

**CALIFORNIA STATE UNIVERSITY,
LOS ANGELES**

INJURY & ILLNESS PREVENTION PROGRAM

August 2019

PROGRAM APPROVAL AND AUTHORIZATION



William A. Covino, President



Date

TABLE OF CONTENTS

TITLE	SECTION
PURPOSE	1.0.
ORGANIZATIONS AFFECTED	2.0.
REFERENCES / STATUTORY AUTHORITY	3.0.
POLICY	4.0.
DEFINITIONS	5.0.
RESPONSIBILITES	6.0.
PROCEDURES / PROGRAM	7.0.
APPENDICES	8.0.
HAZARD / INCIDENT REPORT FORM	8.1.
SUPERVISOR'S REPORT OF OCCUPATIONAL INJURY & ILLNESS	8.2.
EMPLOYEE'S REPORT OF OCCUPATIONAL INJURY & ILLNESS	8.3.

1.0. PURPOSE:

To establish a program for the protection of students, faculty, staff and visitors from potential hazards and / or conditions, which may compromise the safety and health of the campus community. An effective Injury & Illness Prevention Program (IIPP) strives to manage the working and educational environments in order to: identify existing hazards; minimize potential hazardous conditions; correct those identified conditions; and put procedures and / or practices into place to prevent the recurrence of those unsafe conditions.

The purpose of this document is to establish and maintain a written IIPP plan which conforms to California Code of Regulations (CCR) Title 8, Section 3203 standards and addresses the following eight (8) elements:

- Responsibility
- Compliance
- Communication
- Hazard Assessment
- Accident / Exposure Investigation
- Hazard Correction
- Training and Instruction
- Recordkeeping

Proper development, implementation, and oversight by all responsible areas should ensure the effectiveness of the IIPP in achieving a safer and healthier campus environment.

2.0. ORGANIZATIONS AFFECTED:

All California State University, Los Angeles (Cal State LA) employees are directly affected by the program components contained herein. Non-state employees (University Auxiliary Services, Inc. (UAS), University-Student Union (USU), LA County High School for the Arts (LACHSA), etc...) residing on campus should refer to their organization's IIPP. Elements of this program do pertain to non-state employees, student and visitor populations in that a mechanism exists to identify, report, and correct unsafe or potentially hazardous conditions at this University.

3.0. REFERENCES / STATUTORY AUTHORITY:

- 3.1. [California Labor Code, Section 6401.7.](#)
- 3.2. [California Code of Regulations \(CCR\) Title 8, Division 1, Chapter 4, Subchapter 7, Introduction, Section 3203.](#)
- 3.3. [Cal State LA Administrative Procedure 009, Risk Management Safety Committee.](#)
- 3.4. [Cal State LA Administrative Procedure 425, Ergonomic Programs.](#)
- 3.5. [Cal State LA Administrative Procedure 430, University Regulatory Training Requirements.](#)
- 3.6. Cal State LA Risk Management and Environmental Health and Safety (RM/EHS) Heat Illness Prevention Program.

4.0. POLICY:

Insofar as is reasonably possible, it is the policy of Cal State LA to maintain a campus environment for faculty, staff, students, and the public (herein known as campus community) that will not

adversely affect their health and safety nor subject them to avoidable risks of accidental injury and illness. No person will be required to perform any task, which he / she determines to be unsafe or unreasonably hazardous. To accomplish this, the Cal State LA shall strive to maintain facilities and provide resources that allow for a safe and healthful working environment, meeting all Federal, State and local laws and regulations.

While the ultimate responsibility and accountability for campus health & safety resides with the President, the implementation of and monitoring for workplace health and safety falls on every employee. It is each individual's duty to react to and identified unsafe or potentially hazardous conditions by correcting or reporting it to the proper authority. Accordingly, students and visitors have a basic responsibility to conduct their activities or business in a manner supportive of the University's policies and guidelines for health and safety.

