

TOWNSHIP OFFICIALS OF ILLINOIS RISK MANAGEMENT ASSOCIATION

## RISK REMINDER

PARTNERING WITH TOWNSHIPS

# The Fire Triangle

### The Three Secrets of Fire Control

Fire needs three ingredients: fuel, heat and oxygen. When a fuel, such as wood or flammable gas, is heated by a spark or other source of heat, it combines rapidly with oxygen and bursts into flame. You can think of fire's three ingredients as a triangle. For a fire to start and keep burning, all three sides of the triangle must be in place. If you are certain that a small fire poses no immediate threat, you can put it out by removing its fuel, heat or oxygen.

Extinguishers are clearly marked according to the type of fires they can put out.

NEVER USE WATER ON GREASE, ELECTRICAL OR FLAMMABLE LIQUID FIRES.

#### Smother It – Remove Oxygen

In order for a fire to burn, it normally needs air that's at least 15 percent oxygen. Covering a pan of flaming food or closing an oven door cuts off the oxygen supply and smothers the flames. Some fire extinguishers use chemicals, powders or liquified gases to blanket a fire and remove its oxygen supply.

#### Starve it - Remove Fuel

A fire's fuel might be paper, wood, oil, solvents or gas. Removing fuel from a fire can be dangerous, but there are exceptions. For example, you can extinguish burning gas that flows from a pipe by turning off the gas valve.

### Cool It – Remove Heat

Wood, paper and cloth fires are best cooled with water, but other types of fires require special chemicals to reduce heat and flame.



The best way to put out a fire is to prevent it by keeping fuel, heat and oxygen apart. If a fire starts and you are sure it poses no immediate threat, starve it, cool it or smother it to extinguish the flames. If you are in doubt about a fire's seriousness, don't fight it -- get out and report it!