

# Fire Extinguisher Training



# Introduction

- **What should you do if there is a fire**
- **What types of fires are there**
- **What types of extinguishers are available**
- **How to use a Fire Extinguisher**
- **How to inspect a Fire Extinguisher**

# What should I do if there is a fire?

- **Some things you need to think about –**
  - Are you in imminent danger?
  - Do you have a safe way to exit the area?
  - How big is the fire?
  - What type of fire is it?

***Remember – Using a fire extinguisher by ANR employees is completely voluntary***



## If you are:

- In imminent danger – Evacuate to a safe area
- **DO NOT** have a safe way to exit – Find a way to exit the area or make an exit and evacuate to a safe area



**Remember: No Fire is worth risking your life.**

# How big is the Fire?



Small Trash or Incipient Fire



Desk or Room Fire

Building Fire



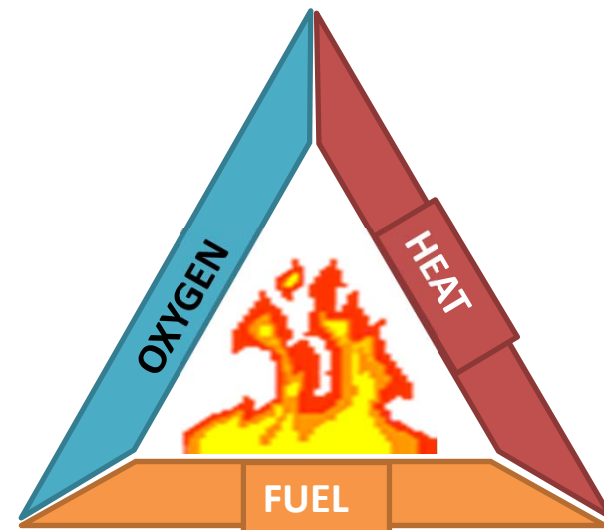
# What type of Fire is it?

CLASSES OF FIRES	TYPES OF FIRES	PICTURE SYMBOL
	Wood, paper, cloth, trash & other ordinary materials.	
	Gasoline, oil, paint and other flammable liquids.	
	May be used on fires involving live electrical equipment without danger to the operator.	
	Combustible metals and combustible metal alloys.	
	Cooking media (Vegetable or Animal Oils and Fats)	




























ABC rated fires are the most typical in an office setting

## Elements of a Fire

- Fuel – Can be from vapor, liquid, or a solid source
- Oxygen – In the air around the fire
- Heat – As small as a spark or a large heat source
- Need all three to have a fire, remove one and the fire will die



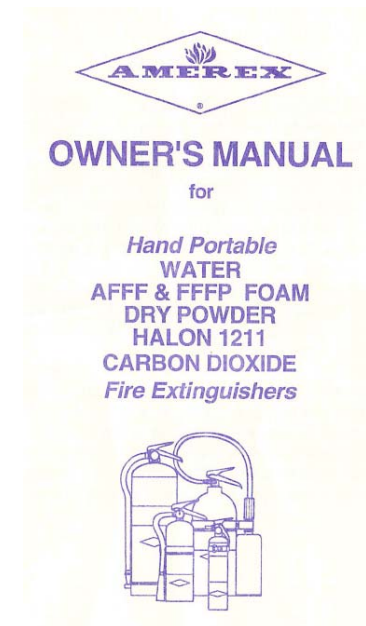
# Types of Extinguishers

Fire Extinguisher Chart						
Extinguisher	Type of Fire					Special Notes
Type	 A	 B	 C	 D	 K	
Water						Dangerous if used on 'liquid fires' or live electricity
Foam						Not practical for home use
Dry Powder						Safe use up to 1000V
Carbon Dioxide (CO2)						Safe on high and low voltages
			Yes 	No 		