5.0. DEFINITIONS:

- 5.1. Accident Investigation – A process by which a review of the circumstances of an event, the gathering of factual records and evidence, and the development of a final report describing the events as they transpired. Typically, the organizations conducting investigations are department management, Public Safety, Human Resources Management (HRM) and RM/EHS.
- 5.2. Employee – Any person (student assistant, full / part-time faculty, staff or administrator) who works for Cal State LA and is subject to coverage under occupational standards as set forth by the California Occupational Safety and Health Administration (OSHA), or falls under Cal State LA's workers' compensation insurance.
- 5.3. Engineering Controls – Engineering measures employed to control workplace hazards (chemical, physical, biological or radiological). This methodology is preferred to the implementation of personal protective equipment (PPE) as a means of personnel protection.
- 5.4. Imminent Hazard – Any condition or practice where there is reasonable certainty that a potentially hazardous condition exists which might cause serious injury or death to an individual, and / or irreversible damage to the campus infrastructure.
- 5.5. Inspection – The review and assessment of a program, area, or practice for the purpose of identifying non-compliant activities, imminent hazards, and / or unsafe acts or conditions.
- 5.6. PPE – Personnel protection equipment designed to protect that individual from the identified hazards of the area to which he / she is exposed. Examples of devices are: gloves, Tyvek suits / protective clothing, respiratory devices, face shields, hard hats, safety glasses / goggles, shields, barriers, or other protective measures. This means of personnel protection is secondary to mechanical or engineering controls.
- 5.7. Unsafe Act – Performance of a task or execution of an action, which threatens the personal health and safety of the primary individual and / or secondary bystanders. Examples are:
 - a) Operating a device without proper certification/authorization
 - b) Lack of or improper use of PPE
 - c) Failure to follow established safety guidelines
 - d) Operating equipment in poor or unsafe conditions
 - e) Failure to warn others of an unsafe condition
 - f) The intentional bypass or removal of safety devices
 - g) Use of defective equipment
 - h) Use of tools / equipment for other than their intended purpose
 - i) Working in hazardous locations without adequate protection or warning

- j) Improper or incomplete repair of equipment / facilities
- k) Horseplay
- l) Wearing of unsafe clothing for task being performed
- m) Entering of a confined space without proper protection or equipment
- n) Food / beverage consumption in an area where chemicals are used or stored

5.8. Unsafe Condition – A feature in the workplace that is likely to cause injury or property damage. Examples are:

- a) Inadequate supports or guards
- b) Defective tools, equipment, or supplies
- c) Congested conditions in the workplace
- d) Inadequate warning systems
- e) Potential fire, chemical, and explosion hazards
- f) Poor housekeeping
- g) Hazardous atmospheric conditions
- h) Excessive noise
- i) Poor ventilation
- j) Inappropriate hygiene / personal grooming, long hair around machinery, beard with respirator use, etc.

6.0 RESPONSIBILITIES:

- 6.1. The University President – Has the responsibility for injury and illness prevention and compliance with the IIPP. The President will meet this responsibility by providing institutional support toward the execution and administration of the Cal State LA IIPP. The actual administration of this Program shall be delegated to RM/EHS.
- 6.2. Deans, Department Chairs, University Management – Have the responsibility to implement the provisions of this IIPP in their immediate work centers to promote a safe and healthful working environment. These duties shall include, but not be limited to, the following activities:
 - 6.2.1. Review the IIPP on a periodic basis and provide RM/EHS with program improvements, as appropriate.
 - 6.2.2. Designate an area representative who serves as a focal point for safety and health related matters and disseminate that contact to all area personnel.
 - 6.2.3. Conduct periodic workplace inspections so that unsafe acts and conditions can be identified and corrected.
 - 6.2.4. Perform / implement the necessary corrective actions as indicated by inspections and employee communications at the department level.
 - 6.2.5. Inform affected employees of unsafe conditions that cannot be immediately corrected, and / or post appropriate warnings in those affected areas.
 - 6.2.6. Refer unsafe acts and conditions that cannot be corrected, or addressed, at the departmental level to RM/EHS.
 - 6.2.7. Develop and implement an area specific training program designed to instruct employees in general safe work practices for their immediate area as well as instructions specific to their job duties. Such education and training shall take place prior to the employee being assigned potentially hazardous employment.

