

Fire Safety

How to Prevent and Keep Your
Employees Safe from a Fire

Why is Fire Safety Important?

- In 2022, 2% of the 5,486 workplace fatalities were due to fires or explosions.
- This is an estimated 107 deaths due to fires and explosions.
- Fires can affect any type of industry or environment – offices, warehouses, manufacturing facilities, hospitals, etc.

Why is Fire Safety Important?



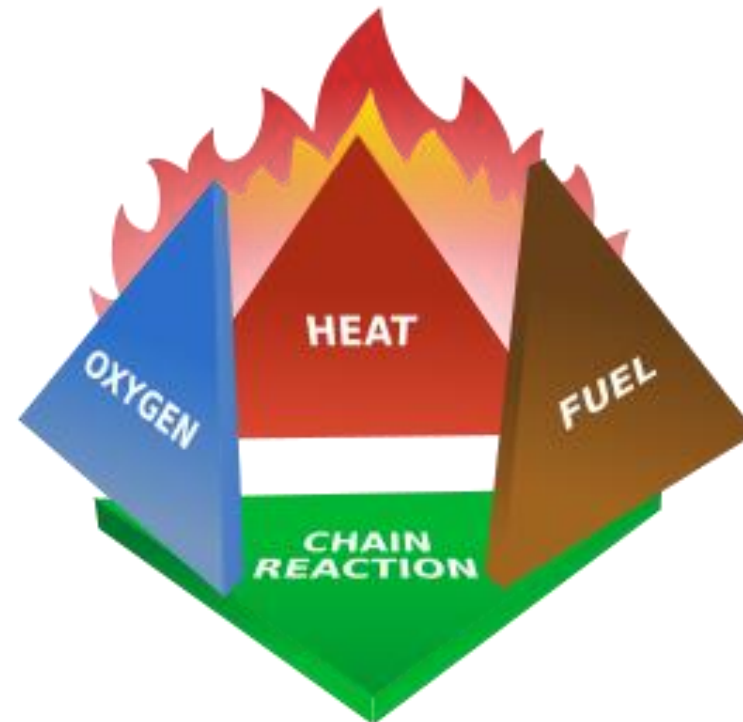
To avoid tragedies like these

In 1911, 150 women and young girls died at the Triangle Shirtwaist Factory in New York because of locked fire exits and inadequate fire extinguishers.

Recently in Hamlet, North Carolina 25 workers died in a fire at a poultry processing plant where again fire exits and inadequate fire extinguishers were the likely cause.

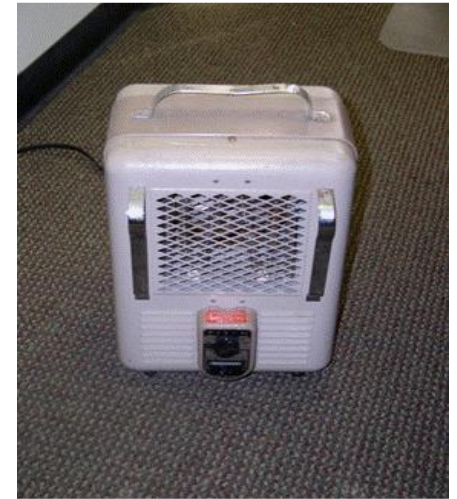
Elements of a Fire

- What a fire needs:
 - Air
 - Heat
 - Fuel
 - Chemical Reaction



Common Causes of Fires

- Electricity
- Refuse or Rubbish
- Smoking
- Heaters
- Hazardous Goods
- Arson
- Specific Hazards



Preventing Fire Injuries and Deaths



To prevent fire injuries, OSHA standards require employers to provide:

- Proper Exits
- Fire Fighting Equipment
- Emergency Plans
- Employee Training

Preventing Fire Injuries and Deaths

Fire Exits

- Every building must have two means of escape.
- Fire doors must not be locked or blocked.
- Exit routes must be clear and free of obstruction.
- Exit routes must be properly marked.



Preventing Fire Injuries and Deaths



Portable Fire Extinguishers

- Every workplace must have proper fire extinguishers.
- Employees expected to use the extinguishers must be instructed.
- Fire extinguishers must be properly maintained.

Preventing Fire Injuries and Deaths

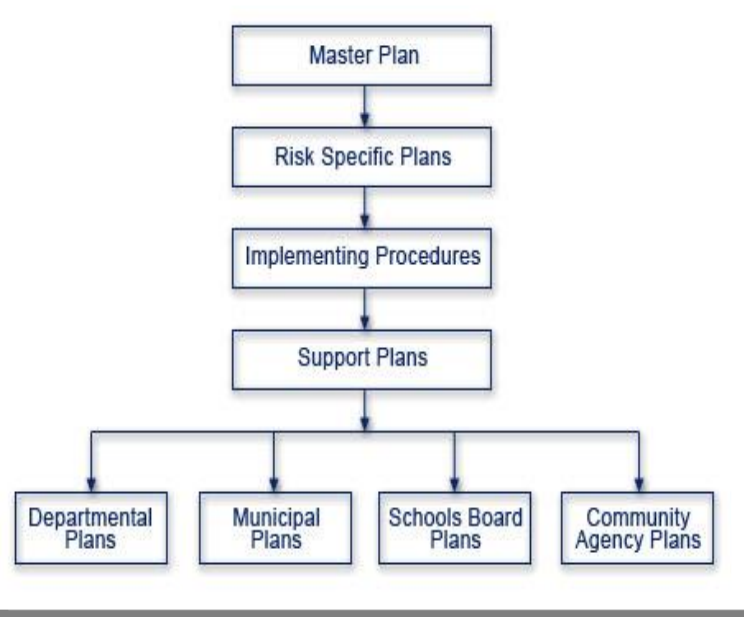
Types of Portable Fire Extinguishers

- Class A: Wood and Paper
- Class B: Flammable Liquids
- Class C: Electrically Energized Fires
- Class D: Flammable Metals
- Multi-Class Ratings: Different types of fires



Preventing Fire Injuries and Deaths

Emergency Evacuation Planning



- Each employer needs to have a written plan.
- Helping physically impaired employees must be addressed in the plan.
- How to alert employees must be a part of the plan.
- Training employees about the plan is required.

Preventing Fire Injuries and Deaths

Fire Prevention Plan

- Should be implemented to complement the evacuation plan.
- Should include storage and cleanup of flammable materials.
- Should include procedures for storage and cleanup of flammable materials.
- All employees are to be appraised of the potential fire hazards of their job.

Preventing Fire Injuries and Deaths



Fire Suppression System

- Fire suppression systems enhance fire safety.
- Automatic fire suppression systems require proper maintenance.
- Signs must be about fire suppression systems that use dangerous agents.



Preventing Fire Injuries and Deaths

- Training
- Prior to the beginning work, each employee should receive training on:
 - Where the emergency exits are
 - If applicable, how to operate fire extinguishers
 - What the fire prevention plan is
 - What the fire evacuation plan is
- Training should be given to temporary employees as well.

Summary

- Fires account for an estimated 107 deaths per year in the workplace.
- Fires must have air, heat, fuel, and a chemical reaction.
- Fires can be caused by many things, most of which can be eliminated.
- OSHA has created rules to help reduce fire injuries and deaths.