2016
Annual Associate Safety Modules

Section 9  Hazardous Materials
Working Safely with Hazardous Materials
What are Hazardous Materials?

Any material or chemical that causes acute health problems, death or chronic illness.

- Is flammable
- Is reactive
- Is identified by the label as a hazardous material
What is Hazard Communication?

• Hazard communication is a method of:
  • Warning you about the potential hazards of workplace chemicals
  • Letting you know how you can protect yourself against the possible risks associated with these chemicals

• Including
  • Physical and health hazards
  • Personal protective equipment necessary during handling or cleanup
  • Emergency procedures – handling, cleanup, and disposal instructions
Hazard Communications Standard
What ‘s Changing?

• On March 26, 2012, the final rule was published to the Federal Register that will now align the Hazard Communication Standard with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

• Material Safety Data Sheets (MSDS) will be referred to as Safety Data Sheets (SDS)

• Chemical Manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category

• Safety Data sheets will have a specified 16- section format
What is the implementation timeline?

• Employers must train all employees on the changes by December 1, 2013.
• All chemical manufacturers, importers, distributors and employers shall be in compliance with all modified provisions by December 21, 2015
• All employers must update alternative workplace labeling and hazard communications programs as necessary by June 1, 2016

MLH has already started to receive newly formatted Safety Data Sheets which are being added to our online database.
Standard Pictograms and Meanings

HEALTH HAZARD

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

Be treated well.
Standard Pictograms and Meanings

- Flame
- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides
Standard Pictograms and Meanings

Exclamation Mark

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

Gas Cylinder

- Gases Under Pressure
Standard Pictograms and Meanings

Corrosion

- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals
Standard Pictograms and Meanings

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides
Standard Pictograms and Meanings

Flame Over Circle

- Oxiders
Standard Pictograms and Meanings

Environment (Non-Mandatory)

- Aquatic Toxicity
Standard Pictograms and Meanings

Skull and Crossbones

- Acute Toxicity (fatal or toxic)
How is this Important Information Communicated to Workers?

• Communication is done through
  • Warning Labels, and
  • Safety Data Sheets (SDS)

• Both types of communication should include the following:
  • Name of the chemical
  • Chemical code number
  • Type of hazard
  • Address and name of supplier
Warning Labels & Safety Data Sheets

- Labels provide basic information about chemicals
- SDSs provide detailed information
- Both should include the following:
  - Name of the chemical
  - Chemical code number
  - Type of hazard
  - Address and supplier name
Identifying Information

All secondary containers must be labeled with the manufacturer’s:

- Name of the chemical
- Chemical code number
- Name
- Address
- Emergency phone number
A “Signal” Word or Symbol

• **Danger** - can cause immediate serious injury or death

• **Warning** - can cause potentially serious injury or death

• **Caution** - can cause potentially moderate injury
National Fire Protection Agency - NFPA

- NFPA “Stop Sign”
- Diamond shaped label
- Colors represent types of health risks
  - Red – flammability
  - Blue – health, respiratory concerns
  - Yellow – reactivity
  - White – specialty concerns
- Numbers represent degree of hazard – 0 is minimal risk through 4 maximum risk
  - Typically found on lab entrances and mechanical spaces
General Information

• Is the chemical explosive, flammable, corrosive, etc.?

• Can the chemical cause irritation to the eyes, lungs, or skin, or can it cause burns or illness of any kind?
Precautionary Statements

- Do not breathe vapors
- Never mix chemicals you are not familiar with or add anything to an empty, or partially empty existing product container
- Use only in well-ventilated areas
- Avoid contact with skin
- Keep away from sparks, heat, and flame
- Respond with caution to all unknown odors. Seek assistance in identifying unknown sources, knowing there is a potential for hazardous chemical exposure. NEVER enter an area where there is a known hazardous chemical exposure, or if you are un-sure if there is the potential for a hazardous chemical exposure.
Handling & Storage Details

• Where and how to store the product
• Type of protective wear needed during product handling
• Where and how to dispose of the product or its empty container
Spills

- A *known* hazardous chemical spill or exposure is when you know you have spilled a hazardous chemical and you know what the chemical is. Material Safety Data Sheets indicate hazardous by physical or chemical exposure.

- A *potential* hazardous chemical exposure due to fumes or unknown smells occurs when you have potentially been exposed to fumes from an unknown source, you can not identify a smell as being non-chemical, or you are asked to respond to an “unknown smell.”
Response Protocol for Spills, Potential Exposure, Fumes, or Smells

In the event of either a known hazardous chemical spill, an unknown odor, or fumes that cause nausea, dizziness, sensation of eyes burning, skin burning, difficulty in breathing or swallowing:

• Evacuate the immediate area (yourself and others). Seek fresh air and or medical attention if necessary.
• Pull the fire alarm to shut off air handling units. By activating the fire alarm, the Fire Department will automatically be dispatched.
• Close all doors leading to the area.
• Keep unauthorized personnel from entering the area (NOTE - Authorized personnel would be the Fire Department, Haz Mat Team, or first responders in proper respiratory gear.)
• DO NOT attempt to rescue persons from the contaminated area that were not evacuated initially (i.e. someone passed out and did not evacuate)
• NEVER move the hazardous chemical or source that potentially caused an exposure
• Call the hospital operator to report the event as a hazardous chemical spill/exposure
• Notify emergency contacts (Facilities services, safety)
• Locate the Material Safety Data Sheet(s) for the material(s) if known
Mercury Spill

• In the event of a mercury spill, contact Facility Services/Maintenance. Do not attempt to clean up the spill yourself

• Evacuate the area
Pharmaceutical Waste

- Pharmaceutical Waste is to be disposed of in the black containers located in each facility.
- Most containers are in clinical areas, pharmacies, and medication rooms.
- Drugs are labeled as “PU Drug- Discard Safely”.
- Items that go into the black containers:
  - Left over medications
  - IV products
  - Medication PACKAGING
  - Medicine (Souffle) cup
Pharmaceutical Waste Continues

Items that DO NOT go into the Black Containers:

- Sharps (place these in our red sharps containers)
- Controlled substances
- Chemotherapy (dispose of in yellow containers)
- For more information – Please refer to the Pharmaceutical Hazardous Waste training module in CHEX Web.
Safety Data Sheets (SDS)

• While a product’s label contains very important general information, the SDS provides the specific information you need when working with a product, for example:
**SDS**

- Fire and explosion information
- Product reactivity
- Health hazards
- Safe handling precautions
- Control measures

You can access SDS for your department on MOLLI

Check with your Supervisor
Always remember the following tips when working with hazardous materials:

**Tip 1:** Read the label and the SDS before handling containers or using products.

**Tip 2:** Report missing, dirty, or illegible labels to your supervisor.

**Tip 3:** Never mix chemicals or add anything to an empty, or partially empty existing product container.
First-Aid Procedures

And finally, what to do in the event of accidental exposure:

1. Remove the person from the area
2. Follow instructions on the SDS sheet for treatment
3. If SDS sheet not available, call Poison Control or the manufacturer of the chemical
Remember

You have the Right To Know about the chemicals you work with. Make sure you read, understand, and follow the label and the SDS.