UNIVERSITY OF ROCHESTER

Chemical Hazard Communication Program

Prepared by:

UNIVERSITY OF ROCHESTER'S
Environmental Health & Safety (EHS)
Department (Revised February 2022)

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INTRODUCTION

The Chemical Hazard Communication written program is designed to inform university employees about the Occupational Safety and Health Administration's (OSHA's) Hazard Communication Standard (HazCom) 29 CFR 1910.1200 and the University of Rochester Hazard Communication Program (HazCom).

The OSHA's HazCom Standard was enacted to provide employees the "Right to Know" the hazards of chemicals in the workplace and how to protect themselves. The Hazard Communication Standard was updated in 2015 to align with the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. This update to the Hazard Communication Standard (HCS) will provide a common and coherent approach to classifying chemicals and communicating hazard information on labels and safety data sheets. The revised HazCom Standard mandates a program for evaluating potential hazards of chemicals, and standardizes required sections in Safety Data Sheets (SDS's)and container labelling.

SECTION 1: REQUIREMENTS AND RESPONSIBLITIES

I. SCOPE and REQUIREMENTS

A. Scope: The HazCom Standard applies to all employees who work in locations where hazardous chemicals are known to be present in such a manner as employees may be exposed under normal conditions of use or in a foreseeable emergency. Exception: Those employees working in laboratories are covered under another OSHA standard, the "Occupational Exposure to Hazardous Chemicals in Laboratories", 29 CFR 1910.1450.

B. Applicable Chemicals: The Standard applies to all chemicals which are defined as hazardous by the Standard and are used in the workplace in a manner in which employees may be exposed to the chemicals under conditions of use or foreseeable emergencies. The standard defines a hazardous chemical as one that has health hazards and/or physical hazards.

C. Requirements:

1. *Written program*: The employer is required to develop and maintain a written Hazard Communication Program, which describes how the requirements of the Standard will be met. This document is designated as the written program
2. *Chemical inventory*: The employer is required to compile a list of the hazardous chemicals present in the workplace. A suggested chemical inventory form to compile the information is available in Appendix 1. A centralized chemical inventory/SDS system will be maintained by EH&S. This system, called Chematix, is networked to provide ready access to the

inventories and SDSs. A link to Chematix may be found at the following location: http://www.safety.rochester.edu/labsafety/chematix_intro.html. EH&S will instruct departments/units how to modify their inventories (contact EH&S at 275-3241 for this assistance).

3. *Safety Data Sheets (SDS's, formerly known as MSDS's*): SDS's must be readily accessible to employees. This requirement can be met by maintaining hard copy SDS binders in the work area or training employees how to access the SDS's online. Once logged into Chematix, click on "Safety Data Sheet Search Through MSDSonline" to search for SDS's. EH&S is available to assist all university staff with locating SDSs by calling 275-3241.
4. *Label*s: All original containers of hazardous chemicals must be labeled with the following information:
    a. Identity of the hazardous chemical(s)
    b. Signal Word
    c. Hazard Statement(s)
    d. Precautionary Statement(s)
    e. Pictogram(s)
    f. Name / Address of the chemical manufacturer, importer or other responsible party

    Exceptions to this rule include:
    1. Containers in which chemicals are transferred from a labeled container for **immediate** use by the employee performing the transfer; and,
    2. Alternatives to labels may also be used such as signs, placards, process sheets, operating procedures or other written materials instead of affixing labels to individual stationary process containers as long as the alternatives contain the required labeling information
5. *Training*: Employers (supervisors) are required to provide information and training to employees on this standard and the hazards of the chemicals used in the workplace. (Refer to Section 2)

II. RESPONSIBILITIES

Responsibility for implementing the HazCom Program resides with each department where hazardous chemicals are utilized in a non-laboratory setting. The responsibility for implementing and fulfilling the mandates of the HazCom Program are as follows:

A. Deans, Administrator, and Department Heads have the ultimate responsibility for administration of safety in their departments. The HazCom Program is one of the

policies and programs that must be administered under their direction.