- 6.2.8. Develop a method of communication where unsafe acts and conditions can be reported by employees without fear of reprisal and management can communicate safety information to employees.
- 6.2.9. Instruct employees in the recognition and avoidance of unsafe acts and conditions, including hazards associated with non-routine tasks and emergency operations.
- 6.2.10. Develop methods to assure employees adhere to safety procedures.
- 6.2.11. Develop a system of record keeping that documents internal training, inspections, unsafe acts and conditions, and complaints / grievances involving safety issues.
- 6.2.12. Submit a completed Supervisor's Report of Occupational Injury or Illness to the University Workers' Compensation Administrator within twenty-four (24) hours of knowledge of the occurrence (Appendix 8.3.). Ensure that all employee work-related injuries and illnesses are properly reported to HRM.
- 6.2.13. In case of serious injury or illness notify RM/EHS as soon as possible at:

Extension 3-3527, 3-3549, or 3-3531

After hours, notify Public Safety Dispatch at:

911 (on-campus line) or 323-343-3700

A serious injury or illness occurs when an employee has inpatient hospitalization for a period in excess of twenty-four (24) hours for other than medical observation or in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement.

- 6.3. RM/EHS – Serves as the focal point for the entire IIPP development, implementation and maintenance. The RM/EHS Director, and / or his / her designee, shall:
 - 6.3.1. Coordinate implementation of the IIPP with all Cal State LA work sites.
 - 6.3.2. Provide assistance to departments, upon request, in complying with program requirements.
 - 6.3.3. Review the IIPP on an annual basis and revise as necessary.
 - 6.3.4. Review all work-related injury and illness reports, determine the need for further investigation and conduct such investigations as necessary.
 - 6.3.5. Conduct safety audits and inspections to verify program compliance.
- 6.4. HRM – Is responsible for:
 - 6.4.1. Scheduling new employee orientation. The RM/EHS Office shall provide an overview of the IIPP with contact information.
 - 6.4.2. Preparing the Employer's Report of Injury or Illness (Form 5020) via Cal State LA's Worker's Compensation Third Party Administrator (TPA) system. The TPA will:
 - 6.4.2.1. Prepare a supplementary record of injuries and illnesses on the OSHA Injuries and illnesses Incident Report (Form 301).

- 6.4.2.2. Record each occupational injury on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses (Form 300A).
- 6.4.2.3. Prepare an annual summary of the OSHA Form 300 and provide to Cal State LA for the annual posting.
- 6.4.3. Post the OSHA Form 300A no later than February 1st and keep it posted at the designated HRM bulletin board where employees can see it until March 1st.
- 6.4.4. Receipt and retention of the Supervisor's Safety Orientation Checklist.
- 6.4.5. Reporting of work-related injuries to the University third party administrator. This function is handled by the Workers' Compensation Coordinator.
- 6.5. All University Employees (Staff & Faculty) – Have the responsibility for their own safety and the safety of their fellow co-workers, including, but not be limited to:
 - 6.5.2. Reading and complying with established RM/EHS procedures and guidelines.
 - 6.5.3. Attending scheduled training sessions and complying with all applicable safety requirements.
 - 6.5.4. Asking their supervisor questions when there is concern about an unknown or potentially hazardous situation.
 - 6.5.5. Immediately reporting unsafe conditions or acts to their supervisor, department administrator / chair, or the RM/EHS Office.
 - 6.5.6. Immediately reporting work-related injuries or illnesses to their direct supervisor and to the Cal State LA Workers' Compensation Coordinator using approved campus documentation (See Appendix 8.3.).

7.0. PROCEDURES / PROGRAM:

7.1. Identification of Authorized Representatives

As mentioned under Section 6.0., the President has delegated the safety and health program responsibilities to RM/EHS. Therefore, the RM/EHS Director and / or his / her designee is the primary contact for employees (staff & faculty).

Additionally, there are three (3) other Safety Officers on campus who are responsible for their respective programs. The Radiation Safety Officer has primary responsibility for all issues and matters pertaining to Cal State LA's utilization of radioactive isotopes and their respective storage, handling and disposal. The Biological Safety Officer has primary responsibility for activities and matters pertaining to the safe use, handling and disposal of infectious, animal, and biological agents. Finally, the Chemical Safety Officer has primary responsibility for the development and management of the Chemical Hygiene Plan (CHP), review and oversight of laboratory practices, and general awareness training related to hazardous materials management.

