someone who is injured, there is a chance that the first aid provider may come in contact with the blood or body fluids of the person being treated. Many diseases such as AIDS and HEPATITIS are transmitted by this exposure.

This blood borne pathogen program gives us procedures to protect ourselves. The written program may sound very technical and, there are many record keeping requirements however, there are only three key points to remember:

- Any human blood or body fluid can contain disease that can infect you.

- Whenever you might come in contact with blood or body fluid PROTECT YOURSELF - cover any part of you that may come in contact, gloves for your hands, mask over your nose and mouth, safety glasses over your eyes, etc.

- Clean up and sanitize any spills

POLICY

Midland Engineering Co., Inc. has adopted the Bloodborne Pathogen Program as part of the comprehensive Safety Program to help insure all employees are provided with a safe and hazard free workplace. Midland Engineering Co., Inc. will provide at no cost to employees personal protective equipment and Hepatitis B vaccines to those who have reasonable chance of contact with body fluids and have had specific first aid training.

SCOPE

Compliance with this Bloodborne Pathogens Program is mandatory and all employees are responsible for reporting any exposure to blood or bodily fluids.
SUMMARY

This program details the methods that will be used to prevent employee exposure to Bloodborne Pathogens like Hepatitis B while administering first aid resulting from an accident such as a serious laceration resulting from the use of tools. The program complies with all of the regulations explained in 29 CFR 1910.1030 (the bloodborne pathogens standard).

DEFINITIONS

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

**Bloodborne Pathogens**, means pathogenic microorganisms that are present in the human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

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

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

**Contaminated Sharps** means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, and broken glass.

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

**Engineering Controls**, means controls (i.e. sharps disposal container, biohazard bag and box) that isolate or remove the Bloodborne pathogens hazard from the workplace.

**Exposure Incident** means a specific eye, mouth, or other mucous membrane, non-intact skin, or potential contact with blood or other potentially infectious materials that result from performance of employee duties.

**HBV**, means hepatitis B virus.

**HIV**, means human immunodeficiency virus.
Sterilize, means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospore.

Universal Precautions is an approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if to be infectious for HIV, HBV, and other Bloodborne pathogens. This means, proper personal protective equipment should always be used insuring protection to all routes of exposure, points of entry (orifice, skin, eyes, etc.).

**EXPOSURE DETERMINATION**

**Pre-Incident Determinations**

The company has performed an exposure analysis to determine which employees may incur occupational exposure to blood or other potentially infectious materials. This determination is based on risks incurred while performing job procedures without the use of personal protective equipment.

All employees have a very remote to no risk of exposure in the workplace environment. However, an employee having remote potential of exposure would be that person in close proximity to an employee experiencing an incident. Accidents are random; therefore, there is no method for determining the exact circumstance of any given incident or location of incident.

For the purpose of rendering first aid to an injured employee the company maintains a policy of self-assistance for minor injury. This policy relies upon the injured individual to assess their minor need at the time of the incident and respond accordingly using readily available First Aid Kits which contain such supplies as aspirin, band-aids, eye-wash, tweezers, gauze and gauze tape, and personal protective equipment.
The following tasks have risk to occupational exposure and should only be performed by trained and authorized employees:

- First Aid for Wounds
- CPR
- First Aid for Vomiting
- Spill cleanup and sanitation
- Other Rescue

Responsibilities Of The First Responder (trained personnel)

First Responder action, as defined by the company, is an incident in which the severity of the injury presents the possibility of exposure to potentially infectious materials to the assistor. In the event of First Responder action, the First Responder has assigned responsibilities and has been provided with training on basic first aid procedures. The First Responder is responsible for implementing first aid procedures according to the methods set forth in the Exposure Control Plan.

The only employee having the assigned risk of exposure is the designated first responder provider. The following is a list of job classifications in which employees may have risk to occupational exposure:

- First Responder
- CPR/First Aid Trained
METHOD OF COMPLIANCE

As summarized in the exposure determination, the potential for exposure only exists in the event of an accident. Therefore, the actual presence of infectious material within the workplace is a rare event. The approach to prevent employee exposure includes six specific attributes. Universal Precautions (see definitions for meaning) will be used to prevent potential contact with blood or other potentially infectious materials.

