7 MINUTE Safety Trainer

Chemical Hazard Communication

GOALS

This safety session teaches employees to:

- Recognize their right to know about chemical hazards and protections.
- Use their right to know to work safely with chemicals.

Applicable Regulations: 29 CFR 1910.1200 (Hazard communication)

1. You have a legal right to know about chemical hazards and protections.

The Hazard Communication Standard (HazCom), including Occupational Safety and Health Administration's (OSHA) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), requires that everyone who works with a hazardous chemical has the right to know about its hazards and how to protect against those hazards—and the responsibility to use that knowledge to work safely.

2. Chemical manufacturers identify hazards and key precautions.

- They classify the physical and health hazards of their products.
- Identify those hazards and key safety precautions on chemical container labels and safety data sheets (SDSs).

3. Employers inform employees about chemical hazards and precautions.

- They develop a written hazard communication program, including a list of hazardous chemicals used or stored in the facility.
- Train employees to identify chemical hazards and to use information and procedures to reduce the risks.
- Ensure that all chemicals have proper labels and complete, easily available SDSs.

4. Chemicals may present physical hazards.

They may catch fire easily; suddenly release pressure and explode; or react when exposed to heat, air, water, or certain other chemicals by burning, exploding, or releasing dangerous vapors.

5. Chemicals may have health hazards.

- Acute health problems develop quickly after exposure (e.g., corrosive skin burns).
- Chronic health problems develop over time, often after many exposures (e.g., cancer from inhaling a toxic chemical).
- Exposure to health hazards can occur in three ways:
  - —Skin or eye contact, which can cause burns, rashes, or even blindness;
  - —Inhaling, or breathing in, chemical vapors and fumes, which can cause dizziness, nausea, lung damage, unconsciousness, or even death; *and*
  - —Swallowing (including eating or smoking after handling chemicals without first washing), which can cause poisoning or damage to internal organs.

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6. Container labels and SDSs identify chemical hazards.
You must read them carefully before starting any job involving a chemical.

- Labels give a brief summary of hazards, including a GHS pictogram.
  — Never use a chemical if its label is missing or too damaged to read.
- SDSs detail a chemical's hazards and signs of exposure, situations that make the chemical more dangerous, and the procedures and equipment to use to reduce risk.

7. Container labels and SDSs describe safety precautions and instructions.
Their safety information may include:

- Handling and storage requirements (e.g., ventilation, avoiding heat exposure)
- Personal protective equipment (PPE) to wear when using the chemical
- Signs and symptoms of exposure that could cause health problems
- How to handle spills, fires, and other emergencies involving the chemical

DISCUSSION POINTS:

- Use a container label, SDS, and your facility's chemicals list to illustrate the session.
- Ask participants which chemicals they check labels and SDSs for before starting a job.

CONCLUSION:

Chemicals can be both useful and hazardous. Understand the risks, and use your training and available information to protect yourself and others on the job.

TEST YOUR KNOWLEDGE:

Have your employees take the Chemical Hazard Communication quiz. By testing their knowledge, you can judge their ability to understand chemical hazards and protections and whether they need to review this important topic again soon.

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QUIZ 1201

C-1E

CHEMICAL HAZARD COMMUNICATION QUIZ

1. **The Occupational Safety and Health Administration regulation that gives employees the right to know about chemical hazards and protections is called the:**
   a. Chemical Act
   b. Hazard Communication Standard
   c. Environmental Protection Agency

2. **Chemical manufacturers identify chemical hazards and provide the information on:**
   a. Container labels and safety data sheets (SDSs)
   b. Lists of hazardous chemicals
   c. Letters to customers

3. **Employers must have written hazard communication programs.**
   a. True b. False

4. **Examples of chemical physical hazards include:**
   a. Cancer
   b. Skin rashes
   c. Fire and explosion

5. **Chemical health hazards that develop quickly after exposure are called:**
   a. Acute
   b. Chronic
   c. Serious

6. **You can be exposed to a chemical by skin or eye contact, inhaling, or swallowing.**
   a. True b. False

7. **If a chemical's container label is missing or so damaged you can't read it, you should:**
   a. Try to remember what was in the container.
   b. Treat the chemical cautiously.
   c. Not use the chemical.

8. **To find all the details on a chemical's hazards and protections, you check:**
   a. Your hazard communication plan
   b. Its SDS
   c. Its label

9. **When employees complete hazard communication training, they should:**
   a. Know and understand how to identify chemical hazards and protections.
   b. Know how chemical manufacturers identify chemical hazards.
   c. Know where to buy personal protective equipment.

10. **Before starting any job with a chemical, you should:**
    a. Receive a manufacturer's booklet on the chemical.
    b. Read the chemical's label and SDS.
    c. Put on a respirator and protective suit.

When you have completed this quiz, turn it in to your supervisor.

Name:_____ **Date:**_____

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ANSWERS TO CHEMICAL HAZARD COMMUNICATION QUIZ

1. b. Hazard Communication Standard.
2. a. Container labels and SDSs.
3. a. True.
4. c. Fire and explosion.
5. a. Acute.
6. a. True.
7. c. Not use the chemical.
8. b. Its SDS.
9. a. Know and understand how to identify chemical hazards and protections.
10. b. Read the chemical's label and SDS.