Fire Extinguisher Training

Course Overview

- What is Fire?
- Classes of Fire
- 3 A’s
- Types of Fire Extinguishers
- Use of a Fire Extinguisher
- Summary

What is Fire?

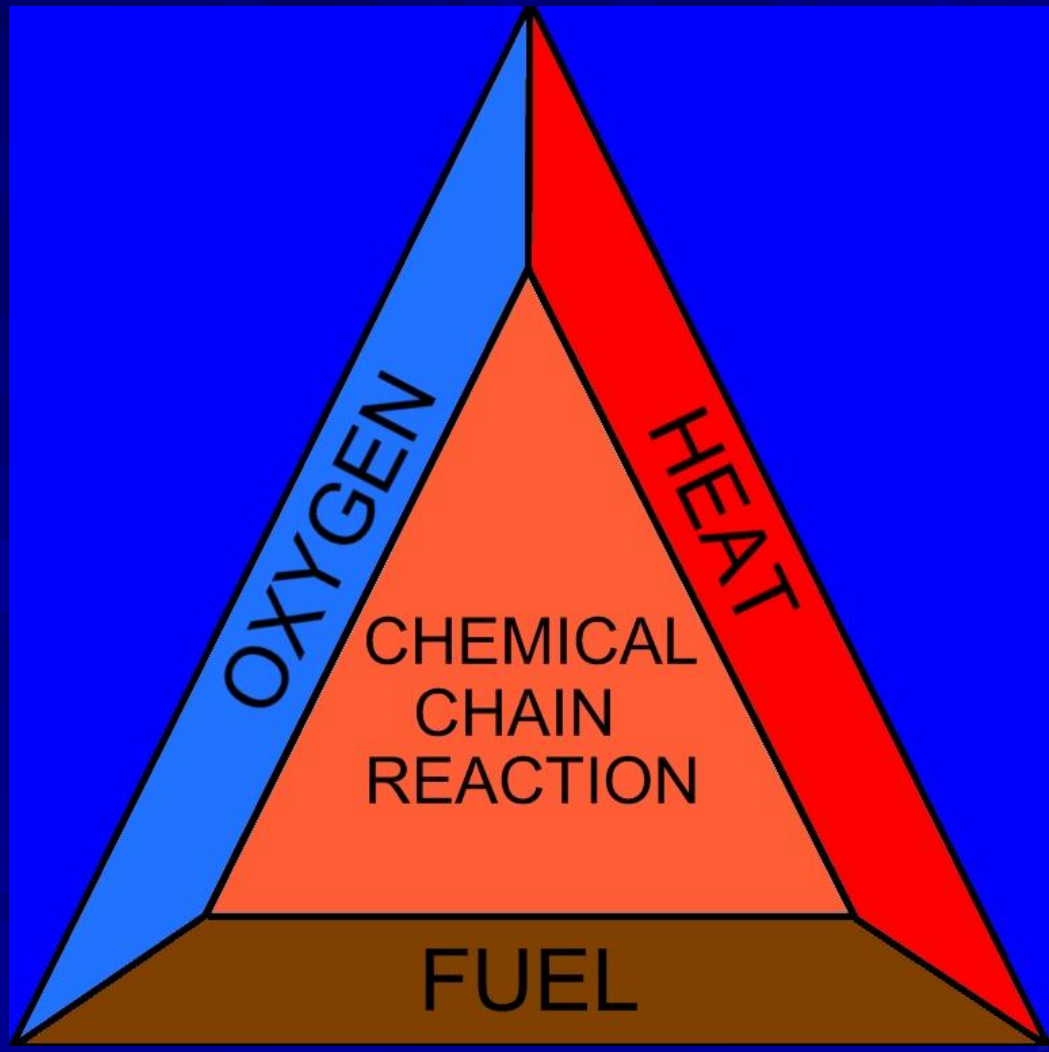
- Fire is a self-sustaining, chemical chain reaction with varying degrees of light and heat.

