



## Introduction

Western University of Health Sciences (WesternU) has developed, implemented, and maintains a Hazard Communication (HazCom) Program in accordance with Cal/OSHA Title 8, California Code of Regulations (CCR), §5194 and the Hazard Communication Regulation and Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200 to enhance our the health and safety of all personnel. According to the provisions of this section, all personnel at WesternU have the right to personally receive information regarding hazardous substances to which they may be exposed. The Hazard Communication Program applies to all WesternU faculty, staff, students, and volunteers while engaged in activities at the university.

## **Purpose**

WesternU Hazard Communication Program defines the requirements and responsibilities for informing and training personnel about hazardous chemicals in their workplace. A chemical manufacturer determines and communicates the hazards of a chemical they produce via a safety data sheet (SDS). Employers are then required to communicate to their personnel the associated hazards of workplace chemicals.

WesternU's Hazard Communication Program (HazCom) includes the following components:

- Written HazCom Program
- Informing Contractors
- Hazardous chemicals List
- Proposition 65 List of Chemicals
- Hazard Identification, Reduction and Controls
- Safety Data Sheets (SDS) and Globally Harmonized System (GHS)
- Personnel information and training
- Hazardous non routine training
- Regulations
- Emergency Response

## **Scope**

This written program applies to all personnel who use hazardous chemicals in routine work processes and to any chemical that is known to be present in the workplace in such a manner that personnel may be exposed under normal conditions of use or due to an unforeseeable emergency.

## **Responsibilities**

WesternU's Chief Operating Officer (COO) is ultimately responsible for the effective implementation of the University's Environmental Health & Safety (EH&S) Programs, including the HazCom Program at all facilities under WesternU control. General policies, which govern the activities and responsibilities of the EH&S program, are established under the authority of the COO.

### **Environmental Health & Safety (EH&S)**

As designated by the COO, EH&S has the full authority and responsibility for developing, implementing and maintaining the Hazard Communication Program. EH&S's duties include:

- Providing overall administrative support for the HazCom Program, including interpretation of the regulation;
- Assisting supervisors in identifying hazardous materials and potentially hazardous operations in the workplace;
- Maintaining a university wide chemical inventory;
- Recommending appropriate engineering controls, administrative controls, and personal protective equipment (PPE);
- Assisting departments with employee training resources and documentation;

- Providing assistance with determining the hazardous properties of chemicals for which SDSs may not be available;
- Conducting periodic audits of work area compliance activities;
- Conducting environmental monitoring upon request to determine employee exposures;
- Providing guidance and technical assistance on chemical purchasing, labeling, use, and storage, and disposal of chemicals.
- Reviewing and updating the written program as needed and evaluating the overall effectiveness of the program.

### **Department Heads, Supervisors and Principal Investigators (PI)**

These personnel have the primary responsibility for ensuring that the HazCom program is implemented and followed in their particular areas of responsibility. They must be knowledgeable of the program requirements and ensure compliance with the program. Their specific duties include:

- Identifying the hazardous materials present in the work area;
- Maintaining an accurate inventory list of hazardous chemicals, including access to SDSs;
- Providing EH&S with a current inventory of all hazardous materials;
- Verifying that all hazardous material containers are properly labeled;
- Verifying that all hazardous materials labels are compliant;
- Ensuring all chemicals are being stored in accordance with the manufacturer recommendations;
- Providing training to employees on the hazards that they may be exposed to, including physical hazards, health hazards, safe handling procedures, and emergency procedures for hazardous materials;
- Report any accidents, incidents (including near misses), and unsafe conditions to EH&S at [ehs@westernu.edu](mailto:ehs@westernu.edu) or via the [TDX Portal](#).

### **Personnel**

Personnel are responsible for following the requirements of the written program. This involves:

- Reviewing, understanding, and following the requirements of the written HazCom program
- Completing the initial online HazCom training and participating in department-specific training, including the review of labels and SDSs prior to working with hazardous chemicals
- Knowing the hazards and precautionary procedures for hazardous chemicals used in the work area
- Following safe work practices, standard operating procedures (SOPs) and wearing proper PPE when working with hazardous chemicals
- Immediately reporting accidents, incidents (including near misses), and unsafe conditions to your supervisor and to EH&S at [ehs@westernu.edu](mailto:ehs@westernu.edu) or via the [TDX Portal](#).

### **Informing Contractors**

Contractors working on WesternU property are responsible for compliance with the Hazard Communication Standard under their own Program. They are also required to provide the project manager/inspectors with SDSs for the hazardous materials they will be using and measures they will employ to minimize exposure of WesternU personnel to those materials. To ensure contractors work safely at WesternU, and to protect members of the WesternU community from chemicals used by outside contractors, the project manager is responsible for giving and receiving the following information to and from contractors:

- a copy of their written HazCom Program, upon request
- onsite copies of SDSs for these products, upon request
- hazardous substances to which contractors may be exposed while on the job site.
- precautions and protective measures the contractors may take to minimize the possibility of exposure.

