## ELECTRICAL SAFETY

### FACTS AND STATISTICS

According to the Consumer Protection Safety Commission (CPSC), there was an annual average of 104,500 (unintentional, electrical, residential structure) fires from 1999-2003, which resulted in about 500 deaths, 4,280 injuries, and nearly \$1.5 billion in property loss. CPSC's latest data (2003) indicate that there were an estimated 160 electrocutions related to consumer products.



fall

# www.electrical-safety.org

#### **OVERVIEW**

More homeowners are embarking on more do-it-yourself projects than ever before. But sometimes, that newfound confidence is accompanied by a lack of understanding of the risks inherent in working with electricity.

Increasing electrical safety awareness and the use of electrical safety technology are key factors in reducing reduce deaths, injuries and economic losses due to electrical hazards.

Most shocks and fires from electrical systems can be prevented. Have your electrical system inspected by a licensed electrician. Fix dangerous defects, install smoke detectors, arc-fault circuit interrupters (AFCIs), ground-fault circuit interrupters (GFCIs), and check lighting and home appliances for wear and tear.

#### WHAT TO LOOK OUT FOR

The following are some of the signs consumers can look for to address home wiring electrical hazards:

- Power outages—circuit breakers that frequently trip or fuses that need replacement
- Dim and flickering lights
- Arcs and sparks—flashes of light or showers of sparks in your electrical system
- Sizzles and buzzes—unusual sounds from your electrical system
- Overheating overheated wires can give off an odor of hot insulation; switchplates or receptacle covers are hot to the touch, or discolored from heat buildup
- Electrical shocks any shock, even a mild tingle, may be warning of an electrical danger
- Overrated panel electrical panels with fuses or circuit breakers rated at higher currents than the capacity of their branch circuits
- ♦ Damaged wire insulation cut, broken or cracked

#### KNOW YOUR HOME'S ELECTRICAL SYSTEM

Homeowners should take an active role in understanding the condition of the current electrical system, its capacity, limitations, and potential hazards. ESFI encourages homeowners to contact a licensed electrician to inspect the home's circuitry to ensure the home's circuits are not overloaded and the home's electrical service can adequately supply the demand. Homeowners can develop a detailed map to show which circuits serve which outlets and fixtures, and how much power is being demanded of each.

Electrical inspections can catch problems hidden behind the walls and correct them before they turn tragic. In many cases, technologies such as ground fault circuit interrupters (GFCIs) and newer arc fault circuit interrupters (AFCIs) can be installed to help prevent a fire and accidental electrocution. The bottom line is: Inspect and Protect—call a qualified, licensed electrician to schedule an electrical inspection.

#### SEASONAL SAFETY REMINDERS FROM ESFI

- Safely store warm weather tools like lawn mowers and trimmers. Check cold weather tools, such as leaf and snow blowers, along with their power cords, for unusual wear and tear. Repair or replace worn tools or parts right away.
- Unplug and safely store battery chargers that won't be in use again until spring.
- Use only weatherproof electrical devices for outside activities. Protect outdoor electrical devices from moisture.
- Make sure electrical equipment that has been wet is inspected and reconditioned by a certified repair dealer.
- Keep dry leaves swept away from outdoor lighting, outlets and power cords.
- Make sure electric blankets are in good repair, certified by an independent testing lab such as UL, CSA or ETL. Power cords should not be frayed, cracked or cut.
- Do not tuck your electric blanket into mattresses or under children, and don't put anything on top of the blanket while in use, such as comforters or bedspreads.
- ◆ Never allow pets to sleep on the electric blanket.

#### **ADDITIONAL RESOURCES AND LINKS**

For more electrical safety information, go to www.electrical-safety.org. For more on consumer product safety, contact the Consumer Product Safety Commission at www.cpsc.gov. For information on product recalls, visit www.recalls.gov. For more on work place safety, contact the U.S. Department of Labor's Occupational Safety and Health Administration at www.osha.gov.