Work Practice Control Methods

The term work practice control methods as defined by the company means a combination of physical facilities (washrooms), portable hand sanitizer cleanser and procedures which when followed will eliminate the possibility of employee exposure to bloodborne pathogens. Some general policy guidelines are:

- Wash exposed areas before eating
- Wash exposed areas after giving first aid
- Wash exposed areas after clean-up

Engineering Controls

Washroom facilities are available to all employees for hand washing activities. Washing facilities are located in the employee laboratory. Employees are encouraged to wash their hands on an ongoing as needed basis. This will minimize or prevent the potential either to self inflicted exposure or cross contamination resulting from contact with others. In addition, the available washroom facility also provides hand cleaner stations. These stations contain approved disinfectant solutions for hand cleaning. The use of these hand cleaners also addresses individual concerns for dermal reactions to the various chemicals. Field operations use portable hand sanitizer cleanser.
Personal Protective Equipment

Equipment provided for protection against potential bloodborne pathogen exposure includes, but is not limited to, gloves, masks and eye protection that are located in the biohazard/first aid kit. The purpose of this personal protective equipment is to prevent blood and other potentially infectious materials to pass through to or reach the employees work clothes. Information and training is provided to employees on the correct use, laundering and disposal of potentially contaminated clothing and personal protective equipment. This required personal protective equipment is provided free of cost to all employees and divisions of Midland Engineering Co., Inc.

Designated Provider Control Methods

This helps control the possibility for exposure by limiting employee response to personnel that are formally trained in exposure control procedures. Situations where infectious materials may disperse and result in exposure of others are controlled by the actions of the designated first responder. It is the responsibility of the responder to administer first aid in a specified exposure containment manner, thus localizing the infectious or presumed infectious materials.

Housekeeping and Laundry

The work areas will be kept in a clean and sanitary condition. Any equipment or working surface will be cleaned and disinfected after contact with blood or other potentially infectious material with a bleach solution (one cup commercial/house hold bleach to 9 cups water). Receptacles intended for refuse will be inspected and decontaminated on a regular basis. Any material (i.e. tissue or paper towel) that is a potential biohazard will be saturated with the bleach solution and placed in receptacles intended for trash. Contaminated sharps will be discarded in closed containers that are puncture resistant and leak proof. Potentially contaminated laundry will be handled as little as possible. Contaminated laundry will be placed in leak proof bags or containers and labeled accordingly. All regulated waste disposal will comply with applicable federal and state regulations.
Hepatitis B Vaccination

The hepatitis B vaccine will be made available at no cost to employees within 10 working days of assignment who have been identified as having potential exposure as part of their job duties. Employees who choose to not be vaccinated must sign a declination form but still have the option to receive the vaccine at a later date. In the event the first responder is exposed to blood or other potentially infectious material, the hepatitis vaccine will be offered within 24 hours of the exposure if the employee has not previously been vaccinated.

INCIDENTAL EXPOSURE

If an employee is exposed to blood or body fluid it should be reported to the safety coordinator or supervisor immediately. This enables the proper response and precautions concerning the potentially exposed individual. All records of exposure incidents will be kept on file by the office supervisor. Individuals who incur an exposure incident will be offered a post exposure evaluation and follow up. Examples of types of exposures can be but are not limited to:

- Stabbed with a sharp
- Blood or body fluid in the eye
- Blood or body fluid on the skin
- Any other method of contact that may allow absorption into the body

INCIDENT INVESTIGATION

A primary responsibility of the designated first provider is the investigation and report of findings of the actual circumstances of the exposure incident. The response procedure to an exposure incident has been structured to be highly visible to management. This was done intentionally to keep management informed and provide a mechanism to assess ongoing procedures and make modifications as necessary to continuously improve safe conditions.

At the conclusion of any incident, the first provider must provide a completed Incident Investigation Form to management. The investigation form addresses specific issues of the incident and defines actions to eliminate potential risk and prevent recurrence.
POST EVALUATION AND FOLLOW-UP

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. This follow-up will include the following:

• Documentation of the route of exposure and the circumstances related to the incident.

• If possible, the identification of the source individual and, if possible, the status of the source individual. The blood of the source individual will be tested (after consent is obtained) for the HIV/HBV.

• Results of testing of the source individual will be made available to the exposed employee with the exposed employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.

• The employee will be offered the option of having their blood collected for testing. The blood sample will be preserved at least 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will be conducted then the appropriate action can be taken and the blood sample discarded.

• The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service.

• The treating physician will give the employee information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.
DESIGNATED FIRST PROVIDER PROCEDURES

The following are defined as the first responder methods and responsibilities:

- Open “First Aid Kit” and put on Personal Protection Equipment. Administer First Aid to stop bleeding and make the individual comfortable.

- Contact your supervisor immediately to determine where to send the individual for medical care.

- Call for medical assistance or drive the individual to the care facility.

- While the individual is at the care facility you should fill out the indicated questions on the Incident Investigation Form and the Information Provided to the Health Care Professional.

- Get a copy of any paperwork given to the worker by the treating physician.

- Supervise the safe clean up and decontamination of any areas of the workplace which may have been contaminated during the incident. Use the personal protective equipment contained in the “First Aid Kit” and a 10% bleach solution to decontaminate equipment and floors.

- Disinfect transport vehicle and place all contaminated materials in the Biohazard Containment Box for controlled disposal.