What is Fire? (cont)

- Fire is made up of four components
  - Fuel
  - Oxygen
  - Heat
  - Chemical Chain Reaction

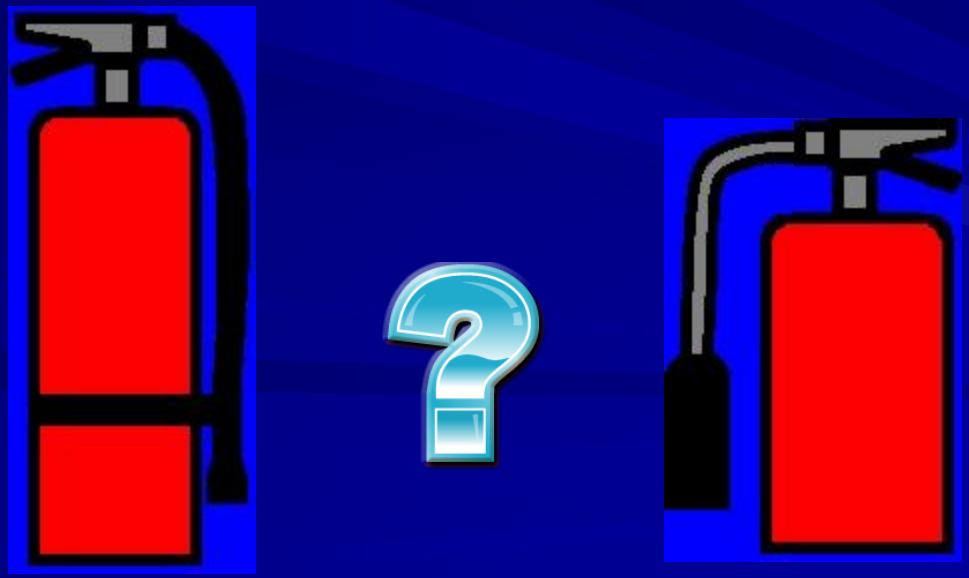
Fire Tetrahedron

- By removing one of these four components the fire will go out.
- Fire extinguishers are designed to do just that.



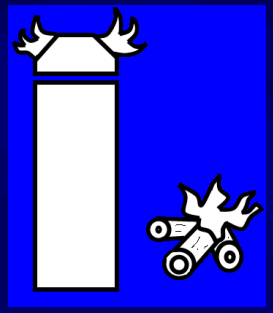
Classes of Fire

- Types of fire are separated into different classes based on the fuel source involved. Knowing the classes of fire will help you choose the appropriate extinguisher.



Classes of Fire (cont)

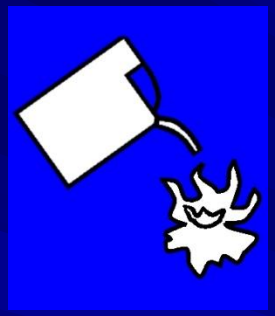
- Each class of fire is designated by a letter and/or a symbol.



Class A:

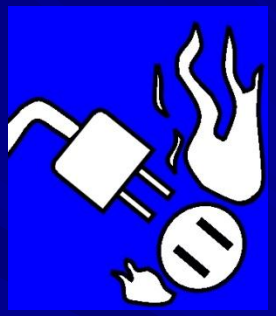
Ordinary Combustibles

(paper, wood, plastics..)



Class B:

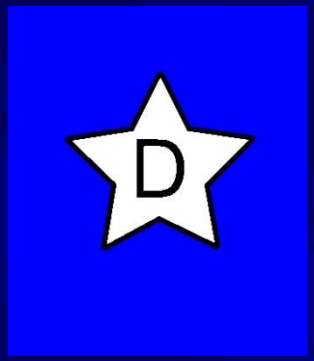
Flammable liquids and gas



Class C:

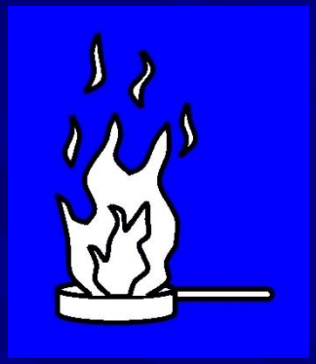
Electrical

Classes of Fire (cont)



Class D:

Metal



Class K:

Cooking oils

If You Discover a Fire Follow The 3 **A**'s

- **A**ctivate
- **A**ssist
- **A**ttempt

The 3 A's (cont)

Activate

Activate the buildings fire alarm system or call 911 to notify emergency services.

