Office of Compliance Safety and Health **FAST FACTS**



Extension Cords & Power Strips

Improper use of easily overloaded, unapproved extension cords can present a serious fire safety hazard in the workplace. In fact, misuse of extension cords led to a significant fire in an Executive Branch office building in 1998.

According to the National Fire Protection Association, electrical distribution equipment, such as extension cords, was the second leading cause of fire deaths in the U.S. between 1994 and 1998. The most common cause of fires from extension cords is due to improper use and/or overloading, especially when cords have multiple outlets. Most extension cords are only rated for a maximum of ten amps or 1200 watts. Overloading can occur when multiple devices are plugged into one cord or when cords are "daisy chained" (plugging multiple extension cords together).

The use of unapproved extension cords is a violation of both OSHA and National Fire Protection Association codes. The OSHA Code of Federal Regulations (29CFR1910.303 (a)) states that conductors and equipment are acceptable for use only if they are approved by recognized laboratories (such as Underwriters Laboratory, Factory Mutual, etc.). Approved extension cords are only allowable in the workplace as temporary wiring, and for no more than 90 days.

Fast Facts About Extension Cords and Power Strips

Approximate Damage Caused by Extension Cords Between 1994 and 1998^{*}

- 6900 fires
- 91 civilian deaths and 421 civilian injuries
- \$115.9 million in direct property damage per year between 1994 and 1998 Source: National Fire Protection Association

Inappropriate Use of Extension Cords

- Using as permanent wiring
- Using unapproved extension cords
- Overloading power capabilities of the cord during temporary use
- Daisy chaining (plugging one extension cord into another and another, etc.)
- Using one surge protector/power strip to power another

Basic Guidelines for the Appropriate Use of Extension Cords

- Cords must be properly approved (by Underwriters Laboratory, etc.)
- Approved cords must be for temporary use only (no more than 90 days)
- Extension cords may be used for remodeling and maintenance or repair of structures or equipment
- It is permissible to use extension cords to light holiday decorations

www.compliance.gov

Office of Compliance Safety and Health **FAST FACTS**

Examples of Improper Extension Cords and Power Strips

To the right is a common example of improper extension cord usage. As seen in this photo from a Congressional facility, one extension cord is being used to power multiple devices. This cord is of the common household variety and not approved for this type of use.





To the left is a burned and melted outlet found in a Congressional facility by the Office of Compliance on a fire safety inspection. This outlet is the result of electrical current overloading and an obvious safety hazard.

Office of Compliance LA 200, Adams Building Washington, DC 20540 202-724-9250 **www.compliance.gov**

Office of Compliance, July 2004