



**Florida Conference of Seventh-day Adventists**  
**Florida Conference Brigade, Medical Cadet Corps**  
351 S State Rd 434, Altamonte Springs, FL 32714



# Fire Safety Part 1: Introduction

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The MCC can play an important **role in fire and utility safety actions**.

- Small fires can be extinguished.
- Recognize a large fire and call for help.
- Prevent additional fires by removing fuel sources.
- Shutting off utilities when necessary and safe to do so.
- Assisting with evacuations where necessary.
- Create a safety perimeter around a large fire site.

## Fire Priorities

Rescuer **safety** is always the number one priority. Therefore:

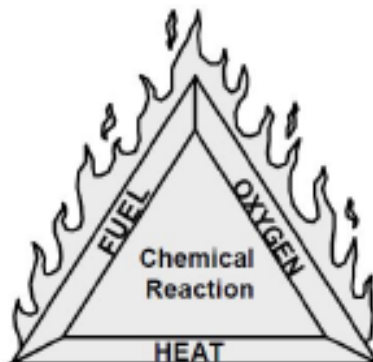
- Always use the buddy system. Stick together at all times.
- Wear safety equipment: gloves, helmet, boots, goggles, masks.
- Work together for the greatest good for the greatest number.

## Fire

### Fire Chemistry

Fire requires **three elements** to exist:

- **Heat**: this elevates the temperature of a material to its ignition point
- **Fuel**: this may be a solid, liquid, or gas determining which method to use to extinguish the fire.
- **Oxygen**: only 20% is needed to keep a fire burning, otherwise the fuel is consumed without burning.



## Classes of Fire

To aid in distinguishing types of fires, there are **five classes** based on the type of fuel that is burning.

- **Class A:** Ordinary combustibles (paper, cloth, wood, rubber, plastics)
- **Class B:** Flammable and combustible liquids (lighter fluid, kerosene. The vapor burns when ignited).
- **Class C:** Energized electrical equipment (wires and motors. When electricity off, then a class A)
- **Class D:** Combustible metals (aluminum, magnesium, and titanium)
- **Class K:** Cooking oils.

## Demonstration:

Ignite a rolled-up piece of cotton and place inside a Pyrex jar, and cover it tightly. The flame will go out as the oxygen is used up from the fire. After the flame is out, remove the cotton roll and blow on it to see if it will rekindle. BE SURE that all burning material is extinguished completely.

## Fire Assessment

This is a process that enables the MCC member to make decisions and **respond appropriately** in the areas of greatest need. By **assessing the fire and the surrounding environment**, the member can decide whether to attempt to suppress the fire and make a plan of action. This is an ongoing process that answers several important questions:

- Do my buddy and I have the right equipment?
- Are there other hazards?
- Is the building structurally damaged?
- Can my buddy and I escape?
- Can my buddy and I fight the fire safely?

First, gather facts about your safety, the prevailing weather, and type of construction involved. Are there hazardous materials involved? Assess if the damage needs more help available to control it. Is there equipment available to suppress the fire? Reassess as time goes on. Don't be reluctant to evacuate an area.

## Firefighting Resources

The most common **resources that communities may have** include:

- Local fire departments
- Fire alarm systems
- Sprinkler systems
- Portable fire extinguishers
- Interior wet standpipes (water hoses found in commercial buildings)

## Fire Extinguishers

Portable fire extinguishers are invaluable for putting out small fires. A well-prepared home should have multiple portable fire extinguishers (kitchen, garage, and basement). Workplaces have to comply with regulations and fire codes. The type of fire determines the type of extinguisher.

### Types

There are four types of extinguishers. It can work by removing air (dry, foam, and CO<sub>2</sub>), or by removing heat (water, foam, and dry chemical).

