#### HAZCOM EMPLOYEE TRAINING: WHAT'S WRONG WITH THIS PICTURE?

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation. Featured are:

**INTRODUCTION**: A brief description of the program and the subject that it addresses.

**PROGRAM OUTLINE:** Summarizes the program content. If the program outline is discussed before the video is presented, the entire program will be more meaningful and successful.

**PREPARING FOR AND CONDUCTING THE PRESENTATION:** These sections will help you set up the training environment, help you relate the program to site-specific incidents, and provide program objectives for focusing your presentation.

**REVIEW QUESTIONS AND ANSWERS:** Questions may be copied and given to participants to document how well they understood the information that was presented. Answers to the review questions are provided separately.

**ATTENDANCE RECORD:** Document the date of your presentation as well as identify the program participants. The attendance record may be copied as needed.

#### **INTRODUCTION**

Chemicals in the workplace can affect our safety. Hazardous substances can cause injuries ranging from slight skin irritations to cancer and birth defects. The key to working safely with chemicals is knowing information about their hazards and how to work safely with those hazards. The federal government issued its Hazard Communication Standard (commonly known as the "Right-To-Know" law) to ensure that we know about chemical hazards and how to work around chemicals safely.

This program identifies the hazards posed by chemicals and explains where to find information essential for avoiding dangerous exposures.

#### PROGRAM OUTLINE

## **INSTRUCTIONAL CONTENT:**

#### **TYPES OF HAZARDS**

- Physical hazards posed by chemicals include burns, fires and explosions. These chemicals include compressed gases and substances that react strongly with other substances.
- Health hazards presented by chemicals can be as harmless as mild skin disorders, but can be as serious as cancer and birth defects.
- Health hazards also include damage to the kidneys, lungs and liver as well as the nervous and reproductive systems.
- Acute effects of health hazards affect us rapidly as the result of sudden exposure.
- Chronic effects develop slowly and occur frequently; they usually show up after repeated exposures.
- The effects of a chemical may not be as rapid or as apparent as a high-speed car accident, but may be just as deadly.

## ROUTES OF ENTRY

• One way chemicals get into the body is inhalation. Breathing vapors of chemicals and smoking around them can be dangerous.

- Another way for chemicals to enter the body is ingestion.
- Eating or drinking without first washing your hands can allow chemicals to be ingested; keep food and beverages away from work areas.
- Chemicals can also be absorbed through the skin.
- Use protective equipment such as gloves, safety glasses and respirators as required when working with chemicals.

#### **CHEMICAL LABELS**

- Chemical labels come in a variety of formats, but the information they all give is easy to find.
- The label gives the commercial name and may also show the generic or scientific name as well.
- The label will include the name of the substance's manufacturer or distributor and may include their phone number.
- Physical and health hazards will also be listed on the label.
- Other information the label may include is emergency and first aid procedures, what type of fire extinguisher to use in the event of a fire and what to do if there is a leak or spill.
- If the chemical is toxic, caustic or corrosive, the label will state how to dispose of the container.
- Your workplace may use its own labeling system; make sure that you are familiar with it.

### MATERIAL SAFETY DATA SHEETS

- Manufacturers and distributors are required to provide an MSDS for each chemical that they supply.
- MSDS's come in different forms, but they all provide the same information.
- The first of the eight or nine sections of an MSDS usually identifies the chemical by name and includes the manufacturer's address and phone number.
- The second section lists the ingredients of the chemical.
- One section will cover the characteristics of the substance, including vapor density and specific gravity.
- A fourth section will list fire and explosion hazards as well as flash point, fire fighting procedures, type of fire extinguisher to use and fire fighting equipment needed in the event of a fire.
- The section on health hazards will indicate the amount of exposure to the chemical a person can tolerate safely according to Threshold Limit Value or Permissible Entry Level.
- Reactivity data is given in one section; it alerts us to things the chemical should be separated from such as air, high temperatures, other chemicals and moisture.
- A section is included that states how to safely handle leaks and spills.
- The personal protective equipment section lists the boots, gloves, respirators, etc. required for work with the chemical as well as the necessary room ventilation and exhaust.

• Some MSDS's have a ninth section which gives special precautions for storing, handling and transporting the chemical.

### **SUMMARY**

- Know where MSDS's are located at your facility. Ask your supervisor if you have any questions about a chemical.
- Use the same precautions you have at work when working with chemicals at home.
- It's everyone's responsibility to use the information provided in your c ompany's Hazard Communication Compliance Program.

#### PREPARE FOR THE SAFETY MEETING OR TRAINING SESSION

Review each section of this Leader's Guide as well as the videotape. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

### Here are some suggestions for preparing your videotape equipment and the room or area you use:

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the videotape program.

Place or secure extension cords to prevent them from becoming a tripping hazard.

#### CONDUCTING THE PRESENTATION

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to provide the viewer with a basic understanding of chemical hazards and how to avoid them.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline. Lead discussions about dangerous situations that have occurred at your facility while working with chemicals. Use the review questions to check how well the program participants understood the information.

After watching the videotape program, the viewer will be able to explain the following:

- Chemical hazards and how to protect against them;
- How chemicals enter the body;
- Information contained on chemical labels and Material Safety Data Sheets.

# 9706: HAZARD COMMUNICATION TRAINING:

# What's Wrong With This Picture? REVIEW QUESTIONS

Na	ameDate
Th	e following questions are provided to determine how well you understand the information presented in this program.
1.	Health hazards that cause symptoms that develop slowly over a period of time after repeated exposures are known as effects.
b.	acute critical chronic
2.	List two ways that chemicals can enter the body.
a.	Different types of chemical labels offer different types of information. true false
a. b. c.	Which of the following would you not be likely to find on a chemical's label? information about the distributor how to respond to a spill health hazards posed by the chemical other substances produced by the manufacturer
a.	Manufacturers are required to provide an MSDS for each chemical that a facility purchases from them. true false
a. b. c.	The indicates the amount of exposure to a chemical a person can tolerate safely.  Threshold Limit Value Permissible Exposure Limit Standard Exposure Index both a and b
a. b. c.	Some MSDS's have a ninth section. What information does it give? the chemical's ingredients prominent companies that use the chemical special precautions for storing and handling acceptable uses for the chemical
a. b. c.	The key to working with chemicals safely is  referring to the company compliance program after an accident has occurred knowing as much information about their hazards as possible notifying your supervisor when there is a spill to avoid using chemicals at all

# 9706: HAZARD COMMUNICATION TRAINING:

# What's Wrong With This Picture? ANSWERS TO THE REVIEW QUESTIONS

- 1. c
- 2. inhalation, ingestion, absorption
- 3. b
- 4. d
- 5. a
- 6. d
- 7. c
- 8. b