

BLOOD-BORNE PATHOGEN EXPOSURE CONTROL PLAN

MIOSHA Part 554: Blood-borne Infectious Diseases
v. March 2024

This plan applies to the following:

Benzie Health Department Office
Benzie Central MS/HS SWP Clinic
FEAS MS/HS SWP Clinic
Leland SWP Clinic
Community Outreach Clinics

Leelanau Health Department Office
Homestead Hills SWP Clinic
FEAS Elementary SWP Clinic
Suttons Bay SWP Clinic

I. GENERAL

The Occupational Safety and Health Administration requires employers who place their employees at risk for bloodborne pathogens to develop a plan for protection against, response to, and recovery from a bloodborne pathogen release whether by air, spill, or direct exposure.

This plan is provided as a guide to assist the **Benzie-Leelanau District Health Department** staff that perform occasional light medical procedures resulting in limited exposure to blood or other potentially infectious material and associated waste products. This plan shall be reviewed annually and updated as needed based on real incidents or trainings.

II. EXPOSURE DETERMINATION

The following employee job classifications at the **Benzie-Leelanau District Health Department** are Categorized according to their anticipated occupational exposure to blood or other potentially infectious material (OPIM),¹ regardless of frequency. The exposure determination is made without regard to the use of personal protective equipment:

Category A Jobs	Category B Jobs	Category C Jobs
HIGH RISK	LOW RISK	NO RISK
Nurse Practitioner Public Health Nurse Public Health Tech HIV Counselor Dietician	Medical Director Health Officer PH Director PH Supervisor Receptionist/Clerk Social Worker Community Health Worker	Receptionist/Clerk Account Clerks Office Secretary EH Director EH County Supervisor Administrative Services Director EH Sanitarian Emergency Preparedness Coordinator

III. ROLES & RESPONSIBILITIES

Safety Officer	Personal Health Director	Supervisor	Public Health Tech
<ul style="list-style-type: none"> Maintain the Exposure Control Plan Train and educate elements of this plan Fit test Category A employees Retain training, exercising, plans, and fit testing records 	<ul style="list-style-type: none"> Serve as Exposure Control Officer Review accuracy of info in this plan. Categorize Jobs Risk Develop Policies and SOPs relevant to Exposure Control Fulfill employee post exposure evaluation and care. Provide records to Director of Administrative Services 	<ul style="list-style-type: none"> Identify exposure incident to employee and report to Safety Officer Ensure employee completes post-exposure documentation Ensure employee completes the necessary training and education upon hiring, and on an annual basis. 	<ul style="list-style-type: none"> Ensures PPE is current and adequate supply Checks supply of cleanup/disinfectant material.

¹ Other potentially infectious materials include: A) semen, B) vaginal secretions, C) amniotic fluid, D) cerebrospinal fluid, E) peritoneal fluid, F) pleural fluid, G) pericardial fluid, H) synovial fluid, I) saliva in dental procedures, J) any body fluid that is visibly contaminated with blood, K) all body fluids in situations where it is difficult or impossible to differentiate between body fluids. Urine, feces and vomit are not considered OPIM except in cases (J) or (K) above.

IV. COMPLIANCY

a. Universal precautions will be observed at the *Health Department* in the provision of clinical services, the removal of sharps and waste, and the housekeeping of any clinic area to prevent contact with blood or OPIM. All blood and OPIM will be considered infectious regardless of the perceived status of the source individual.

b. Engineering and work practice controls One of the key aspects to our Exposure Control Plan is the use of Engineering Controls to eliminate or minimize employee exposure to bloodborne pathogens. As a result, our organization employs equipment such as sharps disposal containers, safer medical devices, such as sharps with engineered sharp injury protection and needleless systems.

The Exposure Control Officer/Safety Officer periodically works with department directors to review tasks and procedures performed in our facility where engineering controls can be implemented or updated.

The Personal Health Director and Personal Health Supervisors will identify, evaluate and select effective engineering and work practice controls and will inform relevant staff of related issues or changes.

ENGINEERING CONTROL EQUIPMENT

The following Engineering Controls equipment is used at the Benzie-Leelanau District Health Department:

- Self-sheathing needles/syringes
- Single-use lancets
- Sharps Containers
- Biohazard Bags/Containers

c. Handwashing facilities are available to employees who incur exposure to blood or other potentially infectious materials. MIOSHA requires that these facilities be readily accessible after incurring exposure. Clinics located at both health department offices and at school sites include handwashing facilities. Upon providing clinical services or incurring exposures when handwashing facilities are not feasible (e.g. outreach clinics), the employer is required to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towel or antiseptic towelettes. If these alternatives are used, then the hands are to be washed with soap and running water as soon as feasible.