## **List of Hazardous Substance**

EH&S maintains a chemical inventory database for all chemicals present at WesternU. All departments are required to submit their current chemical inventory annually. Contact EH&S at [ehs@westernu.edu](mailto:ehs@westernu.edu) or 909-469-8231 to obtain further instruction for completing the chemical inventory.

## **Proposition 65 chemicals**

EH&S is responsible for obtaining updates of Proposition 65 listed chemicals and providing new information to affected personnel. In the case of newly added chemicals to the Proposition 65 list, warning requirements take effect 12 months from the date of being added to this list.

An updated list of chemicals known to the state of California to cause cancer or reproductive toxicity is available at: [http://www.oehha.ca.gov/prop65/prop65\\_list/Newlist.html](http://www.oehha.ca.gov/prop65/prop65_list/Newlist.html).

## **Hazard Identification Reduction and Controls**

### **Hazard Identification**

Supervisors shall assess the workplace to determine if hazardous materials are present, or are likely to be present, which necessitate the use of PPE having fewer hazardous materials in a work area lowers the risk for exposure.

### **Hazard Elimination/Substitution/Reduction**

Supervisors shall determine if the use of a hazardous material is necessary, and consider using a less hazardous substitute, whenever possible. An example might be to substitute an oil-based paint for one that has low Volatile organic compounds (VOCs) and is more environmentally friendly.

### **Engineering Controls**

When hazards cannot be completely eliminated or reduced below acceptable exposure limits, engineering controls shall be considered and implemented whenever possible to eliminate or

reduce the risk of exposure to employees. An example of an engineering control would be the use of a laboratory fume hood to draw airborne contaminants away from a worker's breathing zone.

### **Administrative Controls**

When hazards cannot be completely eliminated or reduced below acceptable levels after considering elimination, substitution and engineering controls, administrative controls shall be considered and implemented, whenever possible. An example of an administrative control would be task rotation for the purpose of reducing one's exposure to hazardous materials.

### **Personal Protective Equipment (PPE)**

Personal protective equipment is the last line of defense against workplace hazards and should only be considered after it has been determined that elimination/substitution/reduction, engineering and administrative controls are not feasible. An example of PPE would be the use of a powered air purifying respirator (PAPR) to filter out airborne contaminants.

## **Safety Data Sheets (SDS) & Global Harmonized System (GHS)**

Safety Data Sheets (SDS) contain hazard and precautionary information for hazardous materials as required by the Hazard Communication Standard should be available for each hazardous material in the workplace. The most current SDS supplied by the chemical manufacturer or distributor should be kept on file, and made accessible to all employees, their representatives, and contractors for viewing or copying during each work shift. Paper or electronic copies of SDSs shall be maintained either in individual workspaces or centrally within the department.

SDSs are broken down into 16 sections:

- Section 1: Identification;
- Section 2: Hazard(s) Identification;
- Section 3: Composition/Information on Ingredients;
- Section 4: First aid measures;
- Section 5: Fire-fighting measures;
- Section 6: Accidental release measures;
- Section 7: Handling and Storage;
- Section 8: Exposure Controls/Personal Protection;
- Section 9: Physical and Chemical Properties;
- Section 10: Stability and Reactivity;
- Section 11: Toxicological Information;
- Section 12: Ecological Information;
- Section 13: Disposal Considerations;
- Section 14: Transport Information;
- Section 15: Regulatory Information; and
- Section 16: Other Information, including date preparation or last revision

### **Labels**

WesternU requires that all chemical and/or product containers used by WesternU personnel are subject to the labeling requirements of the Hazard Communication Standard. Chemical containers, both hazardous and non-hazardous, must be checked to ensure that they are properly labeled upon arrival from the manufacturer. Incorrectly labeled containers must be corrected immediately or immediately returned to the manufacturer or vendor. WesternU prohibits the defacing or removal of labels on materials obtained from manufacturers. Labels must be legible, in English, and prominently displayed on the container. If applicable, the supervisor will arrange for additional labels, signs, and other warnings to be printed in other languages as needed.

Original and secondary containers of hazardous materials must be properly labeled with GHS compliant labels. Portable containers do not need to be labeled if the hazardous chemical will be under the control of and used only by the person who transfers it from the labeled container and only within the work shift which it is transferred. Each supervisor will ensure that all containers have either the original manufacturer's label or a supplemental label that includes the following:

- Product Identifier
- Signal Word
  - Danger – Used for Severe Hazards
  - Warning – Used for Less Severe Hazards
- Hazard Statement(s) – Describe the nature of the chemical's hazard(s) including, where appropriate, degree of hazard
  - Causes for serious eye damage
  - Toxic if swallowed
  - Toxic to aquatic life with long lasting effects
  - May cause allergy or asthma symptoms or breathing difficulty if inhaled
  - Fatal if inhaled
  - May cause drowsiness or dizziness
- Precautionary Statement(s) – Describes the various measures that should be taken to protect health and safety
  - Keep away from heat/sparks/open flames/hot surfaces
  - Do not spray on an open flame or other ignition source
  - Avoid contact during pregnancy/while nursing
  - Wash hands thoroughly after handling
  - In case of inadequate ventilation, wear respiratory protection
  - Keep cool. Protect from sunlight
- Name, address, and telephone number of the chemical manufacturer or other responsible party

