Hazard communication

By Andrew M. Pawuk

Before you begin
This lesson provides a short overview of hazard communication and does not replace a site-specific training program. Be prepared to supplement this session with site-specific requirements, labels and material safety data sheets (MSDSs).

Introduction

The Hazard Communication Standard, also called the "Right to Know" standard, is a federal regulation that began in 1987 to provide employees with information about workplace hazardous materials. The standard covers employees who may encounter hazardous chemicals under normal operating conditions or in foreseeable emergencies. Employees who encounter hazardous chemicals only in non-routine, isolated instances, such as office workers or bank tellers, are not covered.

The standard places responsibilities on the employer, employee and the manufacturer, importer or supplier of the chemical. Each is required to provide a safe workplace.

Main section

What are the responsibilities of manufacturers, importers or suppliers?

- Determine if there is a health or physical hazard associated with their product(s).
- Communicate information with:
  - Labels;
  - MSDS.

What is the employer's responsibility?

- Establish a written hazard communication program.
- Ensure you properly label chemicals.
- Provide training to employees about:
  - Hazards, which may be present;
  - The hazard communication program.

What are the employees' responsibilities?

- Attend training sessions to learn about hazard communication.
- Implement training to properly use chemicals.
- Ensure they properly label chemicals.
- Wear necessary personal protective equipment (PPE).

What are the types of hazards?

- Physical hazards, which include:
  - Combustible liquids;
  - Compressed gases;
  - Explosives;
  - Flammables;
  - Organic peroxides;
  - Oxidizers;
  - Pyrophorics;
  - Unstable items;
  - Items that are water reactive.

- O Health hazards
  - Exposed employees may notice measurable changes that occur in the body. (i.e., decreased lung function).
  - Exposed employees may have signs and symptoms, such as shortness of breath, which is a non-measurable, subjective feeling.
  - Effects rarely seen in the population at large make it easier to determine if the occupational exposure was the primary causative factor.

What are types of health hazards?
- O Carcinogens
- O Corrosives
- O Toxic materials
- O Irritants
- O Sensitizers
- O Toxic chemicals

What type of exposure can a worker have to a chemical?
- O Acute effects usually rapidly occur as a result of short-term exposures and are of short duration.
  - Irritation
  - Corrositivity
  - Sensitization
  - Lethal dose
- O Chronic effects generally occur as a result of long-term exposure and are of long duration.

How can a chemical enter the body?
- O Dust, vapor and fume inhalation is generally the primary entry for workplace exposures.
- O Skin absorption/contact is also an important entry route into the body or can result in direct effects on the skin.
- O Ingestion is not a significant workplace route of exposure. However, it can be dangerous with highly toxic materials. (i.e., lead).
- O Injection may unexpectedly occur, but that is not common. Injection often occurs when a laceration or puncture wound happens.

How do you share information with employees?
- O Training sessions
  - Site-specific training program
  - Hazard-specific training
- O Labels
  - Manufacturers' labels
  - Site-specific labels
- O MSDS

What type of information is on a MSDS?
- O Product identification
- O Hazardous components
- O Physical data and chemical characteristics
- O Physical hazards, including fire-extinguishing information
- O Spill and leak procedures
- O Health hazards
- O Emergency first-aid procedures
- O PPE needed
- O Special precautions

Conclusion

Hazard communication is a vital tool to help employees safely work with chemicals. Each worker plays an important role in ensuring employee safety. The workers may safely work around hazardous materials by identifying hazards, making the information available and using the knowledge. For additional information, review your company's program.

Quiz (Circle "T" for true and "F" for false.)

1. Hazard communication allows employees the right to know about hazardous materials in the workplace. T or F
2. A material may be a health or a physical hazard. T or F
3. You may find hazardous warnings on labels and MSDS. T or F
4. Long-term, adverse exposure may have a chronic effect on a worker. T or F
5. There are three primary entry routes into the body. T or F

Answers: 1.T; 2.T; 3.T; 4.T; 5.F.

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