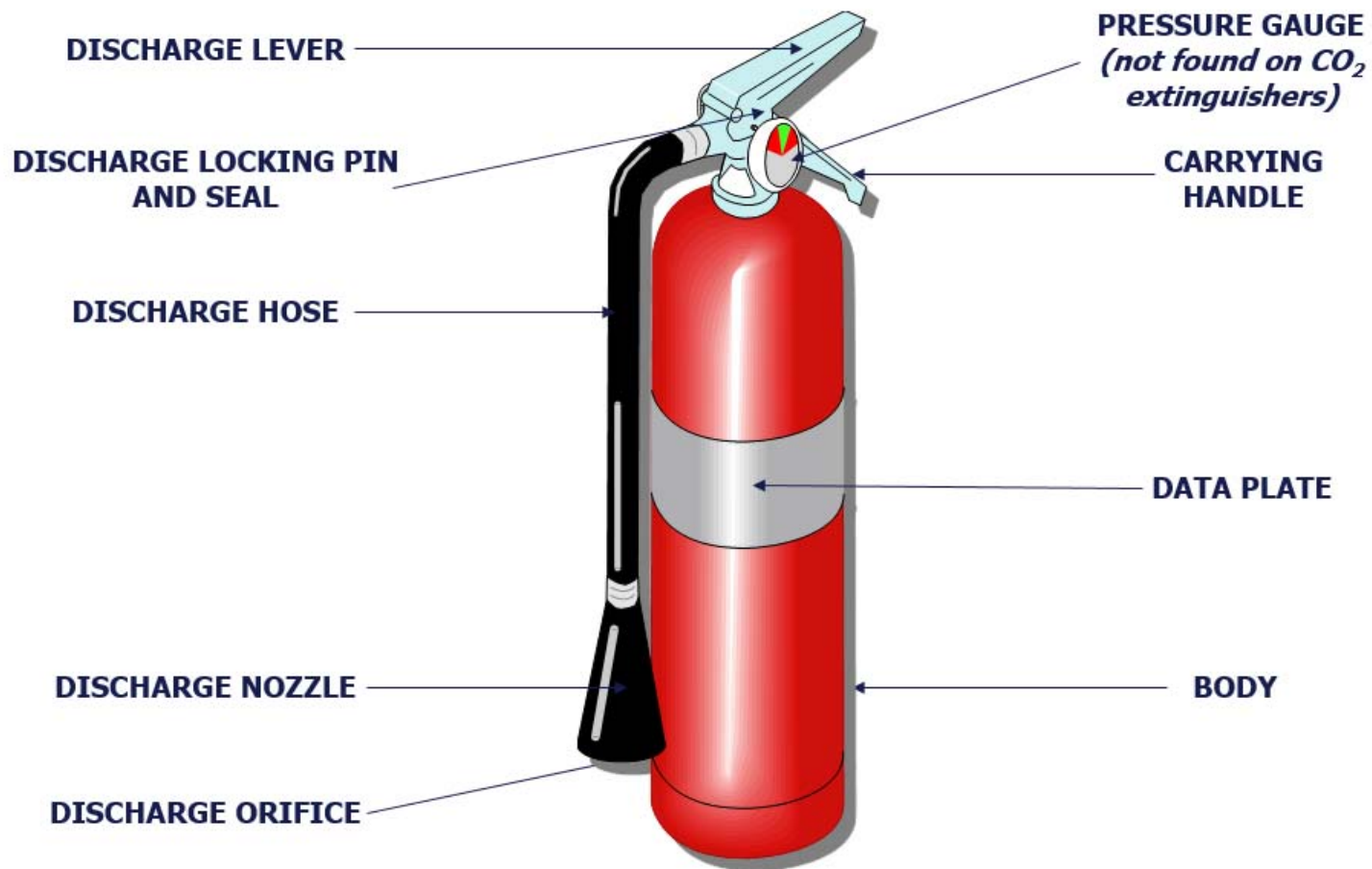


# What Type do We Have?

- In most office setting the extinguisher is a Dry Chemical rated for A, B, & C fires.
- Location should be designated with a sign and on your emergency route map.
- Instructions on how to use the extinguisher are found on the extinguisher itself and sometime on a separate pamphlet.



# Fire Extinguisher Anatomy



## Is there a danger in using a Fire Extinguisher?

- In most cases fire extinguishers do not pose a direct hazard to the operator.
- Dry Chemical – Have a non-toxic powder that may be like a nuisance dust if inhaled
- Carbon Dioxide - The CO<sub>2</sub> will be cold coming out and will displace the oxygen in the room. If problems due occur, remove yourself and others from the area.
- Consult your SDS for specific health and protective measures for your extinguisher

*SDS – Safety Data Sheet*

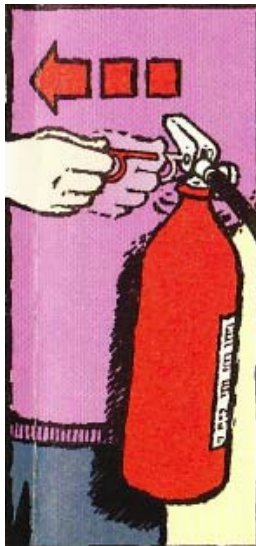
# What are the limits of a Fire Extinguisher?

