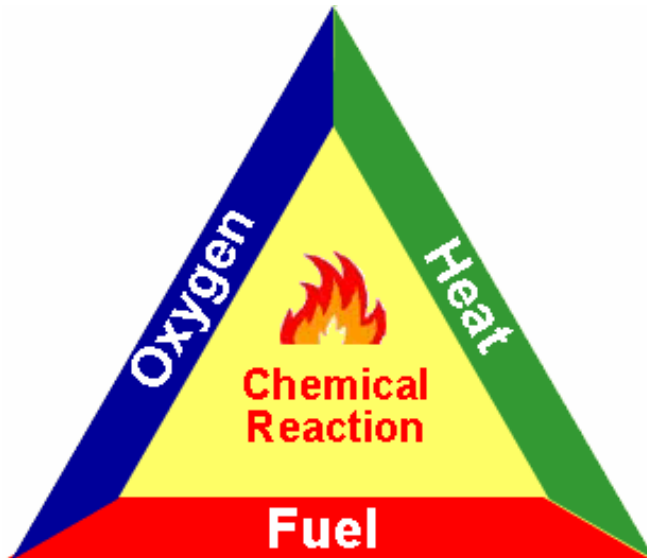


The Fire Triangle

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

1. Enough **oxygen** to sustain combustion,
2. Enough **heat** to raise the material to its ignition temperature,
3. Some sort of **fuel** or combustible material, and
4. The **chemical, exothermic reaction** that is fire.



Oxygen, heat, and fuel are frequently referred to as the "fire triangle." Add in the fourth element, the chemical reaction, and you actually have a fire "tetrahedron." The important thing to remember is: take any of these four things away, and you will not have a fire or the fire will be extinguished.

Essentially, fire extinguishers put out fire by taking away one or more elements of the fire triangle/tetrahedron. Fire safety, at its most basic, is based upon the principle of keeping fuel sources and ignition sources separate.