

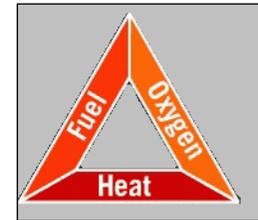
Safety Note #72

## BASIC FIRE PREVENTION MEASURES



According to the statistics from the U.S. Fire Administration, from 2012 to 2021, the 10-year trend in the fire death rate per million population increased by 18%. In 2021, the fire death in the U.S. was 13.0 deaths per million population – 14% higher than it was in 2020 when the fire death rate was 11.4 deaths per million population. 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 fire.



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.