

DEPARTMENTAL HEALTH AND SAFETY GUIDE
" HO'OPONOPONO LAULIMA "

UNIVERSITY OF HAWAI'I AT MANOA

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PREFACE

The University's most important resources are the faculty, staff and students who live and work within the University's facilities. Over twenty thousand individuals are involved in research, administrative and educational activities here. Many may work with hazardous materials as part of their job. Others perform work in environments where serious injuries or possible exposures to dangerous substances could occur. Chemicals, radioactive isotopes, bio-hazardous agents, and energized equipment are routinely used in research and educational endeavors. All personnel working and learning in such environments must be well informed about hazardous materials to which they may be potentially exposed; learn to recognize and correct unsafe physical conditions and to understand correct methods of personal protection to be incorporated into their activities.

The University of Hawaii has a fundamental obligation to safeguard the health, safety and welfare of its students, personnel, and the visiting public whenever they participate in an official University activity. It is the policy of the University to provide and maintain, through implementation of safety and health programs, conditions and practices that provide safe and healthful campus environments. In keeping with this commitment, this Departmental Health and Safety Guide was developed.

The responsibility to implement health and safety programs lies at the departmental level where there exists the greatest control of facilities and personnel. This guide has been developed to provide all Deans, Directors and Department Chairs with an overview of campus resources, regulatory requirements and recommended safe work practices which must be integrated into an effective departmental safety program.



Robert Bley-Vroman, Interim Chancellor
University of Hawai'i at Manoa
May 2015

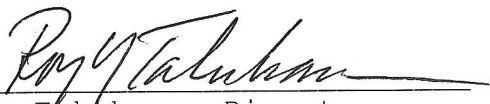
I. INTRODUCTION

Our office is fully committed to providing a healthy and safe environment for everyone and has adopted the theme "Ho'oponopono Laulima" which means "Managing Safety Through Cooperation." It is our hope that the development of this publication will serve as a means of improving communication and cooperation among all members of the University. We believe that departmental support is essential in implementing the University's health and safety policy.

This guide is divided into a number of areas which include policy statements, personnel rights/responsibilities, hazard assessment guidelines and implementation procedures, employee training/education and a reference list of available resources. It is the goal of this publication to integrate health and safety information into a format easily understood and managed by departmental personnel who may have limited knowledge in occupational safety. Any questions concerning this publication should be directed to EHSO for clarification. Any comments or suggestions are encouraged and welcomed by our office.

This manual applies to general work environments and not specific worksites such as laboratories, maintenance shops, animal care facilities, and marine facilities. These specific worksites should have their own safety procedures or manuals, such as the Chemical Hygiene Plan (CHP) for laboratories. Additional departmental procedures may be added to this guide to address specific departmental workplace hazards, e.g. asbestos handling procedures, respiratory protection, hearing conservation, etc.

We hope that this guide will serve as a basis for your department's health and safety program. Please feel free to call us for further information or assistance.



Roy Takekawa, Director
Environmental Health & Safety Office
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II. UH HEALTH AND SAFETY POLICY

The University of Hawaii has a fundamental obligation to safeguard the health, safety, and welfare of its students, personnel, and visiting public whenever they participate in an official University activity. It is the policy of the University to provide for and maintain, through implementation of safety and health programs, conditions and practices that will provide safe and healthful campus environments. It is also the responsibility of each individual to comply with established health and safety regulations and procedures and to take every precaution necessary to prevent injury to themselves and to others. This policy is included in the University of Hawaii System-wide Administrative Procedures Manual, A9.750 University of Hawaii Health and Safety Program.

III. RESPONSIBILITIES

A. DEANS, DIRECTORS AND DEPARTMENT CHAIRS

All Deans, Directors and Department Chairs are responsible for establishing and maintaining programs in their areas which will provide a safe and healthy work and living environment. The primary responsibility for establishing and maintaining a safe and healthy environment for its employees, students and visitors remains at the department level.

B. DEPARTMENTAL SAFETY COORDINATORS (if applicable)

Appointed by the Department Chair/Director, the Coordinator liaisons with EHSO and other service organizations to assist departmental personnel in developing and maintaining all facets of the program.

C. PRINCIPAL INVESTIGATORS/SUPERVISORS

All Principal Investigators and supervisors are responsible for compliance with this policy as it relates to operations under their control. Specific areas of responsibility include employee safety training, identification and elimination of hazardous conditions and recordkeeping.