- 7.1.1. The Health & Safety Coordinator shall serve as a secondary responsible person when the primary individual is unavailable for whatever reason.
- 7.1.2. At the departmental level, department chairs are appropriate contact personnel when questions arise pertaining to the program's local implementation.

- 7.1.3. Finally, the University employs a building approach to safety and accident prevention. There are assigned building coordinators for each structure on campus. These personnel perform routine inspections, handle area trouble calls, and generally respond to safety matters under their building responsibility, as appropriate.
- 7.2. Compliance with Safe and Healthy Work Practices
 - 7.2.1. University guidelines stipulate that it is every employee's responsibility to adhere to the guidelines established for compliance with health and safety standards. In addition, employees are encouraged to achieve a "beyond compliance" workplace by proactively getting involved with their working environments.
 - 7.2.2. All employees shall adhere to safe and healthy work practices as defined by established campus and departmental safety and health guidelines. Failure to do so may result in the initiation of disciplinary measures as defined in their respective collective bargaining agreements.
 - 7.2.3. Cal State LA shall recognize employees who take proactive measures in promoting or implementing effective safety and health practices annually, or upon recognition of a particular activity, as appropriate. This recognition can be any means as determined appropriate and / or fiscally responsible by the department and / or RM/EHS.
 - 7.2.4. Training on the IIPP shall be administered at the department level, through a training supplement provided by RM/EHS. This training shall be performed annually, or as new employees enter a department. Such training can be accomplished utilizing various media including RM/EHS bulletins, notices or electronic references.
 - 7.2.5. Those employees whose performance can be documented as deficient in the areas of safety and health shall receive refresher training on the area(s) in which the deficiency occurred.
 - 7.3. Safety Communication
 - 7.3.1. Committee(s)
 - 7.3.1.1. Once a month, the University Risk Management & Safety Committee (See Section 3.3. of this procedure) meets to discuss campus-wide issues related to health and safety. The membership includes, but is not limited to, representatives of each of the bargaining units, the Campus Safety Officers (RM/EHS, Chemical, Biological and Radiation), several support organizations (Public Safety and Facilities), and the RM/EHS Director who serves as the chairperson. This Committee, by charter, reports directly to the University President with recommendations on improvements to RM/EHS. An annual report on the RM/EHS Program is submitted to the President.
 - 7.3.1.2. The Facilities Safety Committee, which is chaired by the Unit 6 safety representative, meets at the discretion of Unit 6. The Unit's membership, Facilities Management, Public Safety and RM/EHS, are routinely in attendance. The issues discussed relate directly to concerns associated with facilities-related matters.

7.3.1.3. Each department shall include on their normal staff meeting agenda, environmental, health and safety concerns or general topics pertinent to those employees represented. Any issues shall be communicated to RM/EHS for follow-up and action.

7.3.2. Publication(s)

7.3.2.1. RM/EHS shall publish an Employee Safety Handbook that will serve to heighten awareness and insight into environmental, health and safety issues on campus. This document shall be reviewed every two (2) years for currency and updated accordingly. Distribution of this handbook shall be to all employees initially, to new employees through orientation, and available on the RM/EHS website for immediate access.

7.3.2.2. In addition, on an as needed basis, RM/EHS shall publish bulletins, notices or other related guidance documents to communicate immediate environmental, health and safety concerns to the campus community. The method of distribution can be through the campus e-mail system, RM/EHS website, or by direct mail to the departments.

7.3.3. Report of Unsafe Condition(s)

7.3.3.1. Unsafe conditions shall be reported using one (1) of the following methods:

7.3.3.1.1. Hazard / Incident Report Form (hard copy) (Appendix 8.1.). This form provides an anonymous means of reporting.

7.3.3.1.2. Hazard / Incident Report Form (electronic mail system). This form is provided on the RM/EHS webpage, and has a means of reporting that protects anonymity when requested.

7.3.3.1.3. Verbal communication to the supervisor. This is the method that is best suited for communicating unsafe and / or hazardous conditions that are local to the office or building. This means has the added advantage of communicating one's personal concern for safety issues and tends to increase safety communication generally with the supervisor and other staff.

