

## **FIRE EXTINGUISHER BASIC TRAINING**

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.

### **INTRODUCTION**

Workplace fires can happen at any time. That's why it's important to know what to do when a fire starts—know when and how to fight it and when not to. This program will provide viewers with the basic information they need to react safely in a potentially dangerous situation. Topics include classes of fire and extinguishers, when to use an extinguisher, using the PASS method to put out a fire and extinguisher inspection, maintenance and storage.

### **PROGRAM OUTLINE**

#### **ELEMENTS OF A FIRE**

- To burn, a fire needs three things: fuel, oxygen and a heat source.
- Combine those things and you have a fire; remove one of them and the fire will die.
- In essence, that's what a fire extinguisher does; it removes or neutralizes the fuel, the oxygen or the heat source and sometimes more than one. When that happens, the fire goes out.

#### **CLASSES OF FIRE & EXTINGUISHERS**

- There's more than one kind of fire extinguisher because there is more than one kind of fire. The five basic classes of fire are A, B, C, D and K.
- Class A fires involve ordinary combustible materials like cloth, paper and wood. These are fires that can be put out with water using an air-pressurized water extinguisher.
- Class B fires should never be put out with water. They involve flammable liquids like gasoline, alcohol, paints, thinners and so on. Instead of putting them out, water only spreads them and makes them more dangerous.
- Class B fires need to be smothered using a class BC or ABC extinguisher. These are multi-purpose dry chemical extinguishers that also leave a non-flammable substance on the extinguished material, reducing the likelihood of re-ignition.
- Class C fires are electrical fires. They involve energized electrical equipment; that is, equipment still connected to a live electrical source.
- When faced with an electrical fire, you must use either a class BC or ABC extinguisher. It is also important to try and turn off the power at its source if it can be safely accomplished.
- Class D fires involve combustible metals like magnesium, titanium and potassium. These are very dangerous fires that require a special kind of extinguisher depending upon what type of metal is involved.

- There are two types of class D extinguishers: Type 1 uses sodium chloride and is effective at controlling magnesium, sodium, potassium and powdered aluminum metal fires. Type 2 extinguishers use a copper-based dry powder designed to smother the fire and dissipate heat.
- Class K fires are kitchen fires that involve vegetable oils, animal oils or fats in cooking appliances. They occur in commercial kitchens, the kind you find in restaurants, cafeterias and caterers.
- Class K extinguishers use a potassium acetate agent discharged in a fine mist to avoid spreading a grease fire or to help cool the appliance after the fire is out.

### **THE CLASS ABC EXTINGUISHER**

- The most common type of extinguisher, and the one you are most likely to see in your workplace, is the multi-purpose ABC extinguisher, which is effective on class A, B and C fires.
- Always remember that, before you use an extinguisher, make sure it's intended for the type of fire you need to put out. As we mentioned before, using a class A water extinguisher on a class B fire will only spread the flammable liquid and make the fire much more dangerous.
- The ABC fire extinguisher sprays a dry chemical powder that smothers the fire. It also leaves behind a huge mess, but when you have to choose between a fire and a mess, choose the mess.

### **WHEN TO USE AN EXTINGUISHER**

- This is very important to remember: extinguishers should only be used to put out small fires. These are also called incipient stage fires.
- An incipient stage fire is one that's just getting started, that is still small and contained. An extinguisher will effectively put out a fire this size. That's what it's designed to do; that's all it's designed to do.
- An extinguisher can't begin to handle a larger fire, and you only put yourself in danger if you try to fight a fire like this with an extinguisher.
- Whatever the size of the fire, you should always pull the alarm or call 911 before trying to put the fire out. Small fires can quickly turn into large fires, and seconds count to a firefighter.
- Remember that lives are always more important than property; don't take chances. If you're not sure you can extinguish a fire safely, leave the area and close the door behind you to keep the fire from spreading.
- Fully understand that smoke from any type of fire kills more people than the actual fire. If smoke is present, it's best not to try to use an extinguisher; the fumes and gases of smoke are very toxic and can kill.
- If you do fight the fire with an extinguisher, always keep your back to an available escape route. You don't want to get trapped in the room by the fire.

### **USING THE 'PASS' METHOD TO EXTINGUISH A FIRE**

- Remember the word "PASS." This is a shortcut to remind you how to use the extinguisher: Pull the pin; Aim the nozzle; Squeeze the handle; and, Sweep from side to side.
- Remove the extinguisher from its mount and take it to the fire. Pull the pin, then aim the extinguisher nozzle toward the base of the fire, standing six to 10 feet from the fire. Then squeeze the handle.
- If you stand too close to the fire and squeeze the handle, the force of the pressurized gas and extinguishing material could actually spread the flames.
- Activate the extinguisher well before you reach the fire. Move in slowly, making sure not to spread the fire.