D. EMPLOYEES AND STUDENTS

Each individual is responsible for following procedures and guidelines provided by their supervisor/instructor, as well as identifying hazardous conditions in the workplace. Moreover, each employee/student must attend training sessions and understand applicable safety requirements. Individuals are also responsible for asking questions of their supervisors when concerned about unknown or hazardous situations or substances.

E. ENVIRONMENTAL HEALTH AND SAFETY OFFICE (EHSO)

EHSO is responsible for monitoring compliance with this policy. In case of life safety matters or imminent danger to life or health, the Director of EHSO or his/her designee has the authority to order the cessation of the activity until the hazardous condition is abated or adequate measures are taken to minimize exposure to campus personnel from such a condition.

IV. GENERAL HEALTH AND SAFETY REQUIREMENTS

Hawaii Occupational Safety and Health Standards require that employers provide safe and healthful work places and practices by elimination or reduction of existing or potential hazards. Departments shall establish and maintain an occupational safety and health program which includes: a training program instructing employees of safe work practices and specific hazards unique to the employee's job; periodic inspections to identify unsafe conditions and work practices; and ways to correct them. All records of training and inspections shall be kept by the department.

A. POSTING OF NOTICE/EMERGENCY TELEPHONE NUMBERS/EMERGENCY PROCEDURES

1. Posting of Notice

Each department shall post the white and red poster " You Have a Right to a Safe And Healthful Workplace - It's the Law!" which informs employees of the following:

- (a) protections and obligations under the law; and

- (b) the availability of assistance and information; including copies of the law and of specific safety and health standards, from the department or EHSO

Posting of notice shall be in accordance with Section 12-51-2, Title 12 of HIOSH regulations.

2. Emergency Telephone Numbers

A poster shall be fastened and maintained, either on the first-aid kit or cabinet or near telephones giving the phone numbers and addresses of doctors, hospitals and ambulance services to be contacted in case of an emergency or the campus emergency number **(X66911)** shall be posted.

3. Emergency Procedures

Each University department/office should have a written emergency plan which would address the specific procedures for departmental personnel to follow in the event of various foreseeable emergency situations, i.e. fire, medical problem, bomb threat, etc. This plan should provide for students, staff and members of the public and should be reviewed annually. UH Manoa's Department of Public Safety (DPS) has published a brochure which details the general overall response procedures for the campus entitled, "Emergency Procedures for UH Manoa Campus" and copies are available from them.

4. Evacuation and Notification Procedures

WHEN THE BUILDING ALARM IS ACTIVATED, OCCUPANTS WILL:

- a. Evacuate the building without delay. Close doors and windows, if possible.
- b. Notify DPS, via Emergency Call Box or X66911.
- c. Do not under any circumstances silence the building fire alarm.

- d. When evacuating the building, move away from the building entrance and clear building access for emergency response personnel.
- e. Arrange to have a specific location away from the building where people are to meet after evacuation. All department/office personnel, students, and visitors should be accounted for.
- f. Information regarding persons with disabilities who need evacuation assistance should be given to the first responding DPS officers. Honolulu Fire Department personnel have training and equipment to assist with the evacuation of wheelchair users and other mobility impaired persons. Others who may be ambulatory may be assisted from the building, if it can be done safely.
- g. Evacuate disabled persons who are elevator dependent (when the elevator may not be used) i.e. those with wheelchairs, cardiac and/or pulmonary disabilities, crutches, canes, walkers, etc., please use the following procedure (individual departments should evaluate their situations and may adopt alternate procedures if necessary):
 - i) Escort the person to the closest stairwell or "area of rescue assistance."
 - ii) If appropriate, assist the person into the stairwell landing and activate emergency call equipment, if present. If no emergency call equipment is present, assign someone to inform DPS that there is a person with a disability needing evacuation assistance and specify the person's access/evacuation needs.
 - iii) Remain with that person until she/he is rescued by evacuation personnel (Honolulu Fire Department).