7.3.3.2. Reports of unsafe or hazardous conditions that are reported to RM/EHS will be investigated by RM/EHS in a reasonable period.

7.3.4. Training

7.3.4.1. All University faculty, staff and, if necessary, auxiliary employees who perform work at or for Cal State LA, shall receive appropriate training necessary to protect their health and safety. This training shall include information regarding job hazards, possible health effects, and required work practices and procedures. The training constitutes communication of safe and healthful work guidelines to employees. Management personnel for independent contractors are responsible for the safety and health training of their employees.

7.3.4.2. Training shall be provided on a frequency required for the specific topic being addressed as shown in the University Safety Training Matrix of Administrative Procedure 430. Training in ergonomics (Appendix 8.1) and

heat illness prevention (Appendix 8.5.) are two (2) required programs for those affected employees.

7.4. Identification of Workplace Hazards

- 7.4.1. Every employee has the responsibility of maintaining a safe and healthful working environment for themselves and their fellow workers. To that end, any unsafe condition shall be immediately reported to the proper authority. For instances where personnel's health and safety may be immediately compromised, RM/EHS should be notified by calling:

Ext. 3-3527, 3-3549, or 3-3531

If the situation is a nuisance and does not pose an immediate risk of personnel injury or death then contact either the department supervisor or the Facilities Services Work Control directly at:

Ext. 3-3440

- 7.4.2. RM/EHS shall perform biennial inspections of the University facilities to evaluate their compliance to campus safety procedures, regulatory standards, and best management practices. This review shall be a pre-scheduled, announced, activity generally with the building coordinator or area supervisor in attendance.
- 7.4.3. In addition, RM/EHS may conduct unannounced inspections of operations on campus to ensure that daily activities meet all applicable standards.
- 7.4.4. All chemical purchases must receive RM/EHS approval prior to being authorized for purchase. RM/EHS will determine if the compound poses a new risk. New risks will be mitigated where possible and incorporated into procedures and training to ensure the use is performed safely. The product's Safety Data Sheet (SDS) shall be the primary resource for verification of hazards about a particular substance. Additional considerations include inventory management and special hazards or designation review. The University does NOT accept hazardous materials donations.
- 7.4.5. RM/EHS, prior to incorporation onto the campus, shall review any significant change in equipment, machinery, or other health and safety sensitive infrastructure. If the change involves a process rather than equipment modification and has health and safety implications, then RM/EHS shall be informed of the intended action prior to implementation.

7.5. Investigation of Occupational Injury / Illness

- 7.5.1. Upon an occupational injury report to the Cal State LA's Workers' Compensation Coordinator, RM/EHS shall be contacted to perform an accident investigation of the incident. At times, when the supervisor conducts the preliminary investigation, this may be reviewed for accuracy and utilized if the conditions warrant. This decision shall be made by RM/EHS. The written accident investigation shall be submitted to the Workers' Compensation Coordinator and all other relevant persons. If corrective measures are required, a firm schedule for closure must be identified.

For events which result in minor first aid or other non-reportable treatments (including near-miss events), the supervisor may elect to report the incident by the Supervisor's/Employee's Report of Occupational Injury and Illness forms (Appendix 8.2. and / or Appendix 8.3.) or report the event by contacting RM/EHS for investigation and action as warranted.

7.6. Correcting Unsafe or Unhealthy Conditions

- 7.6.1. As mentioned in Section 7.4. of this procedure, following identification of an unsafe or unhealthful condition that poses an immediate threat, a call shall be placed to RM/EHS. A representative of RM/EHS shall initiate corrective actions to alleviate the condition or secure it such that no one is threatened. This may consist of temporarily placing warning tape around the condition to prevent and warn unwary pedestrians, or other action(s) as deemed appropriate.
- 7.6.2. Facilities Services Work Control (extension 3-3440) places a priority on each request based on the requestor's description and health and safety implications. Those determined to be a health and safety concern are given greater priority.
- 7.6.3. A Hazard / Incident Report form (Appendix 8.1.) may be submitted to RM/EHS at any time to report an unsafe or hazardous condition, and under anonymity if desired. Requestors that provide their name will be updated as to the status of the corrective action, as appropriate. Anonymity shall bear no importance when considering the hazard.