- Use the Biohazard Containment Box to store any contaminated sharps or garments. Place all cleanup materials on the Biohazard Containment Box for safe disposal.

- Conduct an inventory of the supplies and equipment used so that the appropriate supplies may be replaced and give the report to the safety coordinator or your supervisor.

- Get these three pages and the doctor’s paperwork to the office by the close of business on the day after the accident. (Incident Report-Inventory Replacement Form-Information Provided to the Health Care Professional).
INFORMATION AND TRAINING

Training for all employees will be conducted prior to initial assignment and within one year of their previous training to tasks where occupational exposure may occur. Training will be conducted in the following manner:

Training for employees will include the following:

- The OSHA Standard for Bloodborne Pathogens.
- Epidemiology and symptomatology of Bloodborne diseases.
- Modes of transmission of Bloodborne Pathogens.
- This Exposure Control Plan, i.e. points of the plan, lines of responsibility, how the plan will be implemented, and access to the plan.
- Procedures that might cause exposure to blood or other potentially infectious materials at this facility.
- Control methods that will be used at the facility to control exposure to blood or other potentially infectious materials.
- Personal protective equipment available at this facility and who should be contacted concerning it.
- Post Exposure evaluation and follow-up.
- Signs and labels used at the facility.
- Hepatitis B vaccine program at the facility.

Training will be conducted using videotapes, written material, etc. and all employees will receive annual refresher training. The materials used for training are located in the Bloodborne Pathogen Training Handout on file at the corporate office and will be made available to employees upon request. This plan as well as all training information will be updated on an annual basis, or as changes dictate.
RECORDS MAINTENANCE

Five separate information forms are generated and maintained as an integral part of the Bloodborne Pathogens Exposure Control Plan. All records will be maintained at the company’s corporate office. Training records will be maintained for a minimum of three years. Medical records will be maintained for the duration of employment plus 30 years. A sample copy of each form is included in this program. The specific forms are as follows:

- Incident Investigation Form
- Training Acknowledgment & Renewal Endorsement (maintained for 3 years)
- HBV Vaccine Status Form
- Inventory Replacement Form

The title of each form is self-explanatory as to the substance and justification of the form and the summary information provided by the completion of the forms complies with the record. All required records would be maintained and kept confidential by authorized personnel. Medical records must have employee consent before release to anyone. As an employee or division of Midland Engineering Co., Inc. you are entitled to access a copy of this exposure control plan and supporting documentation; please make a written request to your supervisor and allow reasonable time for completion.
Exposure/Incident Investigation Form

Incident Date: ______________

Employee Name: ____________________ Time of Day: ___________

Location or Job site: _______________________________________

When was the incident reported & to whom? _______________

What is the nature of the injury? __________________________

________________________________________________________________________________________________________

Why did the accident happen?

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

How could the accident have been avoided?

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

What steps have you taken to prevent any similar accidents from occurring in the future? __________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

Supervisor’s Name: ______________________ DATE: ________

Employee: _____________________________ DATE: ___________
Bloodborne Pathogens Exposure Control Plan

Acknowledgment of Training

I acknowledge that I have received information and training on the following:

- The OSHA Standard for Bloodborne Pathogens
- Epidemiology and symptomatology of Bloodborne diseases
- Modes of transmission of Bloodborne pathogens
- This Exposure Control Plan, i.e. points of the plan, lines of responsibility, how the plan will be implemented, and access to the plan.
- Procedures that might cause exposure to blood or other potentially infectious materials at this facility.
- Control methods, which will be used at the facility to control exposure to blood or other potentially infectious materials.
- Personal protective equipment available at this facility and who should be contacted concerning it.
- Post Exposure evaluation and follow-up
- Signs and labels used at the facility
- Hepatitis B vaccine program at the facility

This information gave me an understanding of the importance of protecting myself from bloodborne pathogens and other potentially infectious material. I will follow all rules, policies, and procedures set forth by the company. If I do not understand any instructions I will ask questions.

______________________________  ________________
Employee Signature  Date

______________________________  ________________
Instructor  Date
# HBV Vaccine Status Form

**Employee Name:** __________________________  **Date:** __________

**Social Security Number:** _______ – _____ – _______

**Date of Hepatitis B Vaccine:** __________

## HEPATITIS B VACCINE DECLARATION

**Date of Hepatitis B Vaccine Decline:** ________________

I, (print your name)______________________________ understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the Hepatitis B vaccine at this time. I understand that by declining this vaccine, I continue to be at 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 the Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

______________________________________________  _______________
Employee Signature  Date

______________________________________________  _______________
Witness Signature  Date
First Aid Inventory Replacement Form

Name of Inspector: ________________________________

Date of Inspection: ____________

Location(s) of Inspection: __________________________
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________

List Items Needed:
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________

Notes: ___________________________________________
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Signature of Inspector or Supervisor