B. HAZARD COMMUNICATION

The term "hazardous" refers to any substance or material which could cause personal harm and injury to persons who may become exposed to the substances. Substances such as chemicals,

radioactive isotopes, cleaning solvents, paints, inks, etc., are all potentially hazardous materials which are routinely used on campus. Of these various types, chemicals far exceed the others in total number and diversity. Chemicals are not only used by researchers in laboratories, but by our janitorial and trades people as well. Since the safe handling and use of chemicals is of primary concern, the Hazard Communication Program has been developed. This program introduces a set of procedures designed to minimize the risk of chemical exposure and to comply with the State of Hawaii Division of Occupational Safety and Health (HIOSH) Hazard Communication Standard (HazCom). The major components of our Hazard Communication Program are presented in this guide and the complete written program is provided on our website(www.hawaii.edu/ehso/industrial/).

UH's Hazard Communication (HazCom) Program has two primary goals: (1) to clearly identify hazardous substances being used in the work place; and (2) to inform employees about the hazardous properties of those substances, as well as methods of personal protection that will ensure their well-being while handling the material while on the job.

The Hazard Communication Program includes the following information:

- . Description of how labels, Safety Data Sheets (SDS) and training are used to inform employees
- . Description of the method the University uses to inform employees about the hazards of non-routine tasks and unlabeled pipes
- . Description of how the University informs contractors of hazardous substances that they may encounter
- . Standardized form for chemical inventories

1. Hazardous Substance Identification and Inventory

Each department is responsible for maintaining an inventory of all chemicals used in its operation. The inventory at a minimum shall include each chemical's name, manufacturer, and quantity. The inventory is to be updated at least annually, with obsolete items removed and new items added as necessary.

2. Safety Data Sheets (SDS)

Manufacturers of chemicals are required by law to develop Safety Data Sheets (SDS) for each of their products. An SDS is a standardized document which contains sections on safety information including methods of personal protection, flammability, reactivity, special handling instructions, spill cleanup information, waste disposal requirements, etc. Most manufacturers routinely include the SDS with their product as it is shipped to the campus. Companies must also provide an SDS for their products upon request.

3. Employee Information and Training

Each supervisor must provide training to their employees upon their assignment to a work area where hazardous substances are present. For details on the specific content of the training, refer to the University's HAZCOM Program. EHSO can also provide assistance to the departments for HAZCOM training.

4. Labeling

Primary labels affixed to manufacturer's original containers must be in good condition. Labels must be in conformance with the Globally Harmonized System Classification and Labeling of Chemicals (GHS) which provide information on health and physical hazards and other specific hazards.

All secondary containers into which hazardous substances are transferred must be adequately labeled with information contained from their original containers. Secondary containers of hazardous materials intended for use within the workday/shift need not have labels.

C. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Requirements for personal protective equipment are found in 29 CFR 1910.132 of the OSHA regulations. This standard covers protective equipment for eyes, face, head, hands, feet and other protective shields/barriers. Under the Personal

Protective Equipment Standard, there are two major requirements:

1. Hazard Assessment

Each department must assess the workplace to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). We can assist the various departments in conducting this assessment.

Based on what hazards exist or potentially exist, the departmental supervisor shall select, and have each affected employee use the types of PPE that will protect against the identified hazards. PPE must properly fit each employee and the employee shall verify the assessment in writing.

2. Training Requirements

Each department must provide training to each employee required to use PPE. Training will include when PPE is needed, what PPE is needed, how to wear PPE, the proper care, maintenance, useful life and disposal of the PPE. The departmental supervisor has to certify in writing that the employee has received and understands the training.

D. WORK SITE INSPECTIONS

Section 12-60-2(b)(3), Title 12 of the HIOSH regulations specifies that periodic inspections to identify unsafe conditions and work practices must be conducted for all departmental areas. The purpose of inspections is to identify and correct potential problems before employees become injured or property is damaged. Conducting inspections serves as one of the elements of a good accident prevention program which helps to maintain a greater safety awareness among all department personnel.

EHSO conducts periodic inspections of labs, shops and administrative areas. However, the number of EHSO staff is not large enough to provide frequent and recurring inspections of all areas on campus. EHSO has conducted inspections upon request and continues to do so.

Problems noted in the inspections should be addressed immediately by supervisory personnel and if necessary, EHSO will provide assistance in resolving problems.

E. WORKERS' COMPENSATION

Employees, Supervisors and Workers' Compensation (WC) Coordinators have a responsibility to timely report the work-related injury/Illness of an employee to the University's insurance carrier. Refer to website: www.hawaii.edu/riskmanagement/workcomp/ for detailed information and the appropriate forms and procedures.