After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

If employees incur exposure to their skin or mucous membranes, then those areas shall be washed or flushed with water as appropriate as soon as feasible following contact.

d. Needles are used in the clinics. When used, they must not be recapped unless required by a medical procedure, must not be bent or broken and must be disposed of in a labeled, closeable, leakproof, puncture-resistant container.

e. Work Areas, where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses.

f. Personal Protective Equipment will be provided to all employees for use in patient treatment, first aid, or housekeeping involving blood or OPIM. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or OPIM to pass through or reach the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Protective clothing will be provided if potential exposure warrants such clothing.

The following PPE is used in seeing patients when performing the listed procedures:

Procedure	Gloves	Lab Coat	Respirator	Procedure Mask	Goggles	Isolation Gown
Fingerstick (all)	X					
Childhood Injections						
Adult Injections						
Phlebotomy or Vena-Puncture	X	X				
STI Testing	X					

Hepatitis C Testing	X					
Pregnancy Tests	X					
HIV Testing	X					
COVID Testing	X			X		
Spills & Splashes (3)	X		X		X	

Lab coats will be cleaned and laundered by the employee unless there is contamination. If blood or other body fluids contaminate the lab coat, the employer will arrange for cleaning and pay the cost.

All PPE will be removed prior to leaving the work area. If a lab coat is visibly contaminated, it shall be placed in a plastic bag in the lab and the Director of Personal Health notified of the need for cleaning. Gloves and masks shall be placed in a regular trash receptacle.

If an employee were to have another person's blood or OPIM splash or soak their clothing, they would make arrangements to remove the contaminated clothing as soon as possible. This clothing would be laundered at the employer's expense. The clothing would be identified as contaminated and any employee exposed to it would be notified and protected from exposure.

Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes. Gloves will be available in the clinic as well as extra supply in the storage room.

Disposable gloves used in the clinics/labs are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.

g. Housekeeping, such as cleaning and decontamination of vomit, urine, blood and other OPIM, will be performed as soon possible.

Decontamination can be accomplished by using one of two methods below:

1. Using a fluid control solidifier stored in the lab in each office and available at school-based clinics, or
2. Using an anti-bacterial/anti-viral wipe
3. Using a bleach and water solution with the following mixture ratio:
 - a. For decontaminating/disinfecting items with blood or body fluids, use 1:500 = 10ml bleach with 490 ml water; or 2 tsp. bleach with 2 cups water.
 - b. For decontaminating/disinfecting items that come in contact with mucus membrane – eyes, nose, ears, etc. use 1:100 = 80 ml of bleach with 8 litres of water; or 1/3 of a cup of bleach with 2 gallons of water.

Note: Bleach loses its disinfectant quality when stored in water.

All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or OPIM materials, as well as the end of the work shift if the surface may have become contaminated since the last cleaning.

h. Regulated Waste bins, pails, cans, and similar receptacles for regulated waste disposal in the clinic shall be appropriately colored or labeled as containing biohazards and shall be inspected, emptied and decontaminated on a regularly scheduled basis. Note: Disposal of feminine hygiene products and bandages or Kleenex used in self-administered first aid (bloody nose, small cut) are not considered regulated waste and will be disposed of in the normal waste stream. Large red bins and bags for medical waste are stored in the storage room at both offices. Biohazard bags and sharps containers are available at each school-based clinic.

The agency has a contract with a Hazardous Materials disposal company that will pick up full bins on a regular schedule.

i. Standard Operating Procedures (S.O.P.'s) provide guidance and information on the anticipated clinical tasks assigned to our employees.

j. Contingency Plans are prepared by BLDHD for employee protection, incident investigation and medical follow-up where circumstances can be foreseen for which the recommended SOPs could not be followed.