B. Supervisors have primary responsibility for :

1. Informing and training employees on potential hazards associated with the chemicals in their work area, and when new chemical hazards are introduced
2. Completing the most recent edition of EH&S's Certificate of Hazard Assessment to determine the personal protective equipment needed to protect the employees. (UR PPE Program)
3. Supervising employees in the implementation of engineering controls, safe work practices, and Personal Protective Equipment (PPE) used to reduce potential exposure to the lowest practical level
4. Investigating and reporting incidents relating to the use of hazardous chemicals
5. Selecting chemicals, supervising the use and disposal of chemicals, and maintaining access to a current chemical inventory, and availability of SDS of hazardous chemicals for all work locations under their direction
6. Assigning initial and periodic HazCom training on MyPath to employees or scheduling in-person HazCom training. Maintaining training records of all those in the department that have attended training sessions relating to HazCom or track training records via MyPath.

C. Employees responsibilities include:

1. Awareness of the hazards associated with the chemicals used and the methods of reducing exposures
2. Planning and using chemicals in accordance with established safe work practices and protocols
3. Using all the appropriate engineering controls, work practices and PPE required for working safely with a chemical
4. Disposing of chemicals in an appropriate manner
5. Reporting unsafe conditions to their supervisor
6. Reporting incidents of hazardous chemical exposure to their supervisor
7. Attending training as required

D. EH&S will oversee general training programs and the availability of Safety Data Sheets via MSDSonline. The Unit's responsibilities include implementation of the HazCom program and:

1. Working with administrators and other employees to develop and implement safe work practices
2. Providing general awareness training to University personnel through "New Hire Employee Orientation," MyPath platforms , and as requested by departments
3. Providing additional training materials and information to assist departments in supplemental training efforts (i.e. chemical specific training)
4. Assisting departments in evaluating areas where regulated materials are

used and determine when exposure monitoring of airborne contaminants is necessary
5. Assisting departments in performing periodic safety surveys of work areas to ensure compliance with the HazCom Program
6. Assist departments with inputting chemical inventories into Chematix and training how to manage changes in inventory.

III. RECORDS

A. Chemical inventories will be maintained by each department, in addition to the University's Chemical Inventory/ SDS System, Chematix. A link to Chematix may be found at: http://www.safety.rochester.edu/labsafety/chematix_intro.html.

B. Attendance records of HazCom training sessions conducted by department supervisors are to be retained in employee files or in the MyPath transcript.

C. Injuries or chemical exposures will be documented on an SMH115 Incident Report Form available on line at http://www.safety.rochester.edu/SMH115.html .

D. Medical records will be retained as established by University protocol.

IV. MULTI-EMPLOYER WORKPLACE

Upon request, EH&S will provide an inventory of the chemicals and a copy of the SDSs to outside contractors for those hazardous chemicals used by the university in the immediate work/construction area.

Outside contractors are required to have a SDS for any hazardous chemical brought onto University property and have them readily available to their employees and to the University. Contractors using particularly hazardous materials (based on flammability, toxicity or stench odor) must receive EH&S approval prior to use.

SECTION 2: REQUIRED EMPLOYEE INFORMATION & TRAINING

The OSHA Hazard Communication Standard requires that employees be informed of the requirements of the Standard, the location of the written Hazard Communication Program, operations in the workplace involving hazardous chemicals, lists of hazardous chemicals used in the workplace and the location of SDSs for these agents. TheHazCom training module is available on MyPath: *EHS Hazard Communication and Global Harmonization*. The supervisor must provide documented site-specific training to all staff on the hazards of chemicals used in the work area and specific engineering controls, work practices and PPE required to work safely with hazardous chemicals.

I. TRAINING

A. Required Training and Frequency of Training

The University provides employees **with information and training to ensure they are mindful of the hazards of chemicals present in their work area. Awareness Training is made available at New Hire Orientation before the employee's initial work assignment begins. Site-specific training must be provided by the supervisor at the initial job assignment. Refresher employee training for special hazards in an employee's work area will be the responsibility of the supervisor.** A general HazCom training module is available on MyPath for initial and annual training. All employee training is documented in MyPath.

