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| Policy or Procedure Subject: Bloodborne Pathogen (BBP) Control Plan | SAF.PY.002.r00**Assoc. Forms:** SAF.PY.FRM.002.r00SAF.PY.FRM.002A.r00SAF.PY.FRM.002B.r00 |
| Department or Section: Laboratory Safety |  | Issue Date: 7/15/2021 |
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**Objective or Purpose:**

The purpose of the Bloodborne Pathogen Control Plan is to eliminate or minimize occupational exposure to blood and/or other body fluids through the development, implementation, and enforcement of work practices, controls, and education.

The plan is in compliance with the Michigan Occupational Safety and Health Administration (MIOSHA) Part 554. Bloodborne Infectious Diseases Standard and Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1030

The BBP includes:

* Occupational Exposure Determination
* Exposure Control Methods
* Communication of Hazards to Workforce Members and Training
* Hepatitis B Vaccination
* Post-exposure Evaluation and Follow-up

**Introduction:**

Bloodborne pathogens means pathogenic microorganisms that are present in human blood and body fluids that can cause disease in humans which includes but not limited to:

• Hepatitis B virus (HBV)

• Hepatitis C virus (HCV)

• Human Immunodeficiency Virus (HIV)

Other potentially infectious materials (OPIM) include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, amniotic fluid, saliva in dental procedures, and any body fluids visually contaminated with blood.

**Occupational Exposure Determination**:

An employer shall evaluate routine tasks and procedures to determine whether there is actual or reasonably anticipated employee exposure to blood or other potentially infectious material. An employee shall categorize depending on evaluation done by employer into Category A or Category B. An exposure determination shall be made without regard to the use of personal protective equipment.

**Category A:**

Occupations that require procedures or other occupation-related tasks that involve exposure or reasonably anticipated exposure to blood or other potentially infectious material or that involve a likelihood for spills or splashes of blood or other potentially infectious material.

**Category B:**

Occupations that do not require tasks that involve exposure to blood or other potentially infectious material on a routine or nonroutine basis as a condition of employment.

Employee exposures to blood/body fluids can happen during many job activities including, but not limited to:

* Laboratory specimen processing/transport
* Handling soiled articles
* Collecting/handling blood or other potentially infected material (OPIM)
* Handling sharps
* Drawing blood
* Performing diagnostic testing

Following is a list of all job classification at Helix Diagnostics which will fall under Category A:

1. Laboratory Scientist
2. Lead Laboratory Scientist
3. Laboratory Assistant
4. Lead laboratory Assistant
5. Manager, Processing
6. Supervisor, Processing
7. Manager, Laboratory
8. Supervisor, Laboratory
9. Laboratory Collector
10. Lead Laboratory Collector
11. Supervisor, Specimen Collection
12. Courier, Laboratory
13. Lead Courier, Laboratory
14. Manager, Logistics

**Source of Exposures**:

* Sharp items like needles, instruments, glass contaminated with blood or body fluids
* Blood or body fluid spill onto non-contact skin
* Splash of blood or body fluid into eyes, nose, mouth

**Protect yourself against BBP (Hepatitis B Vaccination):**

Criteria to meet for HBV vaccine

* Employee who is eligible under category A will be offered HBV vaccine series through employer at no cost within 10 days of initial assignment.
* Information regarding where and how to receive the vaccination will be provided by Human Resources.
* If an employee has previously received the complete HBV vaccination series, is found to be immune to HBV by virtue of adequate antibody titer (Documentation), or the vaccine is contraindicated for medical reasons, then the employer is not required to offer the HBV vaccine to that employee.
* An employer shall assure that an employee who declines to accept hepatitis B vaccination signs a waiver statement with all of the following provisions:
	+ Understanding of risk.
	+ Acknowledgment of opportunity of vaccination at no cost.
	+ Declining vaccination.
	+ Future availability of vaccination at no cost if desired, if still in at-risk status.
	+ See “Waiver Form” attached at the end
* If employee is unsure about the status of his/her Hepatitis B vaccine, then Helix will offer antibody testing. HR will provide the paperwork and coordinate testing for the employee.
* The vaccine helps to protect an employee in case of an exposure
* Employees who decline may request and obtain the vaccination at a later date at no cost.