V. HEPATITIS B VACCINE

***HBV Vaccination Option for Employers with employees trained to render first aid Category A employees:**

According to OSHA and MIOSHA policies, an employer may elect to postpone offering and administering the HBV vaccine series to Category A designated first aid trained employees if the following conditions exist:

- The primary job assignment of the first aid provider is not the rendering of first aid.
- Any first aid rendered by such persons is rendered only as a collateral duty responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred.
- Full training and personal protective equipment shall be provided to these employees.
- Provision for a reporting procedure that ensures that all first aid incidents involving the presence of blood or OPIM will be reported to the employer before the end of the work shift during which the first aid incident occurred. The report must include the names of all first aid providers who rendered assistance, regardless of whether personal protective equipment was used and must describe the first aid incident, including the time and date. The description must include a determination of whether or not, in addition to the presence of blood or OPIM, an exposure incident, as defined in the standard.
- Provision for the full HBV vaccination series is to be made available as soon as possible, but no later than 24 hours following an event, to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood or OPIM regardless of whether or not a specific "exposure incident," as defined by the standard, has occurred.
- In the event of a bonafide exposure incident, the portion of the standard relating to post-exposure evaluation and follow-up would apply.

These conditions exist for all health department employees.

We elect to:

1. Assess the vaccination status/immunity of all new employees upon hire and offer HBV as needed.
2. The HBV vaccines series is offered to all non-vaccinated/non-immune employee if an exposure occurs.

***Note:** The above HBV vaccine exception does not apply to designated first aid providers who render assistance on a regular basis, for example, at a first aid station, clinic, dispensary or other location where injured employees routinely go for assistance; nor does it apply to any healthcare, emergency, or public safety personnel who are expected to render first aid during their work. These employees must be offered the vaccine prior to exposure

VI. POST-EXPOSURE EVALUATION AND FOLLOW-UP

When an employee experiences an exposure incident, it must be **reported to their Supervisor and the BLDHD Incident Report Form filled out, as well as the MIOSHA Form 301**. Attachments

All employees who experience an exposure incident will be offered post-exposure evaluation and follow-up by a licensed physician in accordance with Centers for Disease Control and Prevention guidelines as specified in MIOSHA standard, following HIPAA regulations.

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 HIV/HBV infectivity.
- 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 own blood collected for testing of their HIV/HBV serological status. The blood sample will be preserved for at least 90 days to allow the employee to decide if the blood should be tested for HIV serological status.

The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service in consultation with a licensed healthcare professional.

The employee will be given appropriate, confidential counseling concerning precautions to take during the period after the exposure incident. Counseling on risk reduction and the risks and benefits of HIV testing. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

The following person(s) has been designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy: **Director of Personal Health**

Interaction with Health Care Professionals

An employer shall ensure that the health care professional who is responsible for the hepatitis B vaccination is provided with a copy of these rules and appendices. Written opinions will be obtained in the following instances:

- 1) When the employee is sent to obtain the Hepatitis B vaccine.
- 2) Whenever the employee is sent to a health care professional following an exposure incident.

A written opinion shall be obtained from the health care professional within 15 days and provided to the employee who evaluates employees of this facility.

Health care professionals shall be instructed to limit their written opinions to:

- 1) Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident;
- 2) A statement that the employee has been informed of the results of the evaluation, and;
- 3) A statement that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. (Note: The written opinion to the employer is not to reference any personal medical information.)

Exposure Control Officer Review of Exposure Incident

Exposure Control Officer will review the circumstances of all exposure incidents to determine:

- engineering controls in use at the time
- work practices followed
- a description of the device being used
- protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shield, etc)
- location of the incident (lab or clinic room)
- procedure being performed when the incident occurred
- employee's training

If it is determined that revisions need to be made, the Exposure Control Officer will ensure that appropriate changes are made to this ECP. (Changes may include an evaluation of safer devices, or adding employees to the exposure determination list)

VI. TRAINING

Training for all personal health employees will be conducted prior to initial assignment to tasks where occupational exposure may occur. Training will be conducted in the following manner:

Training for employees will include the following and explanation of:

- The MIOSHA standard for Bloodborne Infectious Disease
- 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, access to the plan, etc.)
- Procedures which 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 its use.

- Post Exposure evaluation and follow-up
- Signs and labels used at the facility
- Hepatitis B vaccine program at the facility

Training sessions shall afford employees ample opportunity for discussion and the answering of questions by a knowledgeable trainer.

The health department's safety officer, Personal Health Supervisor or Personal Health Director will conduct exposure control/bloodborne pathogen training.

All personal health employees will receive annual refresher training.

VII. RECORDKEEPING

The Department maintains a record of each employee with occupational exposure to include:

- Name
- Employee ID Number
- Hepatitis B vaccine from status
- A copy of all results of examinations, medical testing, and follow-up procedures required as part of vaccinations and postexposure follow-up. - Employer shall ensure record confidentiality
- Kept for duration of employment plus 30 years

These records are kept in their personnel file with **Administrative Services**.