The EHS Occupational Safety Unit can provide reference and/or electronic materials to assist the supervisor in training for site specific chemicals or procedures that may introduce a risk to the employees.

Retraining is required when a new hazard is introduced in a work area. Supervisors may request the assistance of EH&S with information or materials, if desired. Documentation of site specific hazards, special hazards, new hazards or changed hazards will be maintained by the employee's department.

B. Purpose and Content of Training

The purpose of Hazard Communication training is to inform individuals of the risks and hazards associated with chemical handling and what to do if an emergency occurs. General awareness training consists of an overview of the following:

1. The existence of the HazCom program and its requirements
2. How to read and understand the material found on a SDS
3. Explanation of container labelling
4. Measures employees can take to protect themselves from chemical hazards
5. Signs and symptoms associated with exposure to hazardous chemicals
6. Location and availability of known reference materials, including SDSs, outlining the hazards, safe handling, storage, and disposal of hazardous chemicals
7. Emergency procedures to follow in the event of a chemical spill

II. READING AND INTERPRETING SDSs & LABELS

The two key written materials that convey information on the hazards of chemicals are Safety Data Sheets (SDSs) and labels. The Hazard Communication Standard requires that SDSs be available for all hazardous chemicals and that all containers of these chemicals be labeled. This section gives valuable information on what to expect and how to use the information on SDSs.

A. Safety Data Sheets (SDSs)

Chemical manufacturers are required to evaluate and determine the hazard classification and category of each class that apply to the chemical or mixture. The hazard classifications and categories are listed in Section 2 of the SDS.

Appendix A of the OSHA HazCom Standard contains the GHS classification criteria for chemicals considered **health hazards:**

1. Acute toxicity
2. Irritant (Skin, eye or respiratory system)
3. Corrosive (skin, eye or respiratory system)
4. Respiratory or skin sensitization
5. Germ cell mutagenicity
6. Carcinogenicity
7. Reproductive toxicity
8. Specific target organ toxicity, for example:
   - Hepatotoxin (liver toxin)
   - Nephrotoxin (kidney toxin)
   - Neurotoxin (central and/or peripheral nervous system toxin)
   - Agents affecting the hematopoietic system (blood/blood-forming)
9. Aspiration hazard

Appendix B of the OSHA HazCom Standard contains the criteria for **physical hazards:**

1. Explosives
2. Flammables (gases, liquids and solids)
3. Self reactive
4. Pyrophoric (ignites spontaneously in air)
5. Self heating
6. In contact with water emits a flammable gas
7. Oxidizing liquids, solids
8. Organic peroxides
9. Corrosive to metal

The GHS Classification uses a severity ranking for each hazard class. **The highest level of hazard is classified as a category "1" and the lowest hazard ranking is a category "4".** For example, for the health hazard classes:

Health Hazards

Hazard Class	Highest level < Hazard Category > Lowest level			
Acute Toxicity	1	2	3	4
Skin Corrosion/Irritation	1A	1B	1C	2
Serious Eye Damage / Eye Irritation	1	2A	2B	
Respiratory or Skin Sensitization	1			
Germ Cell Mutagenicity	1A	1B	2	
Carcinogenicity	1A	1B	2	
Reproductive Toxicity	1A	1B	2	Lactation
STOT – Single Exposure	1	2	3	
STOT – Repeated Exposure	1	2		
Aspiration	1			
Simple Asphyxiants	Single Category			

The Haz Com Standard requires that by 2015 all Safety Data Sheets follow a standard 16-section format:

- **Section 1, Identification** includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.
- **Section 2, Hazard(s) identification** includes all hazards regarding the chemical; required label elements.
- **Section 3, Composition/information on ingredients** includes information on chemical ingredients; trade secret claims.
- **Section 4, First-aid measures** includes important symptoms/ effects, acute, delayed; required treatment.
- **Section 5, Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.
- **Section 6, Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.
- **Section 7, Handling and storage** lists precautions for safe handling and storage, including incompatibilities.
- **Section 8, Exposure controls/personal protection** lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

- **Section 9, Physical and chemical properties** lists the chemical's characteristics.
- **Section 10, Stability and reactivity** lists chemical stability and possibility of hazardous reactions.
- **Section 11, Toxicological information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.
- **Section 12, Ecological information*** Provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment.
- **Section 13, Disposal considerations*** Provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 (Exposure Controls/Personal Protection) of the SDS.
- **Section 14, Transport information*** Provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea.
- **Section 15, Regulatory information*** Identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS.
- **Section 16, Other information,** includes the date of preparation or last revision.

