

FIRE SAFETY

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

Workplace fires leave more than 200 people dead and 5,000 injured each year, while causing as much as \$2.3 billion in property damage. The buildings that are destroyed by fire can be replaced, but human life cannot. To save their lives and the lives of their co-workers, employees must know the proper procedures for preventing fires as well as the correct response methods in the event of a fire in order.

This program shows viewers the steps they can take to prevent a workplace fire and what they can do should a fire start. Topics include classes of fires, types of fire extinguishers, proper use of extinguishers and emergency procedures..

PROGRAM OUTLINE

ELEMENTS OF A FIRE

- A fire needs three elements to burn: fuel, oxygen and heat.
- Examples of fuel include gasoline, chemicals, solvents, oil, wood, plastic and combustible metals.
- Oxygen is part of the air we breathe.
- Take away heat and a fire cannot start or continue to burn.

FIRE PREVENTION

- Good housekeeping is one of the best ways to prevent fires. Clean up your work area to remove paper, plastic or other items that could fuel a fire.
- Make sure all exits are accessible. Don't block exits with boxes or anything that would prohibit easy access.
- Store and handle hazardous materials properly that could serve as fuels.
- Remember the LIES system when using hazardous chemicals:
Limit the amount of hazardous chemicals in storage;
Isolate the product in approved containers;
Eliminate products that are no longer necessary by disposing of them properly;
Separate incompatible materials.

- Always read warnings on product labels. If you have any doubts about the correct way to handle a hazardous substance, ask your supervisor.
- Always use the safety precautions recommended by the manufacturer when handling hazardous materials. Gloves, goggles and a breathing mask may be required.
- Placards identify types of hazardous materials and help firefighters to decide how to fight a fire. Always consider placards as warning labels.
- Report any improper storage of chemicals or wrong type of fire extinguisher for the type of materials present.
- Avoid overloading electrical circuits and replace damaged electrical cords immediately.
- Turn off all electrical appliances before you leave at the end of the day. Check with your supervisor about exceptions, such as computers.
- Take special care when using welding equipment, grinders and other tools that can produce heat and store flammable materials away from them.
- Don't smoke near sources of fuel. Obey "no smoking" signs.

ACTIONS TO TAKE TO PREPARE FOR A FIRE

- You must be prepared in case a fire breaks out at your workplace. Your actions in the first seconds and minutes are vital and can be the difference in a small incident and a major fire.
- Know the location of fire alarms, fire extinguishers and fire hoses at your facility.
- Make sure all smoke detectors work.
- Know your facility's emergency and evacuation procedures. Have a plan to help evacuate physically impaired workers.
- If you are unsure about your organization's emergency procedures, check with your supervisor or safety manager.
- In case of fire, sound the fire alarm, evacuate the building and call the fire department.
- When evacuating, do not use the elevator; use the stairs.
- Before you decide that you will fight the fire, make sure it is small and you have a clear escape path.
- If possible, don't fight the fire alone. Make sure you can see others at all times when fighting a fire with others.
- If outdoors, try to keep the wind behind you.
- If you have any doubt about the size or type of fire, your ability to use an extinguisher correctly or your escape path, do not attempt to fight the fire.
- Leave the building immediately and close doors behind you to slow the spread of fire and smoke.

CLASSES OF FIRE

- The type of fire determines the type of extinguisher to be used. Using the wrong type of extinguisher can have disastrous results.
- Class A fire involve ordinary combustibles, such as wood, paper, cloth, rubber and plastics.
- Class B fires involve flammable gases or liquids, including oil and grease.
- Class C fires involve energized electrical equipment, such as wiring, switches and fuse boxes.
- Class D fires involve combustible metals, such as magnesium, titanium and potassium.

TYPES OF FIRE EXTINGUISHERS

- Some fire extinguishers can be used for only one class of fire, while some can fight two or three classes of fire.
- No extinguisher can be used on all types of fires.
- All fire extinguishers have labels and symbols to indicate the classes of fire on which they can be used.
- Water extinguishers can be used on Class A fires only. They should never be used on other classes of fire.
- Dry chemical extinguishers can be used on two or three types of fires depending on how they are labeled. Class A, B and C extinguishers are becoming common in most workplaces.
- Specialized wet chemical extinguishers, known as K class, are typically used on restaurant kitchen fires and don't leave a dry chemical residue.
- Carbon Dioxide extinguishers can be used on Class B and C fires, but don't work very well on Class A fires because the material usually re-ignites.
- Water mist extinguishers use distilled water and are safe to use on Class A and C fires.
- Halotron Extinguishers are replacing halon extinguishers and are suitable for Class A, B and C fires.
- Some less common extinguishers include the foam extinguisher for Class A and B fires and the Class D extinguishers for combustible metal fires.
- You won't have time to read extinguisher labels in case of emergency, so do it today. Become familiar with the types available at your workplace and their operating instructions.