F. INCIDENT REPORTING/INVESTIGATION

An accident can be defined as "an undesirable event that results in harm to people, damage to property, or loss to process." This includes injuries, occupational disease, damage to University equipment, damage to property, environmental pollution, release of hazardous material or disruption to services. Anytime an accident occurs, that does not result in a workers' compensation claim, an Incident Report should be completed and forwarded to EHSO for follow-up (see Appendix 4).

Similarly, a near-miss is defined as "a situation where the sequence of events could have caused an accident if it had not been interrupted". In order to be proactive in preventing accidents, supervisors are responsible for reporting near-misses to EHSO. Depending on the potential severity and the probability of a near-miss becoming an accident, EHSO staff will conduct investigations in order to identify the problem and implement corrective actions. It is important to understand that "employees being more careful" is not an acceptable corrective action to prevent recurrence of these incidents. When an accident or near-miss is experienced, a failure in a system or procedure has occurred. Identifying the failure is the objective of the investigation that EHSO conducts.

G. MEDICAL AND FIRST AID

Employers are required by OSHA Standard (29CFR1910.151) to have a person or persons properly trained to render first aid for worksites that are not in close proximity to a medical facility. It is recommended that the first-aid program for a worksite be designed to reflect the known and anticipated risks/hazards of the workplace.

As each work environment is unique, it is recommended that the contents of each first aid kit be representative of what injury or illness might be anticipated in that environment. In general, the first aid supplies must be available in adequate quantities and be readily accessible.

If more than first aid treatment is required, call DPS (X66911) or 911(off-site Manoa based facilities)immediately.

OSHA's Best Practices Guide: Fundamentals of Workplace First-Aid Program (www.osha.gov/Publications/OSHA3317first-aid.pdf) identifies four(4) essential elements for an effective first aid program: 1) management leadership and employee involvement; 2) worksite analysis; 3) hazard prevention and control and 4) safety and health training.

H. RECORDKEEPING

All matters pertaining to employee/student health and safety concerns must be fully documented. Written records of activities, such as development of special departmental safety policies and procedures, training sessions for managers and employees, and minutes of safety meetings and so on, must be maintained at the appropriate level as specified in the following:

1. EHSO is responsible for:

Documenting all training programs provided to departments by EHSO staff, including a participant list, date of presentation and topic discussed.

2. Department is responsible for:

Maintaining records concerning employee injuries, incident reports, grievances involving safety matters, personnel exposure records, training, etc.

3. Supervisor is responsible for:

Documenting any exchange of safety information with employees occurring through formal presentation and/or one-to-one meeting at the work site.

Records of all safety matters are subject to periodic review by EHSO, HIOSH and other applicable agencies conducting workplace inspections. They should be maintained in a clearly identified, central file within the department for ease of access.

V. EMPLOYEE SAFETY TRAINING

Effective dissemination of safety information is essential in the success of a health and safety training program. The Hawaii Administrative Rules, Title 12, Chapter 60, Section 12-60(b)(4)(A) states the following: "the employer shall develop and institute a safety and health training program for all employees so they have an understanding of the hazards to which they may be exposed, and the procedures or practices needed to protect them from these hazards."

The purpose of providing safety training to employees is to help them clearly understand the risks of hazards they face on the job and to provide information concerning methods of personal protection which will safeguard them while performing those tasks.

EHSO provides training programs in many different areas (see Appendix 5). Most training program material is general in nature so as to be applicable to a great number of departments. Sessions can be scheduled through EHSO for presentation to departmental employees/students as needed.

Specialized training sessions dealing with an employee's unique job assignment must be developed by his/her supervisor. It is the supervisor's responsibility to understand his/her employee's job tasks and its related hazards. HIOSH regulations are quite specific about responsibilities of supervisory personnel with respect to informing their employees about hazards they face on the job.

A long-range departmental training plan should be developed which sets priorities for training sessions, including a schedule of presentations. Consideration should also be given to frequency required for retraining purposes. These refresher programs should be incorporated into the long-range plan.

Complete documentation of all training activities must be maintained at the department. The record should show the participants printed name and signature, date of presentation, topic discussed,

as well as an outline of the material presented. These records must be made available to HIOSH and other agencies during worksite inspections.