***Note:** Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).

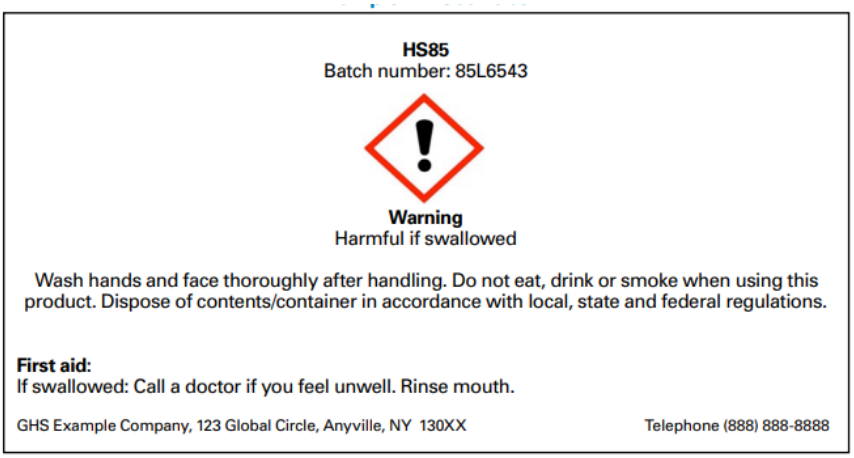
B. Labels and Signs

The hazard and precautionary statements on the label outline the appropriate measures to be taken in case of an emergency and identifies the main hazard(s) associated with the use of the chemical. If a label is missing from a container holding a chemical that can be properly identified, a new label shall be affixed containing the appropriate information. Never mix chemicals that do not have proper labels. Never assume an unlabeled container is harmless. Also, never remove any label unless you immediately replace it with a new label containing the information from the previous label. Labels are an important first source of information on the chemicals used in the workplace.

Labels can be seen as a condensed version of a SDS. The HazCom Standard requires that by 2015, all chemical container labels contain six standard elements:

- **Name, Address and Telephone number** of the manufacturer, importer or other responsible party
- **Product Identifier** - The same identifier must be on both the label and Section 1 of the SDS
- **Signal Word** - "Warning" (less severe) or "Danger" (more severe)
- **Hazard Statement(s)** - Describe the nature of the hazard, including, where appropriate, the degree of hazard
- **Precautionary Statement(s**) - Describe recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to the hazardous chemical or improper storage or handling
- **Pictograms -** Graphic symbols used to communicate specific information about the hazards of a chemical
    - ➢ **A description of the HazCom pictograms can be found in Appendix 2**

Sample Label:



All purchased chemicals and solutions must be labeled with the required 6 elements.

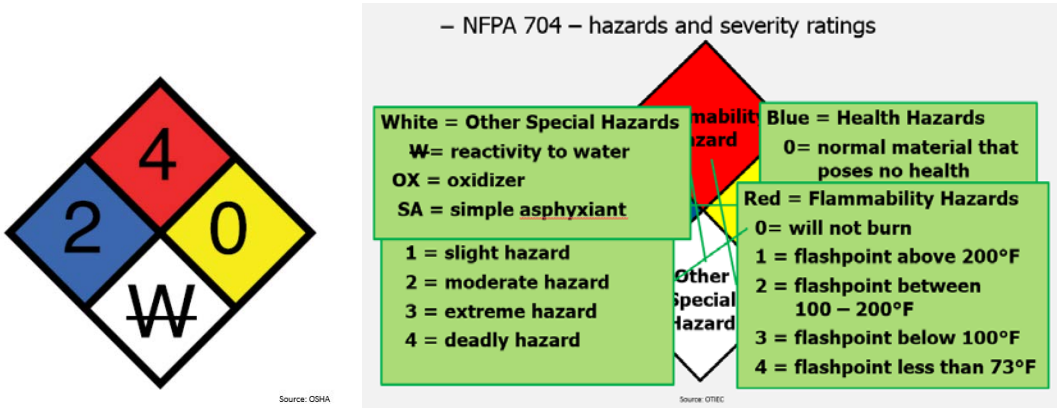
In-house prepared solutions that will remain within UR must have identity labels showing:

- The identity of the hazardous chemical(s) with proper names
- Appropriate hazard warnings (i.e. FLAMMABLE, CORROSIVE)

Secondary container labels or older original containers may still have NFPA or HMIS labelling.

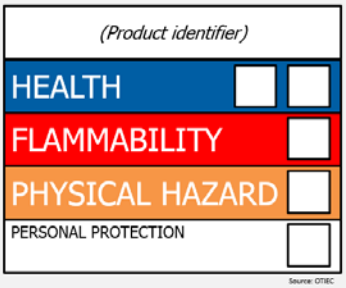
Please be aware that the hazard rating systems for NFPA and HMIS are *opposite* the hazard rating scale for GHS. For example, a hazard rating of "1" on the HMIS scale indicates a low hazard, but a hazard rating of "1" on the GHS scale indicates the most severe hazard class.

NFPA (National Fire Protection Association):



HMIS (Hazardous Materials Identification System):

- HMIS label
  - Intended for "In-plant" (workplace) labeling compliance
  - Color-coded bars
  - Numerical scale, 0-4, with 0 as lowest hazard and 4 as highest hazard
    - 0 = minimal hazard
    - 1 = slight hazard
    - 2 = moderate hazard
    - 3 = serious hazard
    - 4 = severe hazard



Product labels and DOT shipping labels must be retained on all bulk quantities of chemicals.

Signs indicating the location of safety showers and eyewash stations, and other safety and first aid equipment are required.

Warning signs are required in areas or on equipment where special or unusual hazards exist.

III. LIMITING CHEMICAL EXPOSURES

Four main methods exist to control exposure: substitution, engineering controls, safe work practices, and personal protective equipment (PPE). Actions made when procuring, storing, and disposing of chemicals can limit exposures.

A. Substitution / Engineering Controls

Substitutions with less hazardous chemicals, followed by engineering controls are the preferred methods of reducing exposure. Engineering controls should be used whenever the chemical hazard information on the chemical label or the SDS indicates a need. A common need for engineering controls is indicated when an SDS states "use local exhaust." Examples of engineering controls include isolating the chemical by using isolation rooms or using remote equipment, and using special local ventilation.

B. Safe Work Practices

Safe work practices offer another method to reduce exposure after the use of engineering controls. SDS and chemical labels should be reviewed for specific work practice instructions before using chemicals. Additional safe work practices include not working alone, keeping chemical containers covered when possible, washing hands after using chemicals, and reducing the amount of chemicals used or stored.

C. Personal Protective Equipment (PPE)

PPE should be used in addition to, but not as a substitute, for engineering controls and safe work practices to reduce exposure. PPE may consist of respiratory protection, eye protection, face protection, gloves, hearing protection, and protective clothing. SDSs and chemical labels contain specific information on the proper PPE needed.
When PPE is selected, its use shall be in accordance with OSHA standard 29 CRF 1910 subpart I, sections 132-139, and in consultation with the manufacturer.

Personnel must wear PPE to help prevent chemical exposures. Refer to the **UR PPE Program** Adequate PPE needed for the performance of an employee's job function is to be provided by the supervisor at no cost to the employee.

D. Chemical Procurement, Distribution, Storage and Disposal

1. Procurement
    a. Before a substance is used, a SDS with information on proper handling, storage, and disposal shall be obtained and made available for those who will be using

the substance. No container is to be accepted without an adequate identifying label. Manufacturers' labels are not to be defaced or removed.

b. Whenever possible, supervisors should consider using alternative chemicals for very hazardous chemicals.

c. To reduce future wastes, purchase only those quantities necessary.