The 3 A's (cont)

Assist

Assist those who are in immediate danger or who are incapacitated. Do this with out risk to yourself.

The 3 **A**'s (cont)

Attempt

Attempt to fight a fire only after the first two steps have been completed and you feel confident in yourself to do so. Always have an exit to your back in case you need to escape. Never attempt to fight a fire if there is a heavy smoke condition. Smoke can be extremely toxic and will reduce your visibility. Only fight small fires, no larger than the size of a small waste basket. Small fires will grow big very fast.

When to use a fire extinguisher?

Use a Fire Extinguisher When:

- The fire is contained and not spreading
- The extinguisher is readily available
- You know how to use it properly
- Personal safety is not compromised
- There is a clear path for escape

Types of Extinguishers

Dry Chemical

Wet Chemical

Dry Powder

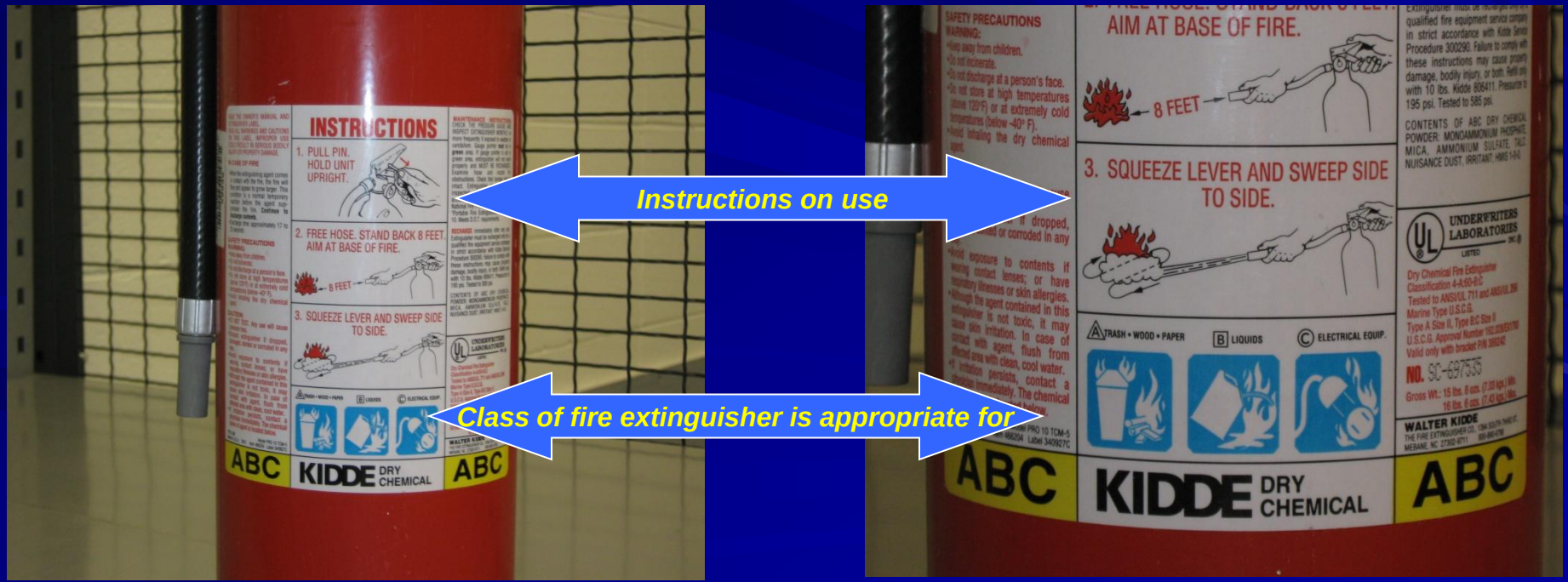
Clean Agent

Carbon Dioxide

Pressurized Water/Foam

Fire Extinguisher Labeling

- Labeling on the fire extinguisher identifies which class of fire it is appropriate for; Class A,B,C,D or K and instructions on how to use it.