- Have an Effective range of 6 to 10 feet
- Have a duration of 10 to 20 seconds dependent on size
- Only work on small, semi-contained fires
- Only work if you know where they are and how to use them
- Home use extinguishers (non-rechargeable) have a shelf life of 8-10 years

**Note: Never throw a fire extinguisher at a fire!!!**

# How to use a Extinguisher

- P - Pull
- A - Aim
- S – Squeeze
- S - Sweep



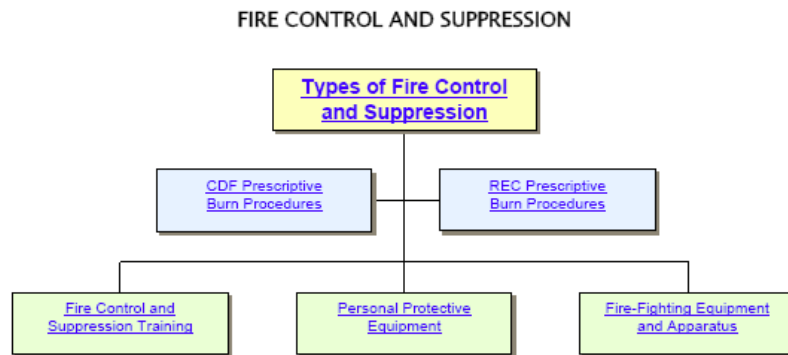
## **Before you attempt to extinguish a fire:**

- **Make sure everyone has left, or is leaving, the building.**
- **Make sure the fire department has been called/alarm sounded.**
- **Make sure the fire is confined to a small area and is not spreading.**
- **Be sure you have an unobstructed escape route to which the fire will not spread.**
- **Be sure you know what's likely burning and your extinguisher is right for the fire.**

***It is reckless to fight a fire in any other circumstances. Instead, leave immediately and close off the area.***

# For more information refer to the:

- ANR Fire Control and Suppression Policy and Procedure
- Safety Note #50 & 72



## Safety Note

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### PORTABLE F



Photograph Courtesy of South Coast REC

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#### Four Types of Fires

1. **Class A**, Fires in ordinary combustibl plastics.
2. **Class B**, Fires in flammable or combi plastic materials.
3. **Class C**, Fires that involve energized of the extinguishing media is importa
4. **Class D**, Fires in combustible metals

#### Portable Fire Extinguisher Use and Req

- Portable fire extinguisher use is limit employees that voluntarily agree to u
- ANR employees are not authorized t
- Never use a portable fire extinguish
- Always use the properly rated portab: ABC rated portable fire extinguisher
- The acronym "PASS" is used to rem as follows:  
P – Pull the pin.  
A – Aim the extinguisher nozzle to  
S – Squeeze the trigger while holc  
S – Sweep the extinguisher from e
- Always use a portable fire extinguish fire.
- Never attempt to use a portable fire r
- Always leave the fire area whenever fire extinguisher becomes depleted;
- All portable fire extinguishers shall b inspection.
- ANR employees that volunteer to usi fire extinguisher training.

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## Safety Note

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Safety Note #72

### BASIC FIRE PREVENTION MEASURES



Information available from the U.S. Fire Administration indicates fire caused approximately 4,000 deaths and 18,000 injuries nationwide during 2003. In addition, the annual total of fire-related fatalities exceeds all annual deaths caused by natural disasters such as earthquakes, hurricanes, and tornadoes. By being aware and taking several basic precautionary measures, employees, and other personnel can control conditions to prevent the outbreak of fires.

Fires require fuel, an adequate oxygen supply, and an ignition source (i.e., the Fire Triangle). Fire prevention is accomplished by maintaining control over one or more of the three required elements that, when brought together, cause fires.



The Fire Triangle

#### Basic Fire Prevention Measures

- Always keep ignition sources and fuels separated. For example, never use an open flame or create sparks in proximity to fuel storage tanks.
- Never use frayed or cracked electrical cords. Do not place electrical cords under carpets.
- Be aware of seasonal vegetation changes and follow recommended practices appropriate for the fire season and type of fire danger present (i.e., Low, Moderate, or High). For example:
  1. Prevent range fires started by catalytic converters by keeping vehicles off dry vegetated range lands during the officially designated fire season.
  2. Do not use potential ignition sources, such as chain saws, welding/grinding equipment, or mowing machines, in dry vegetated areas during the officially designated fire season or during times of High Fire Danger.
  3. Do not smoke in dry vegetated areas during the officially designated fire season or during times of High Fire Danger.
- Always operate machinery and equipment within the manufacturer's design limits. Assure spark arresters are in place and functioning properly. Prevent overheating by not overloading machinery or equipment capacities.
- Keep flammable liquids in a secured area posted with warning signs that identify the flammable hazard. Store flammable liquids in unbreakable containers with securely fastened caps. Always mark containers with the words "Danger - Flammable Liquid."
- Never overload a circuit by plugging too many appliances or equipment into one receptacle.
- Prior to exiting a work area, turn off or disconnect non-essential lights, appliances, machinery, and equipment.
- Immediately report to your supervisor any work conditions that appear to constitute a fire hazard.

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Additional EH&S information may be accessed at the ANR Web Site at: <http://safety.ucanr.org>



# Fire Extinguisher Training

If you need more information please visit

<http://safety.ucanr.edu>

Thank You