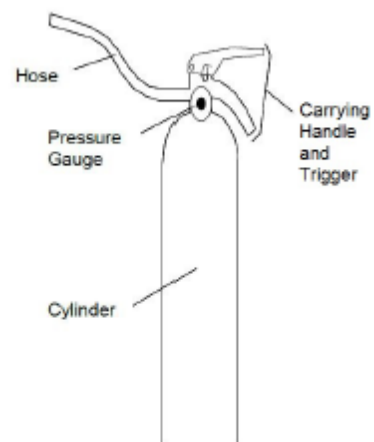
- Carbon dioxide
- Dry powder-most common
- Water
- Special agents (wet chemicals) and Foam



### Deciding when to use a fire extinguisher

When deciding to use a fire extinguisher, assess if evacuation is preferable. Only use a portable fire extinguisher on small fires in the early stages. Only use a fire extinguisher if you know the type of material and the appropriate extinguisher is present. Only use a fire extinguisher if you have been trained to do so.

The components of an extinguisher include a hose, a pressure gauge, a handle with trigger, and the cylinder.

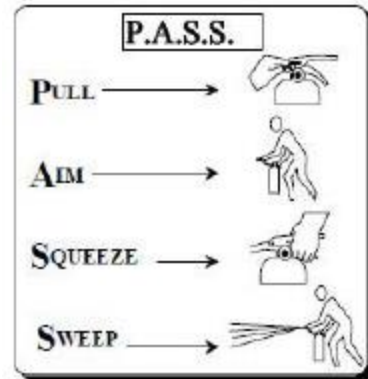


### How to use an extinguisher

The acronym for operating a fire extinguisher is **PASS**.

- **P**ull (test after pulling the pin)
- **A**im
- **S**queeze
- **S**weep

It is important to extinguish the fuel, not the flames, so the spray of the extinguisher is aimed at the base of the fire.



### Fire Suppression Safety

Personal safety is the number one priority. It is not possible to be a rescuer if you become a victim.

Follow these **rules regarding fire suppression safety**:

- Use **safety equipment**.
- Work with a **buddy**.
- Have a backup team, whenever possible.
- Always have **two** ways to exit the fire area.
- **Look** at the door. If air is being sucked under the door or smoke is seeping out the top of the door, **DO NOT TOUCH OR OPEN THE DOOR**.
- Feel closed doors with the back of the hand, working from the bottom up. If the door is hot, **don't enter**.
- Confine the fire whenever possible by **closing doors**.
- **Stay low** to the ground. Smoke inhalation is the leading cause of fire-related deaths.
- Maintain a **safe distance**. Use the effective range of the fire extinguisher.
- Never turn your back on a fire when exiting.
- Maintain the fire extinguishers in good working order.
- **DO NOT** enter smoke filled areas.

## Exercise

If available, use different types of fire extinguishers to learn how to suppress fires. Use the buddy system.

Member one assumes a ready position with the pin pulled, aimed and upright, about 20 feet from the small fire. When member 1 says "going in", member 2 should repeat "going in" and stay within reach of member 1 by placing his hand on the shoulder.

Member 2 is there to keep them both safe while member 1 is focused on suppression of the fire. Walk toward the fire together.

When within 10 feet of the fire, member 1 should begin to discharge the fire extinguisher at the base of the fire.

When exiting, Member 1 says "backing out", then member 2 repeats this while keeping his hand on member 1's shoulder, and they back out.

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For course certification, the form must be filled out.


Member Name (Print) \_\_\_\_\_ Instructor Name (Print) \_\_\_\_\_


Member Position Number \_\_\_\_\_ Instructor Position Number \_\_\_\_\_


Member FEMA SID \_\_\_\_\_ Instructor FEMA SID \_\_\_\_\_


Date of Instruction \_\_\_\_\_


 Recognize the role a MCC member can play in fire suppression and know the top priority.


 Define the three elements of fire chemistry and the different classes of fire.

 Know the questions to ask to assess a fire for personal safety.

 List the firefighting resources available to a community.

 Define the fire extinguisher types and state the circumstance of when to use each type.

 Demonstrate how to use a fire extinguisher.

 Know the rules of fire suppression safety.

With a complete sheet of initials, the instructor's signature signifies certification of completion for the Fire safety Part 1: Introduction course.

Instructor Signature \_\_\_\_\_