Types of Extinguishers (cont)

Dry Chemical

- Dry Chemical is the most widely used type of fire extinguisher and is also recognized as a multi-purpose ABC fire extinguisher.
- The agent works by interrupting the chemical chain reaction. Also, on a class A fire it creates a barrier between the fuel and the oxygen.

Types of Extinguishers (cont)

Carbon Dioxide

- Works by separating oxygen and heat.
- Usually ineffective against class A fires.

Types of Extinguishers (cont)

Water/Foam

- Works by cooling the fire and coating the fuel. Foam extinguishers create a foam barrier preventing the fuel from coming in contact with oxygen.
- Effective on class A fires
- Can cause liquids in class B fires to spread
- Can cause shock hazard on class C fires

Types of Extinguishers (cont)

Dry Powder

- Works by separating fuel from oxygen and/or removing heat
- Effectiveness is based on the type of class D fire it is designed to extinguish.
- Ineffective on class A,B,C fires (metal fires) only.

Types of Extinguishers (cont)

Wet Chemical

- Designed for restaurant type kitchens.
- Works by forming a soapy foam blanket over the burning material and cooling it below it's ignition temperature.

Types of Extinguishers (cont)

Clean Agent

- Works by interrupting the chemical chain reaction.

Fire Extinguisher Locations

- Fire extinguishers are located throughout the workplace and readily accessible in the event of a fire. You can usually find them in hallways, laundry rooms, meeting rooms, kitchens, mechanical/electrical rooms, and near exit doors.
- The class, quantity, and placement of fire extinguishers is determined by the potential size and type of fire that can occur in locations, such as office space, storage space, research etc.
- Employees should take the time to learn the locations of the fire extinguishers in their workplace.

Fire Extinguisher Use

Use the acronym ***PASS*** to remember how to use a fire extinguisher.

P – Pull

A – Aim

S – Squeeze

S – Sweep

P.A.S.S.

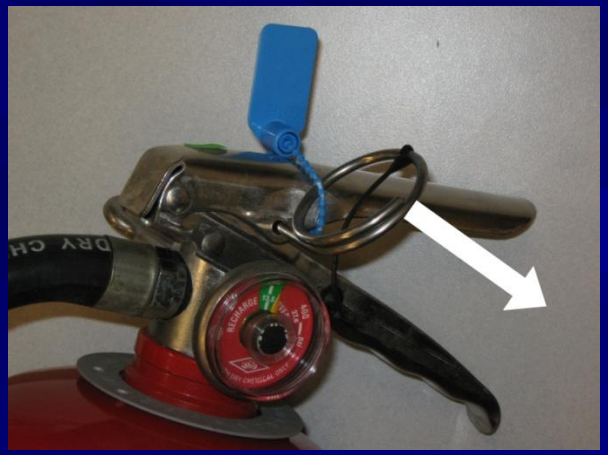
Pull

Aim

Squeeze

Sweep

P.A.S.S. (cont)



PULL

Hold Fire Extinguisher Firmly and **P**ull The Pin Out.

P.A.S.S. (cont)

AIM

Aim the nozzle at the base of the fire

P.A.S.S. (cont)

SQUEEZE

Squeeze the handle of the fire extinguisher

P.A.S.S. (cont)

SWEEP

Sweep back and forth at the base of the fire until the fire is out or the extinguisher has emptied

SUMMARY

Remember the following…

- Actions to take when a fire is discovered….The Three A's (Activate, Assist, Attempt)
- When to use a fire extinguisher?
- How to use a fire extinguisher…. *P.A.S.S. (Pull, Aim, Squeeze, Sweep)*