7.7. Training

- 7.7.1. Any RM/EHS related training should either be developed by, or reviewed and approved by, RM/EHS prior to presentation to employees. At no time shall direction be given, which has failed to allow sufficient RM/EHS review.
- 7.7.2. Safety training begins at new employee orientation, and involves a general awareness of the RM/EHS programs on campus, significant points-of-contact, proper hazard reporting protocols, general safety guidelines, and recent employee notifications. The RM/EHS Director and / or his / her designee shall attend the new employee orientation briefings on a monthly basis, or as conducted by HRM.
- 7.7.3. The RM/EHS Program requires area managers / supervisors to provide training to each employee on how to perform specific job duties in a safe and correct manner. RM/EHS, upon request, shall provide the appropriate assistance necessary to achieve this goal. A Supervisor's Safety Orientation Checklist shall be completed by the department and submitted to HRM for retention in the employee file.
- 7.7.4. RM/EHS shall provide training to new employees on Cal State LA's IIPP. This training shall be made available and it is the responsibility of each employee to attend. The full IIPP training is only required at the time of the employee's initial employment, and further highlights and updates are conducted through University communications and / or department briefings.
- 7.7.5. The majority of Cal State LA's health and safety programs are site or user specific, and RM/EHS shall make available training resources and / or provide direct / indirect training to those personnel impacted by the standards. The matrix of programs and associated training frequencies are contained in [Cal State LA Administrative Procedure 430, University Regulatory Training Requirements](#).

7.8. Record Keeping for all Aspects of IIPP

- 7.8.1. RM/EHS shall maintain all records related to scheduled and periodic inspections required to identify unsafe or hazardous conditions for a period of at least three (3) years. These records should document the individual performing the inspection, the

unsafe conditions and work practices noted, and the action taken to correct the condition or practice identified.

7.8.2. All records related to health and safety training shall be maintained by the department, which conducted said training. This may either be the individual's own department, Public Safety, HRM, or RM/EHS. In addition, outside training shall be documented similarly and maintained in a centralized location for review. All training documents shall include the employee's name, date(s) and type(s) of training provided, and the name of the person conducting the training. This documentation shall be maintained for at least three (3) years.

8.0. APPENDICES:

8.1. [Hazard / Incident Report form.](#)

8.2. [Supervisor's Report of Occupational Injury & Illness.](#)

8.3. [Employee's Report of Occupational Injury & Illness.](#)



HAZARD / INCIDENT REPORT

To: Risk Management & Environment Health & Safety Office (RM/EHS)
Corporation Yard, Room 244

Date: _____

From: Name: _____ (Optional)

Dept./Area: _____

Extension: _____ (Optional)

* Type of Hazard / Incident & Location:

Description of Hazard / Incident:

Additional Comments: (Related historical actions, requests, or experiences)

Investigator's Signature: _____ Date: _____
(RM/EHS Staff Only)

Corrective Action(s) Taken:

Signature of Closure Validation: _____ Date: _____
(RM/EHS Staff Only)

Hazard Communication Training Outline and Handout

TRAINING OUTLINE

The following Health Hazard Information is mandatory.

Although safety hazards related to the physical characteristics of a substance can be objectively defined in terms of testing requirements (e.g. flammability) health hazard definitions are less precise and more subjective. Health hazards may cause measurable changes in the body – such as decreased pulmonary functions. These changes are generally indicated by the occurrence of signs and symptoms in the exposed employees – such as shortness of breath, a non-measurable, subjective feeling. Employees exposed to such hazards must be apprised of both the changes in body function and the signs and symptoms that may occur to signal that change.

The determination of occupational health hazards is complicated by the fact that many of the effects or signs and symptoms occur commonly in non-occupationally exposed populations, so that effects of exposure are difficult to separate from normally occurring illnesses. Occasionally, a substance causes an effect that is rarely seen in the population at large, such as angiosarcomas caused by vinyl chloride exposure, thus making it easier to ascertain that the occupational exposure was the primary causative factor. More often, however, the effects are common, such as lung cancer. The situation is further complicated by the fact that most substances have not been adequately tested to determine their health hazard potential, and data do not exist to substantiate these effects.

