

**2011 OSHA Susan Harwood Capacity Building Grant
(SH22297-SH1)**

HAZCOM SAFETY AWARENESS LESSON PLAN

Course Length: 120 Minutes

Course Description This course is taught in accordance with the Occupational Health and Safety Administration Code of Federal standard. HAZCOM, OSHA Regulations 29 CFR 1910.120. The course is intended to train and/or retrain company employees in the essential safety skills and knowledge for non-professional emergency procedures in HAZCOM. This class presents requirements and procedures to protect employees in general industry and construction from hazards. Participants will receive a course certificate upon successful completion of this course.

Step 1: Planning the Lesson

Instructional Materials:

- PowerPoint Presentation
- Student Handouts
- Instructional Notes
- Audio-visual Equipment
- Emergency Response Guidebook (ERG)
- Sample MSDS
- Chemical Label Wallet Card
- Emergency Response Guide Tabletop Drill
- Flip charts
- Markers

Participant Handouts:

- Hand out #1: Presentation Booklet
- Hand out #2: Chemical Label Wallet Card
- Handout #3: Material Safety Data Sheet (MSDS)
- Handout #4: Emergency Response Guidebook
- Handout #5: HAZCOM Publication (OSHA)

Learning Objectives: Participants will:

- Define the OSHA Hazard Communication Standard
- Identify Employee Rights to Know / OSHA Standards
- Compare and contrast Labeling and Warning Systems

- Analyze each section of the Material Safety Data Sheets (MSDS)
- Use the Emergency Response Guide (ERG) to identify chemical hazards
- Recognize and implement Protective Measures

Step 2: Presenting the Lesson

Introduction: (10 minutes)

- Introduce yourself
 - Include name, title, experience and credentials
 - Start the lesson with an ice breaker:
 - Have everyone give their name and offer an example of a hazardous chemical they have encountered or might encounter on the job. (Since this is an introduction, there are no wrong answers and no penalty for duplicate answers.) Encourage students to participate.
 - Make a list of these on a flip chart, white board, etc.
 - Explain facility emergency action plan procedures/Discuss classroom rules.
 - Briefly read over objectives from PowerPoint slide #2

Class PowerPoint Presentation and Activities: (80 Minutes Total; ERG drill activity should be 30-40 minutes, depending on time.)

- Introduction to the OSHA Hazardous Communication Standard
- Introduction to Hazardous Chemicals-- Physical Hazards and Health Hazards; Chemical Hazards Identification Resources
 - a. Reference identified chemicals named during the ice breaker as a reference.
 - b. As a class categorize them according to PowerPoint slide #3 and #4; going over each of the category descriptions.
 - c. Give examples of any additional categories not covered.
- Discuss PowerPoint slides #5 and #6;
 - a. Have class members get into groups of 2-4 and share how each of the factors from slide #6 are important or affect exposure.
 - b. Teacher/trainer will walk around room, listening, participating in discussion when necessary/appropriate, and facilitating discussion.
- Review PowerPoint slides #7, #8 and #9.
 - a. Provide examples of Chemical Labeling and MSDS (Handouts #1 and #2).
 - b. Have students take turns identifying the various components of labeling/MSDS from their samples orally in the class.
- Protective Measures (PPE) Slides #10 and #11.
 - a. Discuss ways to recognize hazards.
 - b. Ask students to explain why these skills (from slide #10) are the most important “Protective Measure”.

- c. Discuss other Protective Measures from slide #11. Give students examples and opportunity to ask/answer questions to ensure mastery.
- **Classroom Participant Activity: ERG Classroom Drill (30-40 Minutes)**
- Divide class into 5 groups. (This can be accomplished by having every student “count off” 1-2-3-4-5, and repeating, then placing all the 1s in a group, 2s, 3s, etc.)
 - Each group will be assigned one section of the ERG, to include:
 - Placards
 - Explosive Levels
 - Identification codes
 - Chemical Hazards
 - Chemical PPE
 - Show students how to effectively find the sections in the ERG.
 - Students have 15-20 minutes to read/review each section as a group and discuss the content.
 - Students should be given a flip chart and markers.
 - Each group will identify 5 important concepts/components of their section and write them on the flip chart.
 - Teacher/trainer will walk around room helping to facilitate discussion, commenting when necessary/appropriate, asking and answering questions as needed.
 - Each group will take turns explaining where to specifically find their section in the ERG and share their 5 important concepts with the rest of the class.
 - Students will end by participating as a class in the ERG Tabletop Drill Activity.
 - Teacher will ask questions on how to prevent/prepare for exposure to various chemicals to gauge understanding.
 - * This could be turned into a handout for individual/partner work instead if desired.

Course Summary & Evaluation: (15 Minutes)

- Review PowerPoint slides #13 - #17.
- Review the objectives on slide #16. Have the students get with 1-2 partners and discuss each of the objectives. Each partner should take turns responding to each other.
- Teacher/trainer will facilitate discussion, monitor responses, ensure participation and ask/answer questions as appropriate.
 - Define a Physical and Health Hazards
 - Identify Dangers of a Hazardous Chemicals and Identify Chemical Hazards
 - List Basic Terminology
 - Discuss how to protect themselves and others
 - Identify/recognize proper signs and labels

- Evaluation: Monitor participant non-verbal and verbal reactions during summary and previous class discussions.

Participant Critiques & Share References: (10 Minutes)

- Student will complete a course critiques
- **References:**
 - HAZARD Communication in the 21st Century, Retrieved from:
 - <http://www.osha.gov/dsg/hazcom/finalmsdsreport.html>
 - HAZCOM: Foundation of Workplace Chemical Safety Programs. Retrieved from:
 - <http://www.osha.gov/dsg/hazcom/index.html>

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