**Vaccines:**

• Hepatitis B:

 Vaccination available for eligible employees under category A.

• Hepatitis C:

– No vaccine or prophylaxis available

• HIV

– No vaccine available

**Post-Exposure Process and Follow-Up:**

* If serious injury has occurred, **call 911** immediately.
* Notify supervisor and report the incident using AccessPoint incident reporting forms within 24 to 48 hours.

**For US laboratories subject to OSHA regulations, all workplace fatalities must be reported to the Occupational Safety and Health Administration (OSHA) within eight hours and work-related in-patient hospitalizations, amputations, or losses of an eye within 24 hours.**

* Follow Post-exposure plan depending on injury.

**In case of a sharp exposure: (Needle Stick)**

1. Immediately wash the area with soap and water and thoroughly rinse.
2. Obtain medical attention if needed immediately.
3. Report to your supervisor or anyone in charge immediately and then Safety Officer.
4. The identified source patient of exposure must be tested for HIV, HCV, and HBsAg.
	* A consent form for identified source patient must be obtained prior to obtaining the blood sample. (See attached consent form)
5. Order source patient panel (after consent has been received) in Copia. Label source patient tubes and transport bag with SOURCE.
	* Source Patient Sample = SRCPN
6. Fill out AccessPoint Incident reporting forms and also “Sharp Injury Log”, submit to HR and Safety Officer.
7. Laboratory Scientist will notify laboratory results to Safety Officer or designee. Do not disclose results on the phone, only say results are available in the system.
8. Go to Urgent Care or Emergency Department for complete medical evaluation. (See “Lab Accidents/Incidents and Occupational Injuries Reporting, Recording, and Evaluation Policy”)
9. All the medical evaluation documents need to be submitted to HR and Safety Officer by an employee within 15 days of evaluation.
	* Human Resources should be filling the employee medical documents into employee file.

**In case of Non-Sharp Exposure:**

1. Immediately wash the exposed area by using eye wash, sink, or safety shower depending on exposure.
2. Report to your supervisor or anyone in charge immediately and then Safety Officer.
3. Fill out AccessPoint Incident report forms. (See attached)
4. If necessary, employee can report to Urgent Care or Emergency Center for a complete medical evaluation.

**Follow-Up Post Exposure:**

* The source patient specimen will be tested at Helix Diagnostics in the Chemistry department. If HIV or HCV is Reactive, confirmation testing will be performed.
* Once results are complete, Safety Officer will be notified by the laboratory scientist. (See Chemistry policy)
* HR should file report in employee file

**Exposure Control Methods:**

1. **Universal Precautions**
* Universal precaution is an approach to infection control to treat all human blood and certain human body fluids as if they were known to be infectious for HIV, HBV and other bloodborne pathogens, (Bloodborne Pathogens Standard 29 CFR 1910.1030(b)
* Applies to all employees in the healthcare settings, regardless of the suspected or confirmed presence of an infectious agent
* Universal precautions include a group of infection prevention practices depending on the anticipated exposure which include:

– Use of Personal Protective Equipment (PPE)

– Environmental Measures

– Hand Hygiene

– Safe Work Practices to Prevent Exposure to Bloodborne Pathogens

– Respiratory Hygiene/Cough Etiquette

– Proper Waste Disposal

1. **Standard Operating Procedures**
* Standard Operating Procedures have been developed for the laboratory to reduce the exposure to blood and OPIM
* See other Laboratory Safety Policies
1. **Contingency Plan**
* Standard operating procedures must be followed unless the use/process results in increased risk/hazard to the employee or patient.
* Any deviations from the SOP shall be approved under the guidance of the laboratory director, VP of operations or Medical Director or designee in writing.
1. **Engineering controls**
* Safety needles
* Sharp containers
* Needleless devices
* Hand-washing sinks
* Alcohol based hand antiseptic

**Limitations of safety devices**

* Safety devices on needles may not work properly
* Sharps boxes can get too full
* May require activation
1. **Work practice controls**
* Hand hygiene
* Environmental cleaning and disinfection
* Biohazard containers
* Using appropriate PPE
* Remaining focused on the task being performed

**Limitations of work practices**

* Human error. For example, inappropriate donning/doffing of PPE, not using proper hand hygiene
* Effectiveness of cleaning chemicals

**Appropriate Hand Hygiene**

There are 2 ways to perform hand hygiene

* + Soap and water
	+ Alcohol based hand sanitizer

Both methods are acceptable practices except when hands are visibly soiled.