There have been many attempts to categorize effects and to define them in various ways. Generally, the terms “acute” and “chronic” are used to delineate between effects on the basis of severity or duration. “Acute” effects usually occur rapidly as a result of short-term exposures, and are of short duration. “Chronic” effects generally occur as a result of long-term exposure, and are of long duration.

Health Hazard Criteria

1. Carcinogen:

A substance is considered to be if:

- a. It has been evaluated by the International Agency for Research on Cancer (IARC) Monographs, Vols. 1-53 and Supplements 1-8, and found to be a carcinogen or potential carcinogen.
- b. It is listed as a carcinogen or potential carcinogen in the Sixth Annual Report on Carcinogens published by the National toxicology Program (NTP).
- c. OSHA regulates it as a carcinogen.
- d. It has been documented on the California Proposition 65 list of carcinogens.

2. Corrosive:

A substance that causes visible destruction of or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a substance is considered if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in Appendix A to Title 49, CFR, Part 173, it destroys or changes irreversibly the structure of the tissues in four (4) hours. This shall not refer to action on inanimate surfaces.

3. Highly toxic:

A substance falling within any of the following categories:

- a. A substance that has a median lethal dose (LD50) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
- b. A substance that has a median lethal dose (LD50) 200 milligrams or less per kilogram of body weight when administered by continuous contact for twenty-four (24) hours, or less if death occurs within twenty-four (24) hours, with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.
- c. A substance that contains a median lethal concentration of (LD50) in air of 200 parts per million by volume, or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for one (1) hour, or less if death occurs within one (1) hour, to albino rats weighing between 200 and 300 grams each.

4. Irritant:

A substance, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A substance is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of Title 16, CFR, Part 1500.41, for twenty-four (24) hour exposure or by other appropriate techniques, it results in an empirical score of five (5) or more. A substance is an eye irritant if so determined under the procedure listed in Title 16, CFR, Part 1500.42 or other appropriate techniques.

5. Sensitizer:

A substance that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the substance.

6. Toxic:

A substance falling within any of the following categories:

- a. A substance that has a median lethal dose (LD50) of more than 50 milligrams per kilograms but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
- b. A substance that has a median lethal dose (LD50) of more than 200 milligram per kilogram per million but not more than 2,000 parts per kilogram of body weight when administered by

continuous contact for twenty-four (24) hours, or less if death occurs within twenty-four (24) hours, with bare skin of albino rabbits weighing 2 and 3 kilograms each.

- c. A substance that has a median lethal concentration (LD50) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than 2 milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one (1) hour, or less if death occurs within one (1) hour, to albino rats weighing between 200 and 300 grams each.

7. Target organ effects:

The following is an organ categorization of effects, which may occur, including examples of signs and symptoms and substances, which have been found to cause such effects. These examples are presented to illustrate the range and diversity of effects and hazards found in the workplace, and the broad scope employers must consider in this area, but are not intended to be all-inclusive.

- a. Hepatoroxins: Substances, which produce liver damage. Signs and symptoms are jaundice and liver enlargement. Substances are carbon tetrachloride and nitrosamines.
- b. Nephrotoxins: Substances, which produce kidney damage. Signs and Symptoms are edema, and proteinuria. Substances are halogenated hydrocarbons and uranium.
- c. Neurotoxins: Substances, which produce their primary toxic effects on the nervous system. Signs and Symptoms are narcosis, behavioral changes, and decrease in motor functions. Substances are mercury and carbon disulfide.
- d. Agents, which act on the blood or hematopoietic system, decrease hemoglobin function, and deprive the body tissues of oxygen. Signs and Symptoms are cyanosis and loss of consciousness. Substances are carbon monoxide and cyanides.
- e. Agents, which damage the lung and irritate or damage the pulmonary tissue. Signs and Symptoms are cough, tightness in chest, and shortness of breath. Substances are silica and asbestos.
- f. Reproductive toxins: Substances, which affect the reproductive capabilities, including chromosomal damage (mutations) and effects on fetuses (teratogenesis). Signs and Symptoms are birth defects and sterility. Substances are lead and benzene.
- g. Cutaneous hazards: Substances, which affect the dermal layer of the body. Signs and Symptoms are defatting of the skin, rashes and irritation. Substances are ketones and chlorinated compounds.
- h. Eye hazards: Substances, which affect the eye or visual capacity. Signs and Symptoms are conjunctivitis and corneal damage. Substances are organic solvents and acids.

