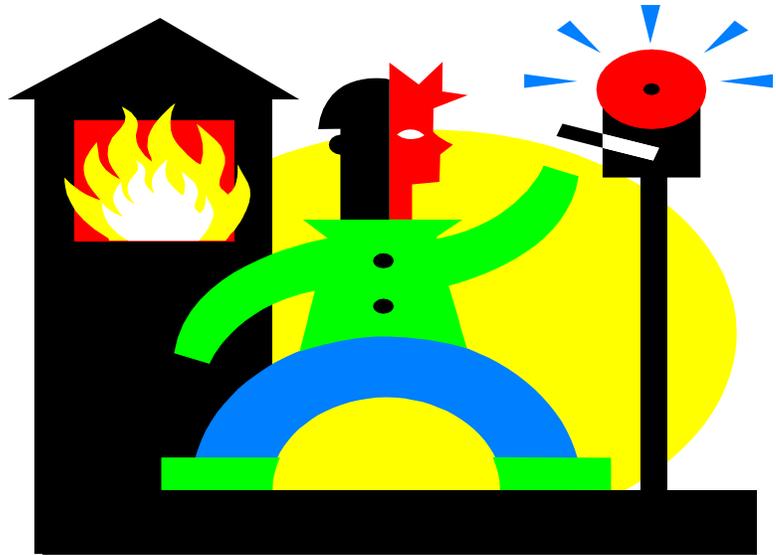


Fire Safety



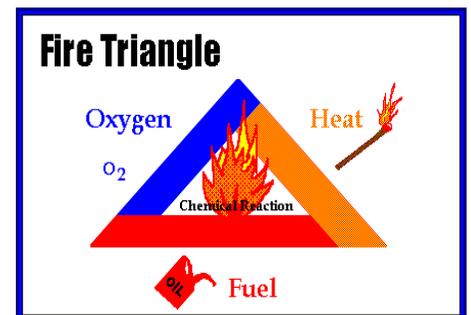
Fire in the workplace is one of the most significant hazards to employees. It is a hazard which can strike any workplace at any time. The effects of workplace fires can be devastating to employees as well as employers. Historically workplace fires have been one of the leading causes of worker deaths and injury. Fires also destroy productive buildings, equipment and disrupt operations.

According to the National Safety Council (NSC) in 2004 there was \$2.4 billion dollars in damages, \$9.8 billion dollars in injuries, and 3,900 deaths due to fires.

FIRE TRIANGLE

Three things must be present at the same time in order to produce fire:

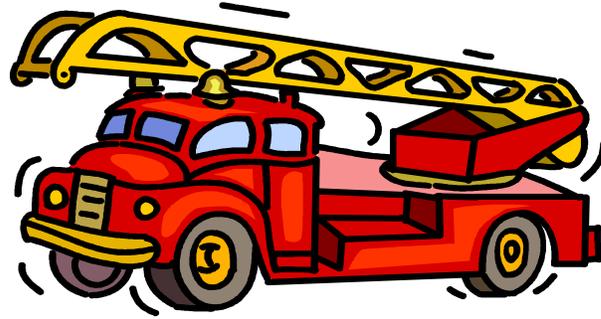
- ⇒ Enough **OXYGEN** to sustain combustion.
- ⇒ Enough **HEAT** to raise the material to its ignition temperature.
- ⇒ Some sort of **FUEL** or combustible material.



Oxygen, heat, and fuel are referred to as the “fire triangle”. Add the fourth element, the chemical reaction and you have a fire. If you take any one of these things away and you will not have a fire or the fire will be extinguished.

FIRE SAFETY IN THE WORKPLACE includes addressing the following:

- ⇒ **Building Exits**
- ⇒ **Fire Extinguishers**
- ⇒ **Evacuation Planning**
- ⇒ **Preventing fires**



Building Exits

- ⇒ Each workplace building should have two means of escape remote from each other to be used in a fire emergency.
- ⇒ Doors must not be locked or blocked to prevent emergency use when employees are in the building.
- ⇒ Exit routes from buildings must be clear and free from obstructions and properly marked with signs designating EXIT from building.

Fire Extinguishers

- ⇒ Each workplace building must have the proper type of fire extinguisher for the fire hazards present in the building.
- ⇒ Employees expected to use fire extinguishers must be instructed on the hazards of fighting a fire, how to properly operate the fire extinguishers, and what procedures to follow in alerting the others to the fire emergency.
- ⇒ Proper maintenance and inspection of the fire extinguishers is required of each employer.

Evacuation Planning

- ⇒ An emergency plan describing the routes used to evacuate the building and procedures accounting for all employees must be implemented by the employer.
- ⇒ This plan must be made available for employee review.

Preventing Fires

- ⇒ Employers need to implement a fire prevention plan, the plan needs to be made available for employee review.
- ⇒ Housekeeping procedures need to be included in the plan.
- ⇒ Controlling workplace ignition sources such as smoking, welding, and burning must also be addressed.
- ⇒ Heat producing equipment must be properly maintained and kept clean of accumulation of flammable residues.