

Discussion Leaders Guide Session Fire Hazards

1. Preparation

- You will need a DVD player and a television.
- Review the **Tell**, **Ask** and **Review** portions of the Discussion Leaders Guide. You will be presenting the materials in *italic* to the group during these sections.
- Preview the video before you show it.
- Ensure that everyone attending the training can easily see and hear the video.
- Print the handouts prior to the training.

Training Day

2. Introduce the Topic

Tell: Today we are going to review hazards that can cause workplace fires and the steps you can take to prevent them. The training will include both a DVD presentation and discussion time. You may be asked questions during the discussion time.

Look at your handout titled Hazards Identification.

Fire requires three elements to start and spread; fuel, ignition and oxygen. Fuel sources are items such as; paper, wood and flammable liquid like gasoline. Ignition can come from a spark or other sources of heat. Fire needs oxygen. Removing even one of the elements above will prevent a fire.

Some of the common hazards that can cause workplace fires are:

- Smoking near combustible materials such as propane, gasoline, acetone and kerosene.
- Storing extra oxygen, acetylene and other compressed gas cylinders near sources of heat or ignition.



- Improper disposal of rags contaminated with oil, grease, solvent and volatile liquid resulting in spontaneous combustion. Spontaneous combustion is fire caused by a chemical reaction.
- Overloading electrical circuits.
- Leaving open flames unattended.
- Using welding equipment and other spark producing equipment near combustible materials.

Note: Use examples from your own workplace if available.

Let's start the DVD now.

3. Start the DVD

- Select your language choice
- Select scenario
- 4. The DVD has paused
- 5. Encourage discussion
 - ASK: What was the source of ignition in this situation? What was the fuel for the fire? What other hazards do you see? What would you do if there were a fire here?

6. Restart the DVD

7. Review

Tell: Fire can be one of the most serious workplace hazards and one of the most preventable accidents. A fire cannot only destroy the facility; it can cause injuries and death. Planning ahead is the best method for preventing fire related accidents.

Look at you handout titled **Preventing**.

Let's go over some of the fire prevention and safety steps you can take:

- Learn the locations of at least two exits at your work area.
- Know where the nearest fire alarm and fire extinguishers are located.



- Store flammable liquids only in approved containers and away from sources of heat.
- Dispose of trash and combustible materials before using welding and other spark producing equipment.
- Never leave open flames unattended.
- Never use gasoline to wash parts; only use approved parts cleaners.
- Dispose of oily and greasy rags in covered non-combustible containers.
- Immediately clean up spilled gasoline and oil spills.
- Never smoke with in 50 feet of a flammable liquid container. Vapors can travel away from the container and ignite.
- Do not stack or store material so high that they interfere with automatic sprinkler systems.
- Make sure that propane heaters and cooking stoves are used only in well ventilated areas.

Note: Review of your company's Emergency Evacuation plan.

Fires are preventable. If you see a small fire and have been trained in how to use a fire extinguisher go-ahead and use the extinguisher to put out the fire. If you have not been trained in how to use a fire extinguisher or think the fire is to big to handle, sound the fire alarm and begin the emergency evacuation. One last thing, if you see anyone suspicious in or around the facility let your supervisor know right away.

Are there any questions?

Thank you.

ADDITIONAL RESOURCES

The Oregon Occupational Safety and Health Administration (OR-OSHA) requires employers with ten or more employees to have a written emergency plan. The plan must include emergency evacuation procedures in the case of a fire. Employers with fewer than 10 employees, while not required to have a written plan, must ensure that employees know what to do in the event of an emergency.



Hazards Identification Fire Hazards

To prevent accidents you must know how to identify hazards and what to do to correct or eliminate them.

Hazards = Conditions or actions that can cause injury or illness Exposure = How close you are to the hazard

Common Hazards

A fire requires a combination of three elements - oxygen, combustible materials and an ignition source. A fire cannot start if even one element is removed. Some common causes of workplace fires are:

- Smoking near combustible materials such as propane, gasoline, acetone and kerosene.
- Storing extra oxygen, acetylene or other compressed gas cylinders near sources of heat or ignition.
- Improper disposal of rags contaminated with oil, grease, solvent or volatile liquid resulting in spontaneous combustion. Spontaneous combustion is fire caused by chemical a reaction.
- Overloading the electrical circuits.
- Leaving open flames unattended.
- Using welding equipment or other spark producing equipment near combustible materials.



Preventing Fire Hazards

THINK...Ahead

- Learn the locations of at least two exits from your work area.
- Know where the nearest fire alarm and fire extinguishers are located.
- Store flammable liquids in approved containers and away from sources of heat.
- Do not store extra gasoline, acetone and paint thinner and any other highly flammable liquid inside the building unless you place it in a flammable store cabinet.

ACT...Now

- Dispose of trash and combustible materials before using welding and other spark producing equipment.
- Never leave open flames unattended.
- Never use gasoline to wash parts; only use approved parts cleaners.
- Dispose of oily or greasy rags in covered non-combustible containers.
- Immediately clean up spilled gasoline and oil spills.

WATCH...Your Step

- Never smoke with in 50 feet of a flammable liquid container. Vapors can travel away from the container and ignite.
- Never fill a gas can or other similar containers to the top. Leaving vapor space allows the liquid to expand if the temperature changes.
- Do not stack or store material so high that they interfere with automatic sprinkler systems.
- Make sure that propane heaters and cook stoves are used only in well ventilated areas.