Specific information on each noted hazardous chemical can be obtained by reviewing the Safety Data Sheet (SDS) the online database on the EH&S website or any University desktop by going to:

<https://go.sitehawk.com/Default.aspx>

If anyone is potentially exposed to a chemical whose identity is a trade secret and a medical professional (nurse or doctor) determines there is a medical emergency, then a manufacturer's

representative must provide that information to the medical professional for treatment purposes in accordance with CCR Title 8, [Section §5194\(i\)\(3\)\(D\)\(2\)](#).

Hazardous Waste tags need to be placed on the waste containers prior to submitting a TDX – Waste Disposal Request form.

Appendix A: - Global Harmonized System (GHS) Chart

## **Personnel Information and Training**

WesternU personnel, volunteers, students, or visitors who use hazardous chemicals are required to complete a Hazardous Communication or equivalent health and safety training course. Training on hazardous materials in the work area is required at the time of their initial assignment, and whenever a new chemical hazard is introduced into their work area. Retraining or supplemental training shall be provided after an injury, serious incident or near miss. Contact EH&S for guidance when developing or providing training for employees in your work area.

Hazardous materials information and training shall consist on the following:

- The requirements of the hazard communication regulation, including the personnel' rights under the regulation
- Departmental operations where hazardous materials are present;
- Location and availability of the written HazCom Program, including the list of hazardous materials and SDSs;
- Proper handling and storage of the material;
- Exposure recognition and control;
- How to read SDSs to obtain hazard information;
- How to read a Container label and understand the content;
- Methods to detect the presence of hazardous materials in the workplace (alarms, odors, etc.);
- Measures personnel need to put into practice to reduce or prevent exposure to these hazardous substances by engineering controls, work practices, and use of personal protective equipment
- Emergency and first-aid procedures to follow if exposed to hazardous substances
- The location and interpretation, if needed, of warning signs or placards to communicate that a chemical known to cause cancer or reproductive toxicity is posted in the workplace.
- Where applicable, training is conducted in languages other than English.

Supervisors are required to provide site specific training on specific hazards which their personnel may encounter in the workplace. In addition, supervisors are required to provide personnel with additional training when a new hazard is introduced into the workplace or whenever they might be exposed to hazards at another university work site. Training must be documented, and records must be retained for the entire length of employment. Records for approved computer-based training will be documented and maintained electronically by EH&S.

## **Hazardous Non-Routine Tasks**

Periodically, WesternU personnel are required to perform hazardous non-routine tasks. Prior to beginning work on a project, personnel will be given information by his/her supervisor regarding hazards to which they may be exposed. EH&S is available to assist supervisors in determining and providing the appropriate training to their personnel.

This information will cover:

- Specific Hazards
- Measures the university has taken to reduce the risk of these hazards, such as providing ventilation, ensuring the presence of other personnel, providing a respiratory protection programs, and establishing emergency procedures.

## **Regulations**

Applicable Regulations

California Code of Regulations, Title 8 Section 5194

Related Standard and Guidelines

- The Hazardous Substance list (CCR, Title 8, S339)
- Toxic and Hazardous Substance List (29 CFR, Part 1910, Subpart Z)
- California Air Contaminates List (CCR, Title 7, S5155)
- Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment, American Conference of Governmental Industrial Hygienist/National Toxicology Program, Annual Report on Carcinogens
- International Agency for Research on Cancer Monographs
- Safety Data Sheets (SDSs) are reproductive toxicants or cancer-producing substances
- Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65 – CCR, Title 22, S12000)

## **Emergency Procedures**

The range and quantity of hazardous materials used at the university requires planning to respond safely in case there is a chemical spill or release. General guidelines when addressing concerns related to accidental spills of hazardous materials and exposure control can be found within the university's Chemical Hygiene Plan or by contacting EH&S at [ehs@westernu.edu](mailto:ehs@westernu.edu) or 909-469-8231.

If the spill is too large to contain and clean up, immediately call 911.

## **Program Evaluation**

EH&S will conduct a periodic review at least once every three years. Comments related to this policy and program can be made by contacting EH&S at 909-469-8231 (ext. 8231) or via email at [ehs@westernu.edu](mailto:ehs@westernu.edu).

**Appendix A: - Global Harmonized System (GHS) Chart**

<p><b>Health Hazard</b></p>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<p><b>Exclamation Mark</b></p>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (Harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<p><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<p><b>Corrosive</b></p>  <ul style="list-style-type: none"> <li>• Skin Corrosion/Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<p><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<p><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<p><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (Fatal or Toxic)</li> </ul>