USING FIRE EXTINGUISHERS

- Try lifting some of the extinguishers in your workplace. Some may be too heavy for you to operate.
- You will put lives in danger if you try to use an extinguisher that is too heavy for you.
- If the extinguisher has a gauge, make sure it is fully charged.
- Don't assume extinguishers are in good working condition. A designated person should check them regularly for damage, leaks or incorrect charging.
- Remember the word PASS system when using the extinguisher:
Pull the pin;

Aim at the base of the fire;
Squeeze the handle;
Sweep the fire from side to side until it appears to be out.

- Move around the perimeter of the fire to maximize coverage.
- Don't use more extinguishing agent than necessary.
- Never turn your back on fire even if it appears to be out. Make sure you have a clear exit from the fire area.

WATER HOSES

- Water hoses should only be used on Class A fires.
- When using a hose, pull out the entire length of the hose from the rack. Turn on the water valve then turn on the hose at the nozzle.
- Stream and spray options are available by rotating the nozzle.
- Don't use a hose unless you have been properly trained to do so. If you use a hose incorrectly, you may cause the fire to spread and do more damage.

EMERGENCY PROCEDURES

- You must be familiar with the emergency procedures for your workplace.
- Participate in your organization's fire drills and evacuation procedures. Go as quickly as possible to the assembly area and stay there until the fire marshal gives you further instructions.
- Follow instructions carefully and don't treat drills as a joke.
- Smoke inhalation and radiant heat are the major killers when a fire breaks out.
- When evacuating the building in the event of a fire, keep low on your hands and knees.
- Keep the back of your hands forward so that if you touch live electrical wires, you will be thrown clear.
- Avoid areas with radiant heat. If not possible, carry something to protect you such as heavy coat or blanket.
- Touch door handles gently with the back of your hand to determine if they are hot.

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.

Copy the attendance record as needed 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 show employees the steps they can take to prevent a workplace fire as well as the procedures for responding to a fire outbreak.

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

Lead discussions about any fires or situations that could contribute to a fire at your facility and what can be done to alleviate any problems. 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:

- Steps to take to prevent fires;
- Classes of fires and fire extinguishers to be used on them;
- Proper use of fire extinguishers and water hoses;
- Emergency and evacuation procedures in the event of a fire.

**FIRE SAFETY
REVIEW QUESTIONS**

Name _____ Date _____

The following questions are provided to check how well you understand the information presented during this program.

1. Which of the following is not required for a fire to burn?
 - a. fuel
 - b. oxygen
 - c. carbon dioxide
 - d. heat

2. You should notify your supervisor if _____.
 - a. you are unsure how to handle a hazardous substance
 - b. you have the wrong type of fire extinguisher in your work area
 - c. you encounter improper storage of hazardous materials
 - d. all of the above

3. You should use the elevator to evacuate a building in the event of a fire.
 - a. true
 - b. false

4. Which type of fire is the only type that can be extinguished with a water fire extinguisher or water hose?
 - a. Class A
 - b. Class B
 - c. Class C
 - d. Class D

5. Smoke inhalation and radiant heat, not actual burns to the body, are the major killers when a fire breaks out.
 - a. true
 - b. false

6. What do the letters PASS stand for?
 - a. Place, Aim, Squeeze, Stop
 - b. Pull, Arm, Stop, Squeeze
 - c. Pull, Aim, Squeeze, Sweep
 - d. Pull, Arm, Stay, Stop

7. When fighting an electrical fire, you should always assume the power to any electrical equipment is on.
 - a. true
 - b. false

8. Why is it important to keep the back of your hands forward when crawling out of a building during a fire?
 - a. so the palms will not burn if the floor is hot
 - b. so you will be thrown clear if you contact energized wires
 - c. because the back of the hand is less sensitive to heat
 - d. none of the above

ANSWERS TO THE REVIEW QUESTIONS

1. c

2. d

3. b

4. a

5. a

6. c

7. a

8. b