Handout

General Chemical Safety

Use these safety procedures when working with chemicals:

- Keep the work area clean and orderly.
- Use the necessary safety equipment.
- Carefully label every container with the identity of its contents and appropriate hazard warnings.
- Store incompatible chemicals in separate areas.
- Substitute with less toxic materials whenever possible.
- Limit the volume of volatile or flammable material to a minimum.
- Provide means of containing the material if containers should break and / or spill their contents.
- Obtain and read the Safety Data Sheets (SDS).

The separation of chemicals (solids or liquids) during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing. Explosives should be stored separately outdoors. Use either distance or barriers (e.g., trays) to isolate chemicals into the following groups:

- Flammable liquids (place in approved fire lockers)
- Acids
- Bases
- Other liquids

Container Labeling

It is extremely important that all containers of chemicals are properly labeled. This includes every type of container from a 5000-gallon storage tank to a spray bottle of degreaser. The following requirements apply:

- All containers must have a label, tag or marking that indicates any safety or health hazards.
- Portable containers need not be labeled if they are used immediately that shift, but must be under the strict control of the employee using the product.
- All warning labels, tags, etc., must be maintained in a legible condition and not be defaced.
- Incoming chemicals are to be checked for proper labeling by the user.

Emergencies

In case of an emergency, implement the Emergency Action Plan.

- Evacuate people from the area.
- Isolate the area.
- If the material is flammable, turn off ignition and heat sources.
- Call 911 for campus Public Safety assistance, if required.

Non-Routine Tasks

Non-routine tasks are defined as working on, near, or with unlabeled piping, unlabeled containers of any substance, confined space entry where a hazardous substance may be present and / or a one-time task using a hazardous substance differently than intended. A full hazard evaluation must be conducted before continuing with non-routine tasks involving chemicals.

Safety Data Sheets (SDS)

SDSs are provided by the chemical manufacturer to provide additional information concerning safe use of the product. Each SDS provides:

- Common name and chemical name of the material or product.
- Name, address and phone number of the manufacturer.
- Emergency phone numbers for immediate hazard information.
- Date the SDS was last updated.
- Listing of hazardous ingredients.
- Chemical hazards of the material.
- Information for identification of chemical and physical properties.

SDS: Chemical User Information

Fire and / or Explosion Information

- Material flash point, auto-ignition temperature and upper / lower flammable limits.
- Proper fire extinguisher agents to be used.
- Fire fighting techniques.
- Any unusual fire or explosive hazards.

Chemical Reactions Information

- Stability of chemical.
- Conditions and other materials, which can cause reactions with the chemical.
- Dangerous substances that can be produced when the chemical reacts.

Control Measures

- Engineering controls required for safe use of the product.
- Personal protective equipment (PPE) required for use of the product.
- Safe storage requirements and guidelines.
- Safe handling procedures.

Chemical Health Hazards

- Permissible Exposure Limits (PEL) and Threshold Limits Value (TLV).
- Acute or chronic symptoms of exposure.
- Main routes of entry into the body.



- Medical conditions that can be made worse by exposure.
- Cancer causing properties, if any.
- Emergency and first aid treatments.

Spill and Leak Procedures

- Cleanup protocols.
- PPE to be used during cleanup.
- Disposal of waste and cleanup material.

Preparatory Outline

HAZARD COMMUNICATION SAFETY TRAINING OUTLINE

Preparation

- Read applicable Hazard Communication Plan
- Check Safety Office for videos
- Check Safety Office for other resources
- Read instructor training information
- Resolve questions you have before training session
- Notify employees two (2) days in advance of time / location of training

Training Materials

- Training handouts
- Hazard Communication Training Handout
- Safety Data Sheets (SDS) (as examples)

Support

Contact RM/EHS at extension 3-3549 or 3-3527 to receive any additional materials or other information, which would enhance the training experience.

Documentation

Ensure that all attendees are signed in and those records are retained within the department office, and a copy is submitted to RM/EHS.