State Fire Marshal’s Office provides electrical fire prevention tips

Residential electrical fires kill as many as 280 Americans each year and injure 1,000 more. Some of these fires are caused by electrical system failures, but many more are caused by incorrectly installed wiring and overloaded circuits and extension cords.

“Many avoidable electrical fires can be traced to the misuse of electric cords, whether through overloaded circuits, poor maintenance or cords being placed under rugs or in high traffic areas,” says State Fire Marshal and Commerce & Insurance Commissioner Julie Mix McPeak. “Simple safety precautions can reduce these occurrences and help safeguard your home from fires.”

During a typical year in the United States, home electrical problems account for 26,100 fires and $1 billion in property losses. The bedroom is the leading area of fire origin for residential building electrical fires. However, electrical fires that begin in the living room/family room/den areas result in the most deaths. Most electrical distribution fires result from problems with "fixed wiring" such as faulty electrical outlets and old wiring. Problems with cords (such as extension and appliance cords), plugs, receptacles and switches also cause many home electrical fires. Light fixtures and lamps/light bulbs are also among the leading causes of electrical fires.

The State Fire Marshal's Office and the U.S. Fire Administration (USFA) would like consumers to know that there are simple steps to take to prevent electrical fires.

Safety Precautions

- Routinely check your electrical appliances and their wiring. Replace all worn, old or damaged appliance cords immediately. Do not try to repair them.
- Buy only appliances that bear the label of a recognized testing laboratory.
- Major and small appliances should be plugged directly into a wall outlet. Never use an extension cord. Unplug small appliances when not in use.
- If an appliance has a three-prong plug, use it only in a three-slot outlet. Never force it to fit into a two-slot outlet or extension cord.
- Install tamper-resistant electrical outlets if you have young children. Where replacement is not possible, install new protective outlet covers, which do not allow a child to insert an object into the wall outlet.
- Replace any electrical tool if it causes even small electrical shocks, overheats, shorts out or gives off smoke or sparks.
- Use only surge protectors or power strips that have internal overload protection and that also bear the label of a recognized testing laboratory. For best results, avoid buying surge protectors or power strips from dollar stores, which have been known to inadvertently sell low-quality products bearing counterfeit logos of independent testing labs.
- Use light bulbs that match the recommended wattage on the lamp or fixture.
- Avoid putting cords where they can be damaged or pinched by furniture, under rugs and carpets or across doorways.
- Extension cords are for temporary use only. Have a qualified electrician determine if additional circuits or wall outlets are needed.
- Do not use a clothes dryer without a lint filter. Clean out the dryer’s lint filter before and after each load of laundry. Clean lint out of the vent pipe quarterly or more often if you notice that it is taking longer than usual for your clothes to dry.
- Make sure the air exhaust vent pipe on the dryer is not restricted and the outdoor vent flap will open when the dryer is operating.
- Gas dryers should be inspected by a professional to make sure that the gas line and connection are intact and free of leaks.
- Keep dryers in good working order by following the manufacturer’s operating instructions. Do not overload your dryer.
- Turn off the dryer when you leave home or go to bed.
- Electrical work should be done only by a licensed electrician. Have your home electrical system inspected by a licensed, qualified professional when buying, selling or renovating a home. You can check limited-licensed electricians' license statuses at Commerce & Insurance’s license database, http://verify.tn.gov. Call a licensed electrician if you have any of the following:
  - Recurring problems with blowing fuses or tripping circuit breakers
  - A tingling feeling when you touch an electrical appliance
  - Discolored or warm wall outlets or switches
  - A burning smell or rubbery odor coming from an appliance
  - Flickering lights
  - Sparks from a wall outlet
  - Cracked or broken wall outlets

Finally, install and maintain working smoke alarms in your home. Having a working smoke alarm dramatically increases your chances of surviving a fire. And remember to practice a home fire escape plan frequently with your family. For more information on making your home fire-safe, download and print the State Fire Marshal’s home fire safety checklist (http://tn.gov/fire/fsk/documents/checklist.pdf).

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