Electricity is an essential part of our daily routine. It provides energy for water heating, home heating and cooking, runs the fridge and helps to cool you down in summer, keeps the lights burning at night, and powers all your modern appliances. If electrical appliances are installed by experts and used wisely, electricity is a safe energy source. This brochure provides useful safety tips on electrical equipment and using electricity safely.

WHY WORRY ABOUT ELECTRICITY?
Death. Electrocutions rank fourth (9 percent) in causes of industrial fatalities (behind traffic, violence and construction). The National Safety Council estimates 600 people die every year of electrical causes. Most of these accidents involve low voltage (600 volts or less). Electricity is an integral part of today’s modern world, and sometimes it is easy to forget just how dangerous it can be. Given the correct circumstances, it can kill. But it can also shock you painfully, damage sensitive equipment and ignite combustible materials.

THE BASIC RULES TO STAY SAFE ARE SIMPLE, ALWAYS:
» Treat electricity with respect.
» Look up and live to avoid contact with power lines.
» Be extra careful using electricity in damp areas and outdoors.
» Use the correct cords, cables and plugs, and keep them in good condition.
» Use only licensed electricians for installations and repairs.
» Use safety switches as additional protection against electrical shock.

LOOK UP AND LIVE
Electrical fatalities can be caused by accidental contact with overhead power lines, so always “look up and live.” Electricity can spark across a gap, so stay well away from power lines, up to 275,000 volts may be present.

» Never climb electrical towers or poles, or enter electrical substations; this is dangerous and can lead to severe burns or an electrical fatality.
» Never park, store, transport or operate irrigation pipes, tip trucks, boat masts, radio aerials and cranes near or under power line.
» Never fly kites or model airplanes near power lines; if one does become entangled, don’t try to retrieve it, call the electricity distributor.
» Always tell children not to climb trees near power lines.

DON’T MIX WATER AND ELECTRICITY
Because water conducts electricity, water and electricity are a dangerous combination. Use extra caution when using electrical appliances near water or in damp areas.

» Never touch appliances, switches, powerpoints or lights with wet hands or a damp wash cloth.
» Good ventilation, such as exhaust fans in kitchens, bathrooms and laundries prevents condensation building up on switches, appliances and powerpoints.
» Never use a portable electric heater in the bathroom.
» Never leave portable electric appliances or extension cords close to a pool or pond, they could be splashed or fall into water.
» If an appliance does get wet, switch it off at the powerpoint, unplug it, dry it out and have it checked by a licensed electrical contractor.
» Never wash or immerse appliances in water unless manufacturer’s instructions allow it.
Before cleaning a portable electrical appliance, switch it off at the power point and unplug it. This ensures that the appliance is not energized.

If food is stuck inside your toaster, switch it off at the power point and unplug it before attempting to clear the blockage.

Always use the correct fuse wire, fuse cartridge or plug-in circuit breaker, to avoid overloads which might cause fire, a repeatedly blowing fuse signals a fault which should be checked by a licensed electrical contractor.

Always strictly follow the manufacturer’s instructions for electric blankets. Tie the tapes around the mattress to stop creasing. Blankets should be inspected yearly for damage, and tested every five years.

If there is a power failure, switch off any heaters, electric kettles or cooking appliances which were working at the time, to avoid the possibility of starting a fire when the power comes back on.

Extension cords can cause tripping hazards. Do not run them across walkways, floors or areas where people walk or equipment is rolled.

When using outdoor tools and appliances, use only extension cords equipped with an inline GFCI and labeled for outdoor use.

Use polarized extension cords with polarized appliances.

Insert plugs fully so that no part of the prongs are exposed when the extension cord is in use.

When disconnecting cords, pull the plug rather than the cord itself.

Replace cracked or worn extension cords with new, properly rated cords that bear the mark of a nationally recognized testing laboratory, safety closures and other safety features.

DON'T BE SHOCKED: PREVENT ELECTROCUTION

Use only three-wire (grounded) extension cords for appliances with three-prong plugs.

Never remove the third (round or u-shaped) prong, which is a safety feature designed to reduce the risk of shock and electrocution.

Electricity and water don’t mix: if using an extension cord in a kitchen, bathroom, outdoors or in a potentially damp location, plug it only into a ground fault circuit interrupter (GFCI) outlet.
EFFECTS OF ELECTROCUTION ON YOUR BODY:

A small night-light with a 6-watt bulb draws .05 ampere, and even that small amount of current can be fatal. Here are some effects of current (in milli amps) passing through a 150 pound body (note that perception is only .5 to 1.5 milli amps):

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