VI. HAZARDOUS WASTE/NON-HAZARDOUS WASTE

A. HAZARDOUS WASTE

The generation and disposal of hazardous waste at the University is strictly regulated. The EHSO Hazardous Materials Management Program (www.hawaii.edu/ehso/hazmat/) ensures proper disposal of waste in accordance with federal and state rules and regulations. Hazardous waste includes flammable, explosive, poisonous and toxic chemicals. For radioactive waste, please call EHSO's Radiation Safety Officer; for infectious waste call UH's Biological Safety Officer.

B. Non-Hazardous Waste

Non-hazardous waste is handled by the Custodial Section of the Buildings and Grounds Management Office (BGM). The custodians will empty waste baskets containing regular trash. Glass is to be segregated from other non-hazardous trash. For disposal of other non-hazardous waste, refer to our waste disposal guidelines at www.hawaii.edu/ehso/compliance/wastel.htm.

VII. RESOURCES

The following resources are available to departments for assistance in the implementation of their health and safety program.

A. ON-CAMPUS

1. **Environmental Health and Safety Office - www.hawaii.edu/ehso**

Occupational Health and Safety - The Industrial Hygienist (IH) provides assistance in the anticipation, identification, evaluation and control of workplace hazards such as asbestos,

chemical exposure, noise, ergonomics, indoor air quality, and other potentially hazardous conditions.

Hazardous Materials Management - The Hazardous Materials Manager provides assistance in the transportation, segregation, consolidation, identification and storage of potentially hazardous materials/chemicals in compliance with EPA and DOT regulations. Ultimate disposal of hazardous waste at mainland sites. Material exchange and waste minimization assistance is also Provided.

Environmental Compliance - The Environmental Compliance Officer monitors compliance with a variety of environmental regulations, such as chemical storage tanks (both above/below ground), site assessment, site clean ups, storm water runoff, waste water disposal and hazardous materials storage and release reporting.

Radiation Safety - The Radiation Safety Officer (RSO) monitors regulatory compliance with respect to use, storage and disposal of radiation sources. Provides information on radiation protection to personnel and survey all areas in which radioactive materials are used.

Fire Safety - The Fire Safety Officer provides inspection and maintenance of all fire protection equipment and conducts comprehensive building inspections to ensure compliance with applicable fire and building codes. Training on the use of fire extinguisher is also available.

Laboratory Safety - The Chemical Hygiene Officer (CHO) conducts periodic inspections of eyewash stations, safety showers and laboratory hoods. Problems connected with chemical storage, fire safety, electrical safety and personal protection are focused upon. The CHO also provides information on safe handling and storage of reactive and toxic substances; and makes recommendations regarding proper personal protection.

Diving Safety - The Diving Safety Officer provides oversight of Scuba divers working under UH auspices which involves the evaluation and approval of dive plans; training and program support, including advanced and scientific diving techniques; diving rescue; diving first aid; equipment inspection and authorization services; and investigation of SCUBA diving accidents.

EHSO Publications - Copies of the following reference publications are available from EHSO (www.hawaii.edu/ehso)

- * UH Departmental Health and Safety Guide
- * UH Diving Safety Manual
- * UH Radiation Safety Manual
- * UH Hazard Communication Program
- * UH Hearing Conservation Program
- * UH Respiratory Protection Program
- * UH Asbestos Management Plan
- * UH Chemical Hygiene Plan
- * UH Hazardous Materials Management Program

All EHSO services are available to department personnel by contacting EHSO during regular working hours.

2. **Office of Research Compliance** - The Biological Safety Program falls under this office and provides over-site on the regulations and guidelines regarding the procurement, storage, transport, use and disposal of biological commodities. The Biosafety Officer conducts inspections, ensures biosafety cabinets are annually certified and manages the disposal of biological waste.
3. **Office of Risk Management** - The Worker's Compensation (WC) Program for the University is administered by this office. A work related injury or illness of an employee must be timely reported by his/her department WC Coordinator to the University's insurance carrier with a copy to the UH Office of Human Resources. See UH Administrative Procedure A9.720 Workers' Compensation for further instructions on this matter.
4. **University Health Services** - physicians and nurses provide primary medical care for illness and injury for students. Student Health Services assists the student in obtaining other specialized medical services in the community. Health and education are also provided.