

CHEMICAL HYGIENE PLAN

MIOSHA Part 431: Hazardous Work in Laboratories
v. May 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 workplaces that have **hazardous chemicals** to develop a plan that protects employees from health hazards associated with chemicals in labs or elsewhere as well as limiting exposure.

This plan is provided as a guide to assist the **Benzie-Leelanau District Health Department** who has a supply of hazardous chemicals located in clinical settings and which could be spilled or released causing potential health risks.

Additionally, Environmental Health staff may come across hazardous materials.

II. EXPOSURE DETERMINATION

The following employee job classifications at the **Benzie-Leelanau District Health Department** are Categorized according to their anticipated occupational exposure to hazardous chemicals in the workplace. 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 I, II, III Public Health Tech HIV Counselor Dietician | Medical Director Health Officer PH Director PH Supervisor Receptionist/Clerk | Receptionist/Clerk Account Clerks Office Secretary EH Director EH County Supervisor Administrative Services Director EH Sanitarian Social Worker Emergency Preparedness Coordinator Community Health Worker |

III. ROLES & RESPONSIBILITIES

| Safety Officer | Personal Health Director | Supervisor | Public Health Tech |
|--|--|--|---|
| <ul style="list-style-type: none"> Maintain the Chemical Hygiene Plan Train and educate elements of this plan Fit test High Risk/Category A employees Retain training, exercising, plans, and fit testing records Fill out incident report forms. | <ul style="list-style-type: none"> Review accuracy of info in this plan. Categorize Jobs Risk Develop Policies and SOPs relevant to Chemical Hygiene 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 and PH Director Ensure exposed employees complete required 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. |

IV. COMPLIANCY

a. Universal precautions will be observed at the *Health Department* in the provision of clinical services, the proper storage in accordance to manufacturer labels, and proper handling and use. Chemicals will be kept safe from access to the public, especially children. All chemicals will be considered hazardous regardless of the level of risk to health.

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 hazardous chemicals. As a result, our facility provides equipment and supplies to protect health risks from hazardous chemicals.

The Exposure Control 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 Supervisor and Director will be responsible for identifying, evaluating, and selecting effective engineering and work practice controls. Issues and changes will be shared with the Health, Safety, and Wellness committee minutes.

ENGINEERING CONTROL EQUIPMENT

The following areas have, or should have, Engineering Control Equipment to eliminate or minimize our employees' exposure to hazardous chemicals.

Storage Cabinets
SDS Sheets

c. Handwashing facilities are available to employees who incur exposure to hazardous chemicals. MIOSHA requires that these facilities be readily accessible after incurring exposure. All BLDHD clinic sites have handwashing facilities. Upon incurring exposures when handwashing facilities are not feasible, the employer is required to provide a cleanser in conjunction with a clean cloth/paper towel or 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.

e. Work Areas, where there is a reasonable likelihood of a chemical spill or release employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses in the work areas.

f. Personal Protective Equipment will be provided to all employees for use in handling chemicals. Personal protective equipment will be chosen based on the anticipated risk to skin, eyes, or ingestion as indicated in the chemical's SDS sheet.

Protective clothing including gloves, goggles, respirators, and lab coats will be available to employees using chemicals.

All PPE will be cleaned, laundered, and disposed of by the employer at no cost to employees. All repairs and replacements will be made by the employer at no cost to employees.

All PPE will be removed prior to leaving the work area and disposed of in the trash, free from public access.

Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with chemicals *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 spill cleanup will follow SDS instructions.

i. Standard Operating Procedures (S.O.P.'s) provide guidance and information on the anticipated first aid tasks assigned to our employees. They will be based on the form found in Appendix A and will be utilized in employee training.

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.

VI. POST-EXPOSURE EVALUATION AND FOLLOW-UP

When an employee experiences a chemical exposure incident, it must be **reported to their Supervisor and an Incident Report Form filled out.** Attachment

All employees who experience a chemical 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.
- Documentation of potential short and long term health effects of the exposure.

A written opinion shall be obtained from the health care professional within 15 days and provided to the Personal Health Director.

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

- 1) Symptoms and treatment related to the current exposure.
- 2) Potential short and long term health effects of the exposure.
- 3) A statement that the employee has been informed of the results of the evaluation.

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: ***Emergency Coordinator***

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.

VI. TRAINING

Training for all 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:

- Location where chemicals are stored and used.
- Location of SDS sheets containing chemical information including risks.

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

All employees will receive annual refresher training. Note: This training is to be conducted within one year of the employee's previous 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.

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**

*Benzie-Leelanau District Health Department***Hazardous Chemicals Exposure Incident Report**

Name: _____ Job Position: _____ Employee ID # _____

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

Exposure to (chemical name(s):**Type of Exposure:**

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

Describe Personal Protective in use at time of incident:

- ☐ Gloves
- ☐ Goggles
- ☐ Other

Describe Situation Precisely:**Describe Immediate Interventions:**Was the area ☐ Washed ☐ Flushed?

Date of Last Td Booster

Did injury bleed freely? ☐ Yes ☐ NoBooster Td Given ☐ Yes ☐ NoWas antiseptic applied? ☐ Yes ☐ No

Other?

Current Symptoms of Exposure:**Medical Evaluation:**

Date:

Provider:

Treatment:

Recommendations:

(Attach report from provider)

Other Comments:**Supervisor Signature/Date**

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.