

# Consumer Product Safety Commission

## Extension Cords Fact Sheet

CPSC Document #16

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### THE STATISTICS

The U.S. Consumer Product Safety Commission (CPSC) estimates that each year, about 4,000 injuries associated with electric extension cords are treated in hospital emergency rooms. About half the injuries involve fractures, lacerations, contusions, or sprains from people tripping over extension cords. Thirteen percent of the injuries involve children under-five years of age; electrical burns to the mouth accounted for half the injuries to young children.

CPSC also estimates that about 3,300 residential fires originate in extension cords each year, killing 50 people and injuring about 270 others. The most frequent causes of such fires are short circuits, overloading, damage, and/or misuse of extension cords.

### THE PROBLEM

Following are CPSC investigations of injuries that illustrate the major accident patterns associated with extension cords, namely children putting extension cords in their mouths, overloaded cords, worn or damaged cords, and tripping over cords: A 15-month-old girl put an extension cord in her mouth and suffered an electrical burn. She required surgery. Two young children were injured in a fire caused by an overloaded extension cord in their family's home. A lamp, TV set, and electric heater had been plugged into a single, light-duty extension cord. A 65-year old woman was treated for a fractured ankle after tripping over an extension cord.

### THE STANDARDS

The National Electrical Code says that many cord-connected appliances should be equipped with polarized grounding type plugs. Polarized plugs have one blade slightly wider than the other and can only be inserted one way into the outlet. Polarization and grounding ensure that certain parts of appliances that could have a higher risk of electric shock when they become live are instead connected to the neutral, or grounded, side of the circuit. Such electrical products should only be used with polarized or grounding type extension cords.

Voluntary industry safety standards, including those of Underwriters Laboratories Inc. (UL), now require that general use extension cords have safety closures, warning labels, rating information about the electrical current, and other added features for the protection of children and other consumers.

In addition, UL-listed extension cords now must be constructed with #16 gauge or larger wire, or be equipped with integral fuses. The #16 gauge wire is rated to carry 13 amperes (up to 1560 watts), as compared to the formerly-used #18 gauge cords that were rated for 10 amperes (up to 1200 watts).

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### SAFETY SUGGESTIONS

CPSC has the following recommendations for the purchase and safe use of extension cords:

- \* Use extension cords only when necessary and only on a temporary basis.
- \* Use polarized extension cords with polarized appliances.
- \* Make sure cords do not dangle from the counter or table tops where they can be pulled down or tripped over.
- \* Replace cracked or worn extension cords with new. #16 gauge cords that have the listing, of a nationally-recognized testing laboratory, safety closures, and other safety features.
- \* With cords lacking safety closures, cover any unused outlets with electrical tape or with plastic caps to prevent the chance of a child making contact with the live circuit.
- \* 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.
- \* Teach children not to play with plugs and outlets.
- \* Use only three-wire 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.

- \* In locations where furniture or beds may be pushed against an extension cord where the cord joins the plug, use a special "angle extension cord," which is specifically designed for use in these instances.
- \* Check the plug and the body of the extension cord while the cord is in use. Noticeable warming of these plastic parts is expected when cords are being used at their maximum rating, however, if the cord feels hot or if there is a softening of the plastic, this is a warning that the plug wires or connections are failing and that the extension cord should be discarded and replaced.
- \* Never use an extension cord while it is coiled or looped. Never cover any part of an extension cord with newspapers, clothing, rugs, or any objects while the cord is in use. Never place an extension cord where it is likely to be damaged by heavy furniture or foot traffic.
- \* Don't use staples or nails to attach extension cords to a baseboard or to another surface. This could damage the cord and present a shock or fire hazard.
- \* Don't overload extension cords by plugging in appliances that draw a total of more watts than the rating of the cord.
- \* Use special, heavy duty extension cords for high wattage appliances such as air conditioners, portable electric heaters, and freezers.
- \* When using outdoor tools and appliances, use only extension cords labeled for outdoor use.

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The U.S. Consumer Product Safety Commission protects the public from the unreasonable risk of injury or death from 15,000 types of consumer products under the agency's jurisdiction. To report a dangerous product or a product-related injury, you can go to [CPSC's forms page](#) and use the first on-line form on that page. Or, you can call CPSC's hotline at (800) 638-2772 or CPSC's teletypewriter at (800) 638-8270, or send the information to [info@cpsc.gov](mailto:info@cpsc.gov). Consumers can obtain this publication and additional publication information from the [Publications section](#) of CPSC's web site or by sending your publication request to [publications@cpsc.gov](mailto:publications@cpsc.gov). If you would like to receive CPSC's recall notices, subscribing to the email list will send all press releases to you the day they are issued.

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