Soap and water must be used when visibly soiled.

When to perform hand hygiene:

* + Before and after putting on gloves
* Touching the patient or the patient’s environment
	+ Providing patient care
1. **Personal Protective Equipment (PPE)**
	* Gowns/lab coat
	* Masks
	* Gloves
	* Face fluid shield
	* Safety Goggles

**Limitations of PPE:**

* + Needles and sharp items can puncture gloves
	+ Gloves that do not fit well can rip or tear
	+ Body fluids can splash over masks and shields if they are not worn properly
1. **House keeping**
* Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture resistant, leak proof on sides and bottoms, and appropriately labeled or color-coded.
* All regulated medical waste is placed in containers which are closable, constructed to contain all contents, leak proof, and appropriately labeled with a biohazard label/symbol or color-coded
* Orange/red labels with a universal biohazard symbol shall be utilized to warn of potential hazards
* Labels shall be placed on biohazard containers, soiled utility rooms, refrigerators/freezers used as storage for blood and OPIM, sharps disposal containers, and containers used to store, transport blood or OPIM.

**Communication of Hazards to Workforce Members and Training:**

* Orange/red labels with a universal biohazard symbol shall be utilized to warn of potential hazards
* Labels shall be placed on:
	+ Biohazard containers
	+ Refrigerators/freezers used as storage for blood and OPIM
	+ Sharp disposal containers
	+ Containers used to store, transport, ship blood or OPIM
* BBP training is provided to all employees using MTS and Zywave training modules once a year.

**References:**

1. Michigan Occupational Safety and Health Administration, Part 554. Bloodborne Infectious Diseases
2. OSHA Bloodborne Pathogens Standard

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**HEPATITS B VACCINE DECLINATION FORM**

I 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 the Hepatitis B vaccine, at no charge to myself by my employer Helix Diagnostics. However, at this time I decline Hepatitis B vaccination. 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 want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no cost to me by my employer.

Employee Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Sharps Injury log:**

Organization name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Year: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The Bloodborne Pathogen Plan requires that you establish and maintain a Sharps Injury Log to record all contaminated sharps injuries in a facility. The purpose of this log is to help you evaluate and identify problem devices or procedures that require attention.

The Sharps Injury Log needs to do all of the following:

Maintain sharps injuries separately from other injuries and illness kept on the Injury and Illness Log as required.

Include ALL sharps injuries that occur during a calendar year.

Be retained for 5 years beyond the completion of that calendar year.

Preserves the confidentiality of affected employees.

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| --- | --- | --- | --- | --- | --- |
| Date | Case/Report No. | Type of Device (examples: needle, glass pipette etc.) | Brand Name of Device | Work Area where injury occurred | Brief description of how the incident occurred and body part injured. |
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Reviewed By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

** SAF.PY.FRM.002B.r00**

**SOURCE INDIVIDUAL CONSENT FORM**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, have been identified as the source of blood or bodily

 (Name)

fluid involved in an occupational exposure incident at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (Place of exposure)

on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Pursuant to OSHA regulations governing bloodborne pathogens, and the

 (Date)

Exposure Control Plan enacted by Helix Diagnostics Lab, I have been requested to consent to the testing of my blood to detect the presence of antibodies to the Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C virus (HCV).

Accordingly:

\_\_\_\_\_\_\_\_\_\_\_\_\_ I grant my consent for the testing of my blood and/or bodily fluid in order to ascertain whether the HIV, HBV or HCV is present. My consent is hereby given voluntarily of my own free will. My consent has not been obtained through duress, coercion, or pressure.

\_\_\_\_\_\_\_\_\_\_\_\_\_ I refuse to grant my consent for such testing.

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Printed Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent /Guardian’s Full Name if Minor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_