- After the fire is out, check to make sure it's really out. Don't leave the area until you're certain that a fire will not reignite.
- Many times, fires start up again after you think they're out. That's another reason for calling the fire department.
- If you are successful in putting out the fire, the professionals can double-check to make sure it's fully extinguished. They don't mind arriving to find out that you already extinguished the fire, but they get real upset if you don't call them until the fire gets out of hand.

### **FIRE EXTINGUISHER TRAINING FOR EMPLOYEES**

- Your company may coordinate training with the local fire department or bring in a vendor to conduct hands-on training.
- Don't be afraid to let your supervisor know you've never used an extinguisher. Most people haven't and putting out a fire with an extinguisher does require a little training and practice.
- For example, extinguishers are pressurized. The force of the expelled gas can be strong, so hang on to the extinguisher if you're going to pull the pin and squeeze the handle.
- Also, if you've never used one, the noise can be startling, so be prepared.
- No matter how much training you've had, you can't put out a fire with an extinguisher that's empty. That's why regular maintenance is so important.

### **EXTINGUISHER INSPECTION, MAINTENANCE & STORAGE**

- Extinguisher inspections and maintenance should be a major part of your facility's fire prevention policy.
- Check them at least once a month to make sure they're in good shape; look them over weekly if they're outdoors.
- When you're examining the extinguisher, make sure the pressure gauge shows that it's fully charged, the locking pin and plastic tamper seal are in place, the hose and horn are unobstructed and in good shape and the metal parts are free of corrosion.
- Never test an extinguisher to see if it's working. Once the valve has been opened, the extinguisher will lose pressure and may empty completely within a few days.
- This means that any time an extinguisher is used, even for a moment, it must be completely serviced and recharged. If this doesn't happen, it may be useless when you need it.
- After an extinguisher has been inspected and serviced, the servicing company will issue a service tag that's good for one year. During your monthly inspections, check to make sure it's current; if it's over year old, the extinguisher needs to be re-serviced immediately.
- A fire extinguisher is no good at all if you can't find it when you need it. Never store an extinguisher on the floor, in a closet or behind furniture, plants or decorations.
- Extinguishers should be mounted on hangers or in marked fire extinguisher cabinets where they can be clearly seen.
- When a fire starts, there's not time to search for an extinguisher that works. They must be within easy reach and ready to go.

## **SUMMARY**

- Fire extinguishers can save property and lives, so you need to know how to use them.
- Know what classes of fires might occur at your facility and which extinguishers you can use to fight them.
- Make sure that extinguishers are mounted in plain sight, checked regularly and inspected annually.
- Sound the alarm and call 911 before trying to tackle a blaze. Always keep your back to an escape route and get out if the situation becomes too dangerous.
- Remember the PASS method: pull the pin; aim the nozzle; squeeze the trigger; sweep from side to side.
- Talk to your local fire department about getting hands-on experience with extinguishers.
- Fires can start anywhere, at any time, but with the proper training and with the right extinguisher, you may be able to extinguish a small fire before it gets out of control.

## **PREPARE FOR THE SAFETY MEETING**

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 video 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.

## **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 help viewers determine when they should fight a fire and how to use an extinguisher to put out a fire once they've decided it's safe to fight it.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline. Lead discussions about fire hazards at your facility and what your company's policies are for responding to a fire should one break out. Use the review questions to check how well the program participants understood the information.

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

- The five classes of fire and the appropriate extinguishers for putting them out;
- What conditions must be met when deciding when to use a fire extinguisher;
- How to use the PASS method to extinguish a fire;
- How to inspect, maintain and store fire extinguishers.

**FIRE EXTINGUISHER BASIC TRAINING**  
**REVIEW QUIZ**

Name \_\_\_\_\_ Date \_\_\_\_\_

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

1. Which class of fires involves energized electrical equipment?
  - a. Type A
  - b. Type B
  - c. Type C
  
2. Which chemical compound is used as an extinguishing agent in Class K extinguishers?
  - a. sodium chloride
  - b. potassium acetate
  - c. carbon dioxide
  
3. Smoke from any type of fire kills more people than the actual fire.
  - a. true
  - b. false
  
4. If a fire is in its incipient stage, you should start fighting it immediately and then sound the alarm or call 911 when it is fully extinguished.
  - a. true
  - b. false
  
5. How far should you be standing from a fire when you begin to extinguish a fire?
  - a. 2-3 feet
  - b. 6-10 feet
  - c. 12-15 feet
  
6. How often should you check the condition of a fire extinguisher that is placed outdoors?
  - a. daily
  - b. monthly
  - c. weekly
  
7. You should never test a fire extinguisher to see if it is working.
  - a. true
  - b. false

***ANSWERS TO THE REVIEW QUESTIONS***

1. c

2. b

3. a

4. b

5. b

6. c

7. a