

Lesson Plan
General Industry Outreach Training Program (10-hour)

Topic: Means of Egress and Fire Protection

Overview of the OSHA Standard

Subpart E, *Means of Egress*, contains requirements essential to providing a safe means of egress from fire and similar emergencies. The subpart deals with the need to have a safe and efficient means of leaving a building or facility under emergency circumstances, with minimal problems finding and using it.

Subpart L, *Fire Protection*, contains requirements for fire brigades, and all portable and fixed fire suppression equipment, fire detection systems, and fire or employee alarm systems installed to meet the fire protection requirements of 29 CFR Part 1910.

Step 1: Planning the Lesson

• Instructional Materials.

1. PowerPoint presentation
2. Instructor notes.
3. Other materials.

• Instructional Objectives.

1. Complete the required topics for the OSHA 10-hour course.
2. Complete the following optional topics:
 - a.
 - b.
 - c.
3. Present *Means of Egress and Fire Protection* to [number] participants.
4. Incorporate active participation in each lesson.
5. Provide a quiz or short evaluation at the end of the course.
6. Ensure feedback from participants at various points in the training.

• Guest Speakers/Presenters and Topics/Responsibilities.

Step 2: Presenting the Lesson

• Lesson Introduction.

Introductory remarks or transition from previous lesson.

- **Learning Objectives/Outcomes.**

Upon completion of the lesson, participants will be able to:

1. List or describe the three parts to an appropriate escape route.

Possible responses.

- the way of exit access
- the exit
- the way of exit discharge

2. Discuss at least four characteristics of an effective escape route.

Possible responses.

- Fire alarms to alert occupants, including flashing lights to alert those that are hearing impaired.
- Enough exits in the proper arrangement for quick escape of all occupants in an emergency.
- Adequate and reliable illumination for all exit facilities.
- At least 28 inches wide and 7-1/2 feet in height.
- Unobstructed, unblocked and unlocked exits.
- The door from a room or building that is designated as an exit from a building or from a room containing high hazard contents must swing in the direction of exit travel.

3. Give four reasons for developing an emergency action plan.

Possible responses.

- To describe actions that ensure employee safety during an emergency.
- To map out a floor plan showing emergency routes.
- To communicate to employees the actions they are to take in emergency situations.
- To ensure all emergencies that might reasonably be expected are covered in the plan. Examples are: fires, toxic chemical releases, hurricanes, tornadoes, blizzards, floods, earthquakes, or terrorist activities.

- **Learning Objectives/Outcomes (Continued)**

4. Name the required elements of a fire prevention plan.

Possible responses.

- The plan must be in writing.
- The plan must list major fire hazards.
- The plan must give procedures for handling, storage and control of items that have been identified as major fire hazards.
- The plan must give the names and job titles of persons responsible for
 - maintenance of equipment and systems to prevent or control ignitions or fires.
 - control of fuel source hazards.
- The plan must provide training for all employees who have responsibility for activities in the plan.

5. List at least four of the five classes of fire extinguishers and the types of fires they can properly extinguish.

Possible responses.

- Class A – combustibles/wood, cloth, paper
- Class B – flammables/liquids, gases, greases
- Class C – electrical/energized electrical equipment
- Class D – combustible/metals
- Class K – combustible cooking media/vegetable or animal oils and fats

6. Describe at least four requirements for proper maintenance of portable fire extinguishers.

Possible responses.

- Must be fully charged.
- Must be kept in operable condition.
- Must be kept in their designated place at all times except during operation.
- Must conduct an annual maintenance check.
- Must record the annual maintenance check and retain this record for one year after the last entry or for the life of the shell – whichever is less.

- **Planned Activities, Discussion, or Participant Interaction.**

Step 3: Evaluating Student Learning and Instruction

- **Lesson Evaluation and Comments.**

References

OSHA Standards

- 29 CFR 1910 Subpart E, Means of Egress (1910.35 to 1910.38)
 - http://www.osha-slc.gov/OshStd_toc/OSHA_Std_toc_1910_SUBPART_E.html
- 29 CFR 1910 Subpart L, Fire Prevention (1910.155 to 1910.165)
 - http://www.osha-slc.gov/OshStd_toc/OSHA_Std_toc_1910_SUBPART_L.html

OSHA Publications

- <http://www.osha-slc.gov/OshDoc/Additional.html>
- 3088 How to Prepare for Workplace Emergencies

OSHA References/Resources

- OSHA Fire Safety Advisor
 - <http://www.osha-slc.gov/dts/osta/oshasoft/softfirex.html>
- OSHA Small Business Outreach Training Program, Emergency Preparedness and Response
 - <http://www.osha-slc.gov/SLTC/smallbusiness/sec10.html>
- OSHA Technical Links – Fire Safety
 - <http://www.osha-slc.gov/SLTC/firesafety/index.html>