Training Records:

- Date(s)
- Summary of Contents
- Names and qualifications of trainers
- Names and job titles of all trainees
- Maintain records for three (3) years

Training records shall be kept by the **Safety Officer**

**STANDARD OPERATING PROCEDURE
FOR BLOODBORNE INFECTIOUS DISEASE CONTROL MEASURES**

1. Task/Procedure: Blood-Borne Pathogen/Other Potentially Infected Material Cleanup Procedure

2. Exposure Potential: Non-intact skin exposure to blood or general exposure.

3. Personal Protective Equipment:

- Gloves, N-95 masks, towels – are in the clinic/lab room and storage room #1.
- Do Not disinfect or reuse PPE after exposure. Discard appropriately.

4. Use: Don PPE before permitting task or procedure

5. Maintenance/Disinfection:

- Decontamination can be accomplished by using one of the methods below:
 1. Using the material stored in the little cabinet in the Benzie office and the material stored above the sink in the Leelanau office, or available at school-based clinics; or
 2. Using an antibacterial/anti-viral wipe
 3. Be accomplished by utilizing a bleach and water solution with the following mixture ratio and wiping it up:
 - a. For decontaminating/disinfecting items with blood or body fluids, use 1:500 = 10ml bleach with 490 ml water; or 2 tsp. bleach with 2 cups water.
 - b. For decontaminating/disinfecting items that encounter mucus membrane – eyes, nose, ears, etc. use 1:100 = 80 ml of bleach with 8 litres of water; or 1/3 of a cup of bleach with 2 gallons of water.

Note: Bleach loses its disinfectant quality when stored in water.

6. Disposal:

- Discard PPE in a standard trash-can unless saturated/dripping with blood or OPIM which requires biohazard waste disposal (red bag waste).
- Dispose cleanup material/bleach wipes in red bag waste.

7. Engineering Controls:

- Gloves to blot towels over substance and to pickup/scrape bleach wipes around contaminated material,
- Sinks for hand-washing.

8. Work Practice Controls:

- Wear PPE as noted above.
- Post-procedures where blood or OPIM exposure is likely/occurred: Decontaminate surfaces using approved EPA registered disinfectant or bleach wipes. Also, disinfection of surfaces may be conducted at the end of the workday.
- Dispose of bleach wipes used on surfaces in the regular trash unless saturated with blood or OPIM.
- Hands must be washed/sanitized after removal of gloves or other PPE.

General Work Practice Controls:

- Eating, drinking, smoking, applying cosmetics are prohibited in work areas where there is reasonable likelihood of occupational exposure
- Food and drink shall not be kept in refrigerators, freeze ware, shelves, cabinets, or on countertops or bench tops where blood or OPIM are present.

9. Management of Exposure Incidents:

- Provide immediate first aid and follow post exposure follow up procedure in exposure control plan.
- Fill out an Incident Report Form – Attachment 1

10. Contingency Plan (*if this SOP cannot be followed*):

If employees determine that this SOP cannot be followed, they should stop the procedure/work activity and close access to the area where contaminated and use soap and water to wash hands. Immediately notify a Supervisor or Office Manager. The Office Manager will ensure that needed equipment/supplies, etc. are provided to employees and a revised SOP is developed to address the new hazards/incident identified.

Attachment 1

Benzie-Leelanau District Health Department

Exposure to Bloodborne Pathogens Incident Report

Name: _____ Job Position: _____ Employee ID # _____

Date/Time of Exposure: _____ Date/Time of Report: _____

Exposure to:

- | | |
|--|--|
| <input type="checkbox"/> Blood | <input type="checkbox"/> Saliva |
| <input type="checkbox"/> Body fluid with visible blood | <input type="checkbox"/> Seminal fluid |
| <input type="checkbox"/> Vaginal secretions | <input type="checkbox"/> Other |
| <input type="checkbox"/> Internal body fluids (circle one) cerebrospinal, synovial, pleural, amniotic, pericardial, peritoneal | |

Type of Exposure:

- ☐ Needlestick/sharps accident
- ☐ Contact with mucous membranes (eyes, nose, mouth)
- ☐ Contact with skin (circle all that apply): broken, chapped, abraded, dermatitis, prolonged contact, extensive contact
- ☐ Other

Source of Exposure:

Patient name, if known: _____

Exact location exposure took place: _____

Describe Activity Leading to Exposure:

- | | |
|--|---|
| <input type="checkbox"/> Giving injection | <input type="checkbox"/> Drawing Blood |
| <input type="checkbox"/> Recapping needles | <input type="checkbox"/> Dental Procedure |
| <input type="checkbox"/> Handling IV lines | <input type="checkbox"/> Handling lab specimens |
| <input type="checkbox"/> Other | |

Describe Situation Precisely:**Describe Immediate Interventions:**

Was the area ☐ Washed ☐ Flushed? Date of Last Td Booster _____

Did injury bleed freely? ☐ Yes ☐ No Booster Td Given ☐ Yes ☐ No

Was antiseptic applied? ☐ Yes ☐ No

Other? _____

Source of Exposure: (source)

Obtain consent form _____ and Lab Test form _____

Hx: Has source had HbsAg test before? ☐ Yes ☐ No What were the results? ☐ Positive ☐ Negative

Has source had Hepatitis C Antibody (Anti-HCV) test before? ☐ Yes ☐ No What were the results? ☐ Positive ☐ Negative

Patient known to be HIV+? ☐ Yes ☐ No Is patient HIV negative (HIV-), but at high risk? ☐ Yes ☐ No

Follow-up: (employee)

Obtain consent form _____ and Lab Test form _____

Hx: Hepatitis B vaccine history (number of doses and dates): _____

Is anti-HBs status known? ☐ Positive ☐ Negative ☐ Unknown

Employee has the following responsibilities. Date when these were reviewed: _____

Reviewed: _____

Report any flu-like illness: fever, rash, fatigue, malaise, swollen glands, etc. ☐

Refrain from blood/organ/tissue/semen donation until negative test at 4 months. ☐

Postpone pregnancy until negative test at 4 months. ☐

Signs and symptoms of infection. ☐

POST-EXPOSURE FOLLOW-UP (to be completed by supervisor or Medical Director)**Source:**

Test: HbsAg results following this exposure are _____ Date _____

Hepatitis C antibody test results following this exposure are _____ Date _____

HIV Antibody Test results are: _____ Date _____

List risk factors for blood borne illness: _____

STANDARD PRECAUTIONS

This category of precautions, which extends the CDC's previous **Universal Precautions**, applies to blood, all body fluids, secretions, and excretions except sweat (regardless of whether these fluids, secretions, or excretions contain visible blood), non-intact skin, and mucous membranes. These general barrier techniques are designed to reduce exposure to health care personnel to body fluids containing the human immunodeficiency virus or other bloodborne pathogens, since medical history and examination cannot reliably identify all patients infected with these agents. In addition, **Standard Precautions** may reduce transmission of microorganisms from patients who are not recognized as harboring potential pathogens, such as antibiotic-resistant bacteria. **Standard Precautions** include the following techniques:

- **Hand washing** is necessary after touching blood, body fluids, secretions, excretions, and contaminated items, whether or not gloves are worn. Hands should be washed immediately after removing gloves, between patient contacts, and when otherwise indicated to avoid transfer of microorganisms to other patients or environments.
- **Gloves** (clean, non-sterile) should be worn when touching mucous membranes and non-intact skin. Gloves should be changed between tasks and procedures on the same patient after contact with material that may contain a high concentration of microorganisms. Gloves should be promptly removed after use and hand washing performed before touching non-contaminated items and environmental surfaces and before contact with another patient.
- **Mask, eye protection, and face shields** should be worn to protect mucous membranes of the eyes, nose, and mouth during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- **Non-sterile gowns** that are fluid-resistant will protect skin and prevent the soiling of clothing during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions, or excretions. Soiled gowns should be removed promptly.
- **Patient care equipment** that has been used should be handled in a manner that prevents skin and mucous membrane exposures and contamination of clothing.
- **All used linen** is considered to be contaminated and should be handled, transported, and processed in a manner that prevents skin and mucous membrane exposure and contamination of clothing.
- **Bloodborne pathogen** exposure should be avoided by taking precautions to prevent injuries when using, cleaning, and disposing of needles, scalpels, and other sharp instruments and devices.
- **Mouthpieces, resuscitation bags, and other ventilation devices** should be readily available in all patient care areas and used instead of mouth-to-mouth resuscitation.

PERCUTANEOUS INJURY LOG

Complete this form when there has been an occupational exposure to an employee resulting in a percutaneous injury from a needle or lancet. The employee's confidentiality **must** be maintained. Each incident should be reviewed and evaluated to determine if procedural changes should occur.

Date of Exposure	Type and Brand of Device	Work area of Incident	Explanation of How Exposure Occurred	Supervisor Review (✓)