AVOIDING ELECTRICAL ACCIDENTS

Most electrical hazards can be prevented with common sense and plain, old, good wiring.

For most people, preventing an electrical accident means not plugging too many things into a feeble extension cord (which many do anyway) or not using a hair dryer while taking a bath (HOPEFULLY THEY DON’T DO THIS). While these are valid and important precautions, there are many other potential electrical safety hazards in any home. Taking a look at some of the most common causes of electrical accidents can help you appreciate the considerable power - and potential danger - of electricity and how to use this power safely.

CORDS and PLUGS

According to the National Fire Protection Association (www.nfpa.org), electrical cords are responsible for most of the civilian deaths related to accidents each year. Yet these are among the easiest hazards to avoid: Never use a cord or plug with evidence of burning or melting or any other visible damage. If the insulation is damaged or missing, or the cord has become loose from the plug, REPLACE the whole thing; NEVER use a cord repaired with electrical tape.

Extension cords (including power strips and surge protectors) are the biggest offenders in the cord category. DON’T use extension cords for permanent hookups, conceal them in any way (especially under carpeting) or expose them to possible physical damage. Always use the right cord for the job, such as a 3 prong grounded cord for all appliances and tools that require grounding. Also make sure the cord’s capacity well exceeds the demand of what’s plugged into it; heavier-gauge cords can handle more current than lighter-gauge cords. Avoid using 3-prong adapters to plug grounded cords into ungrounded outlets (while theoretically possible, the chances of a true ground existing here are extremely slight).

FIXTURES and APPLIANCES

Misuse of lamps and light fixtures is another top cause of electrical accidents. As harmless as it may seem, using a 100-watt bulb in a 60-watt fixture, for example, can melt the fixture wires, creating a shock and fire hazard. The same danger exists when plugging a cord into an adapter outlet that screws into a light bulb socket.

As for appliances, don’t use any device that sparks, smokes, buzzes, emits a burning smell or shows any cord damage. Unplug appliances before cleaning them. Never operate an appliance or any electrical equipment while standing in water.
HOUSE WIRING/WIRING SYSTEMS

Fixed wiring is the second-leading cause of electrical-related house fires. Potential problems with household wiring systems can range from overloaded circuits (including improperly rated or installed circuit breakers) to damaged wires to loose connections on switches, outlets, and other devices. Since most electrical wiring is behind the scenes-and beyond the realm of common knowledge, the best way to prevent a wiring-related accident is to have your home inspected by a licensed electrician--and ask to see license. This pro can look for all of the most common hazards and advise you about correcting problems and how much the solutions might cost.

WET AREAS

GFCI (ground fault circuit interrupter) outlets are required in all bathrooms, kitchens, garages, outdoors, and other potentially wet areas in and around your home. If your existing outlets in these wet areas are not GFCI, have them installed by a licensed electrician as soon as possible. Don’t worry, changing to a GFCI outlet does not require new wiring. GFCIs protect against a variety of common electrical accidents, including shock or fire from electrical current reaching water or moisture, faulty appliance and tool wiring, and other ground fault hazards.

WITH ALL DUE RESPECT

As a general rule, the best approach to preventing electrical accidents is to treat this often underrated power source with respect. This means actually following the advice written in the product manuals and on the little labels found on cords, appliances, fixtures, and other devices. It also means purchasing and using only electrical products that are approved by an independent testing group, such as Underwriters Laboratories (“UL”), (“ETL), or (“CSA”).

NEVER modify or tamper with electrical equipment, and don’t be lazy about repairing or replacing any old, outdated or damaged devices, including all those feeble extension cords you’ve been using for years (you’re pushing your luck with those).
REACHING TO SAFETY: 
Use Extension Cords Properly

Roughly 3,300 home fires originate in extension cords each year, killing 50 people and injuring 270 more. Extension cords can overheat and cause fires when used improperly, so keep these important tips in mind to protect your home and workplace.

- DON'T attempt to plug extension cords into one another.
- Make sure extension cords are properly rated for their intended use, indoor or outdoor, and meet or exceed the power needs of the appliance or device being used.
- Keep all outdoor extension cords clear of snow and standing water.
- A heavy reliance on extension cords is an indication that you have too few outlets to address your needs. Have additional outlets installed where you need them.
- Do NOT overload extension cords.
- Do NOT nail or staple electrical cords to walls or baseboards.
- NEVER use three-prong plugs with outlets that only have two slots. Never cut off the ground pin to force a fit, which could lead to electric shock.
- Inspect cords for DAMAGE before use. Check for cracked or frayed sockets, loose or bare wires, and loose connections.
- Do NOT run through walls, doorways, ceilings or floors. If cord is covered, heat cannot escape, which may result in a FIRE HAZARD.
- Do NOT substitute extension cords for permanent wiring.
- Buy only cords that have been approved by an independent testing laboratory.

DO NOT use an extension cord or a power strip with heaters or fans, which could cause cords to overheat and result in a fire.

MAY IS NATIONAL ELECTRICAL SAFETY MONTH

ESFi.org www.facebook.com/ESFi.org www.twitter.com/ESFidotorg www.youtube.com/ESFiDotorg