2. Distribution: When chemicals are transported by hand or cart, the container should be placed within a second, larger container or bucket.

3. Storage

   a. Periodic inventories must be conducted. An example of a chemical inventory sheet is located in Appendix 1. Updated information is to be entered into the University's Chemical Inventory / SDS System. The Environmental Compliance / Hazardous Waste Management Unit, (275-2056) must be consulted before disposal of unneeded or excess items or a hazwaste card can be completed in Chematix to request a waste pickup. A visual inspection for replacement, deterioration, and container integrity should be performed when inventories are updated annually.

   b. Chemicals must be stored correctly. Consult the SDS and product labels for recommended storage procedures. Manufacturers should be consulted for additional storage recommendations.

4. Disposal

   a. All hazardous waste generated shall be disposed of in accordance with local, state and federal regulations. The Environmental Compliance / Hazardous Waste Management Unit shall be contacted for guidance on the disposal of any chemical waste.

   b. An electronic waste card can be completed in Chematix, which will automatically contact the Environmental Compliance Unit for pickup.

   c. **Training on the proper disposal of hazardous waste is available. Contact the Environmental Compliance / Hazardous Waste Management Unit (275-2056) for details.**

SECTION 3: CHEMICALS - HAZARDS AND EMERGENCY RESPONSE

I. EXPOSURE LEVELS

Minimizing exposures to chemicals is important to worker safety. Consulting the SDS can provide valuable information on preventing exposures to chemicals. Adverse effects from chemical exposures can lead to long-term health effects. Exposures to chemicals are described in many ways. Acute or short term exposures are exposures that occur over a very short period of time, usually less than 15 minutes. Chronic or long-term exposures occur over a long period of time, usually weeks or years.

OSHA regulates the amount of a chemical an employee can be exposed to. OSHA's Permissible Exposure Limit (PEL) for a chemical is a legal regulatory limit of airborne exposure, averaged

over an 8-hour work period which cannot be exceeded. Short Term Exposure Limits (STEL's) are 15-minute time-weighted average (TWA) airborne limits. STELs are typically defined for chemicals that have fast-acting acute effects.

The American Conference of Governmental Industrial Hygienist (ACGIH) publishes a list of Threshold Limit Values (TLV's) for chemicals. The TLVs are widely recognized guidelines to assist in the control of health hazards intended to be used in the practice of industrial hygiene. The TLV for a chemical is the 8-hr TWA airborne concentration of a chemical that is thought most people can be exposed to, day after day, over a working lifetime, without adverse health effects.

Methods of detecting chemicals can include:

- Exposure monitoring by the employer
- Continuous monitoring devices
- Observation of the chemical's appearance, odor, or other physical characteristics.

II. MEDICAL CONSULTATIONS AND EXAMINATIONS

Medical consultations and examinations are available for chemical exposures from the University Health Service (UHS). In the event of a serious injury or an after hour's emergency, care is available from Strong Memorial Hospital's Emergency Department. All required medical examinations and consultations are performed by, and under the direct supervision of, a licensed physician and are provided without cost to the employee.

A. Consultations

Consultations and medical examinations for work-related illnesses, injuries, and exposures are made available under the following circumstances:

1. When an employee develops signs or symptoms associated with a hazardous chemical to which he/she may have been exposed
2. Where exposure monitoring reveals any exposure levels routinely above the OSHA Action Level (AL) or Permissible Exposure Limit (PEL) for which there are exposure monitoring and medical surveillance requirements
3. Whenever an unusual event takes place in the work area such as a spill, leak, explosion, or other occurrence resulting in the likelihood of an exposure above the PEL or STEL

B. Chemical Exposures

1. When an employee believes they might have had exposure to a hazardous chemical, they are to immediately report their findings/incident to their supervisor.
2. The employee will seek immediate medical attention if required; phone University Health Service (UHS) at 275-2662. Identify yourself, state that a person has been exposed to a chemical (how and which one), and what preliminary precautions have

been taken. UHS will provide triage and instruct the caller on where the employee should go for treatment. The nature of the exposure may necessitate a referral directly to the Emergency Department or the employee may be referred to the UHS Clinic. The employee should give the full name of the chemical exposed to and, if possible, a copy of the Safety Data Sheet (SDS), to the medical provider.

