FIRE SAFETY BY THE NUMBERS

A fire department responded to a fire **every 23 seconds** in the U.S.
An outside fire was reported **every 46 seconds**.
A structure fire was reported **every 66 seconds**.
A vehicle fire was reported **every 156 seconds**.
Civilian fire deaths in 2012: **2,855**
Civilian fire injuries in 2012: **16,500**

Source: 2012 statistics by the National Fire Protection Association

Know How To Use Fire Extinguishers

**PLAIN AND SIMPLE:** Fires can happen anytime, anywhere, and fire extinguishers can save lives.

Nearly 30 percent of home electrical fires begin with ignition of wires or cable insulation, according to the National Fire Protection Association. And almost half involve some type of electrical distribution equipment such as outlets, switches or lamps.

The three main components of a fire are fuel, oxygen and heat. This is called the fire triangle, and all three components must be present to produce fire. The fourth component is the chemical reaction of converting the fuel into vapor gas. To extinguish a fire, one of the components must be removed.

Fires are classified according to the fuel source they consume. There are four main classes of fires:

- **Class A fires** consume ordinary combustibles: wood, paper, plastic, etc.
- **Class B fires** are fueled by flammable liquids: gasoline, oil, paint, etc.
- **Class C fires** are electrical fires.
- **Class D fires** consume flammable metals.

Fire extinguishers are rated according to the type of fires they can be used on correctly. Some extinguishers can be used for different types of fires. Extinguishers will indicate on the label the classes of fires for which they are intended.

Also, look for the Underwriters Laboratory symbol on the label. Near that you’ll find a classification such as 2A, 10B, C, etc. This coding represents the capabilities of the extinguishers. For example, 2A means the extinguisher is capable of putting out 2 square feet of class A fire; 10B indicates that 10 square feet of class B fire can be extinguished. Know the capabilities of your equipment before using it.

The correct use of fire extinguishers in an office, workplace or home can make the difference between life and death.

**Remember PASS**

The acronym PASS stands for Pull, Aim, Squeeze and Sweep:

- Pull the pin. Aim the nozzle at the fuel source—the base of the fire, not the flames.
- Squeeze the handle, maintaining a constant spray. Sweep back and forth across the fire until it is completely extinguished.

Once an extinguisher has been discharged, either completely or partially, it must be replaced or recharged. Many extinguishers, but not all, are rechargeable. Check the label.

Is your fire extinguisher handy and ready?

Do not underestimate fire’s capability. Fires can double in size every 30 seconds. They can go from controllable to out of control in a very short time.

Fires extinguishers must be accessible. Recommended locations include the kitchen, bedroom and garage. It would be best to have one in each of those places. Keep one in your vehicle, too.

Inspect fire extinguishers at least monthly. This should include checking the nozzle for obstructions and checking the charge indicator. Be sure the pin is in place and hasn’t been tampered with. Most household multiclass extinguishers use a fine chemical powder as the extinguishing agent. Shake these extinguishers vigorously during inspections to prevent the powder from settling or solidifying.

**Contain Kitchen Fires**

One of the leading causes of home fires is cooking. Many of these are initially container fires. If an extinguisher is aimed into the container, the fire likely will be spread instead of put out.

One of the best ways to deal with a container fire is to cover it with a lid or any nonflammable cover, such as a cookie sheet. Never use water on a flammable liquid fire. If water hits burning oil, a superexpansion of the water molecules will occur, causing a violent eruption.
Energy-Efficient Gift Ideas

THIS HOLIDAY SEASON, why not give friends and family gifts that will save them money all year long? The Energy Education Council has gift suggestions that decrease energy use and increase savings:

Energy Star products. New electronics are popular holiday gifts. If you plan on buying a computer, television or home theater component for a friend, do them a favor and buy an Energy Star-certified product. Energy Star appliances use at least 20 percent less energy. They are tested for performance and features, too—not just efficiency.

Programmable thermostats. The holiday season is also the home heating season. A programmable thermostat can help loved ones heat their home strategically and save money.

Rechargeable batteries and chargers. Many families have to hunt down batteries for new gadgets and toys during the holidays. Help your friends and family prepare with a rechargeable battery set.

Energy-efficient lightbulbs. Properly packed, new lightbulbs make good stocking stuffers. CFLs and LEDs are designed to last longer and use less energy than traditional incandescent bulbs. You can buy bright, white lights for working spaces and also warmer lights for the home. Be sure to buy Energy Star-certified lightbulbs to guarantee energy efficiency and quality.

Gift certificates. A gift certificate can help get your friends and loved ones on the path to energy efficiency. One idea is a gift certificate for insulation and sealing updates: In most homes, heating and cooling is the largest part of the energy bill, and an insulation upgrade is one of the most cost-effective ways to improve home efficiency. Helping friends afford one really would be the gift that keeps on giving!

Renewable gadgets and toys. The popularity of renewable and alternative energy is growing. With new gadgets and toys, you can experience and enjoy new forms of energy in your home—including hand-crank flashlights and solar chargers. Renewables also power a variety of toys, such as solar crickets and cars that use the power of the sun to move.

—Energy Education Council