

# Electrical Safety



In 2008, Bristol Fire/Rescue responded to 761 fire related emergencies, including 79 responses that were actual structure fires. Electricity is our most mysterious form of energy; you can't see it, hear it, or smell it, but you can sure feel it! We rely on this much needed resource; but we have failed to treat electricity with the respect it deserves. **Electricity can kill in 1 second.**

Hazards commonly found in older homes are increasingly causing fires and fatalities in the US. However, by taking a few simple steps and by incorporating newer technology you can protect your home from many of these dangers. Home electrical problems account for nearly 55,000 home fires every year. These fires cause over 500 deaths, injure more than 1,400 people, and account for \$1.4 billion in property damage. Older homes are at even greater risk to fire. According to the US Census Bureau, half of the homes in the United States were built before 1973. These homes and electrical systems were built before many of the appliances and electronics that we commonly use today were even around. To put this into perspective, a third of US homes were built before hair dryers or electric can openers were invented! Half of the homes were built before the advent of the garage door opener or the home computer! "Many homes and electrical systems in the US are simply being overburdened leading to fires, deaths, and injuries."

Electric receptacles are responsible for 40 deaths and 5,300 fires. It is estimated that 70% of electrocutions could be prevented and 32% of all deaths caused by residential electrical systems are the result of faulty cords and plugs. Ground Fault Circuit Interrupters (GFCIs) are an important safety feature. A GFCI greatly reduces fatalities by monitoring electricity flow and shutting off if the flow changes. While they do not prevent shocks, they help protect you from serious electrocution and severe injuries. Make sure you test all GFCIs once a month and after every major electrical storm.

"Extension cords are a big concern when it comes to home fire safety", explains Assistant Fire Chief Jack Spurgeon. Extension cords are intended for temporary use and are **never** to be used in replacement of permanent wiring. Extension cords are not as safe as permanent house

wiring, and it is much safer to have receptacles installed where they are needed. Portable heaters should never be plugged into an extension cord; and, fatal fires have been attributed to this application, added Spurgeon.

It is best to hire a professional to repair, replace, or install anything electrical. However, if you attempt a small job yourself, be knowledgeable and do it safe. Make sure you know what the electrical inspectors require in your local; so you will know what needs to be inspected. Remember to call before digging outside to avoid buried cables. **NEVER ASSUME ANYTHING!**