3. For any serious situation at anytime, call x13 (Department of Public Safety) and request a MERT (Medical Emergency Response Team) Response.
4. If an employee experiences symptoms or injury as a result of chemical exposure, the employee needs to complete an Employee Incident Report. The form can be found at: http://www.safety.rochester.edu/SMH115.html
5. For high severity incidents, the supervisor will notify their department head and contact EHS for an immediate incident review (275-3241)
6. EHS reviews each exposure incident reported in the Employee Incident reporting system (Cority), where a cause and corrective action are documented.

C. Medical Surveillance

Special medical surveillance programs are provided when indicated by the unique needs of a department or division (e.g. Hearing Conservation exams) and are available through UHS. The department can call UHS at 275-2662 for department charges and other information.

III. SPILL CONTROL

Preplanning for a spill response saves time and minimizes hazards. Small spills are those spills, which by their small volume or low toxicity, are not deemed to present a health hazard to trained chemical users. Small chemical spills are to be cleaned up immediately by the chemical user. Some spills can create slippery conditions that can lead to additional hazards. The appropriate PPE must be worn when cleaning these spills to help prevent exposures.

Some hazardous substances necessitate special clean-up procedures to minimize hazards to clean-up personnel. Major spills are those spills, which by their large volume or high toxicity present a health hazard under normal conditions. Clean up of these spills should not be attempted by employees.

Spill Emergency Plan

1. Emergency preplanning to be followed before working with hazardous chemicals:
   a. Determine the potential location of releases
   b. Determine the quantities of material that may be released
   c. Know the chemical and physical properties of the material (physical state, vapor pressure, air or water reactivity)
   d. Know the material's hazardous properties (toxicity, corrosivity, flammability)
   e. Have the required PPE and spill kits available
2. In the event of a **small spill**, the following general procedures are to be followed:
   a. Attend to any persons who may have been contaminated. If personal exposure may have occurred, have the person use the emergency eye wash station or

safety shower. Direct the person to University Health Service if medical assistance is needed.

b. Notify persons in the immediate area of the spill
c. Mark off spill area and close the door
d. Avoid breathing vapors of the spilled material
e. Leave any local exhaust ventilation on
f. Secure supplies to affect clean-up
g. During clean-up, wear the appropriate PPE
h. Place the collected waste in an appropriate container for disposal

3. In the event of a **major spill**, the following procedures are to be followed:
   a. Attend to any persons who may have been contaminated. If a direct exposure may have occurred, have the person use the eye wash station or safety shower
   b. Alert others in the immediate area of the spill. Evacuate personnel from the area
   c. Confine the fumes/vapors from the spill by closing the door to the room where the spill occurred
   d. Contact the Department of Public Safety (x13) from a safe location and provide information on the spilled material (what spilled, quantity, location of the spill, etc.)
   e. Stay available to provide information concerning the spill and other hazards that may be present in the spill area to the emergency spill response personnel.

Contact the Occupational Safety Unit at 275-3241 with any questions regarding this program.

APPENDIX 1

CHEMICAL INVENTORY

Location:_____ Date:_____

Completed by:_____

NAME OF CHEMICAL PRODUCT	MANUFACTURER	Size of Container	Number of Containers	SDS Available?

Appendix 2

Hazard Communication Standard Pictogram

As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

HCS Pictograms and Hazards

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

- Gases Under Pressure

Corrosion

- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment

(Non-Mandatory)

- Aquatic Toxicity

Skull and Crossbones

- Acute Toxicity (fatal or toxic)

For more information:

OSHA® Occupational Safety and Health Administration

U.S. Department of Labor
www.osha.gov (800) 321-OSHA (6742)