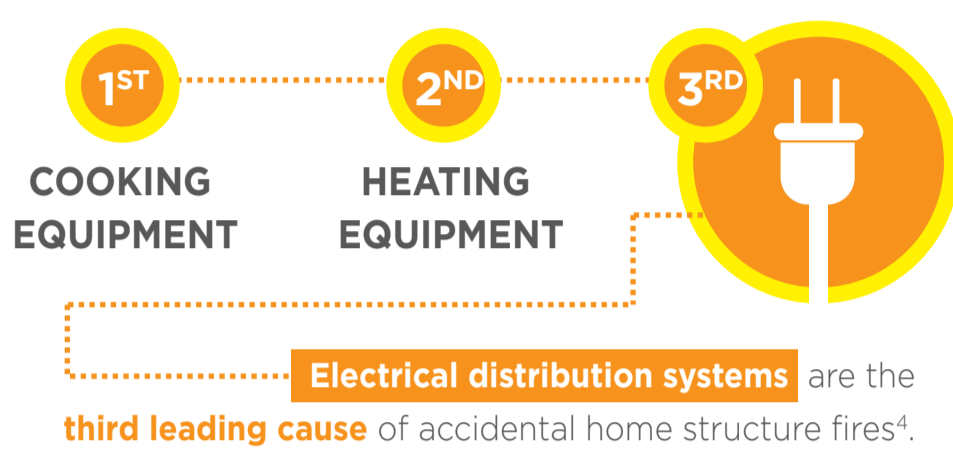


# PREVENTION AND CONSEQUENCES OF ELECTRICAL FIRES

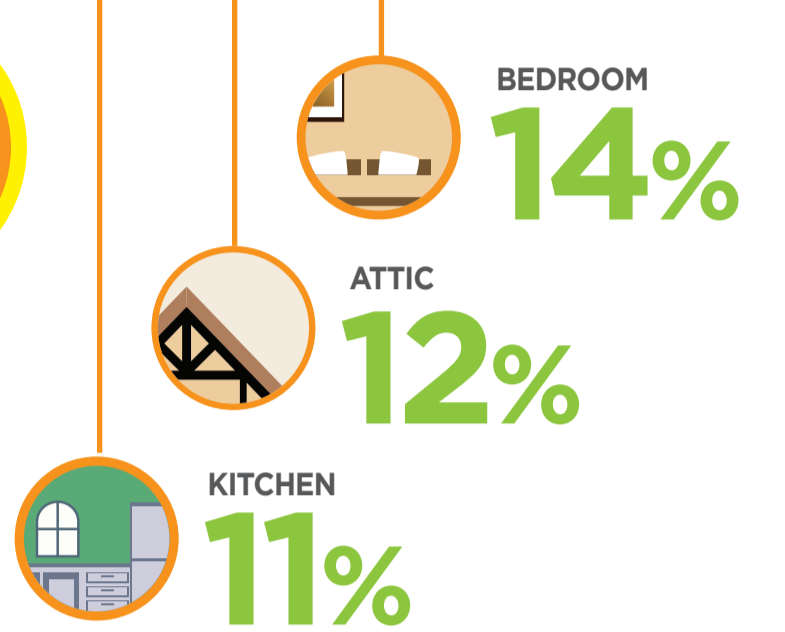
An "Electrical fire" can be defined as a fire involving some type of electrical failure or malfunction. If equipment powered by electricity fails, a fire may occur<sup>1</sup>



## CAUSES FOR ACCIDENTAL HOME STRUCTURE FIRES



## LEADING AREAS OF THE HOME IN WHICH ELECTRICAL FIRES OCCUR INCLUDE:<sup>2</sup>



## WHEN & HOW

**12** December and January are peak months for home electrical fires<sup>2</sup>

**Arcing faults** are responsible for starting more than **28,000** home fires each year in the U.S.<sup>4</sup>

Arcing occurs when a connection is loose or wires or cords are damaged, resulting in ignition<sup>2</sup>

**5,300** fires every year originate in the vicinity of receptacles<sup>4</sup>

An estimated **3,300** residential fires originate in the vicinity of extension cords each year<sup>6</sup>

**OLDER HOMES HAVE A HIGHER PERCENTAGE OF ELECTRICAL FIRES<sup>5</sup>**

## CONSEQUENCES OF ELECTRICAL FIRES<sup>5</sup>



## PREVENTING ELECTRICAL FIRES

**MORE THAN 50%** of the electrical fires that occur every year could be prevented with the installation of **Arc Fault Circuit Interrupters (AFCIs)**, according to a CPSC estimate.<sup>11</sup>

AFCIs are a type of receptacle that recognize fire hazards and quickly shut off the power<sup>9</sup>

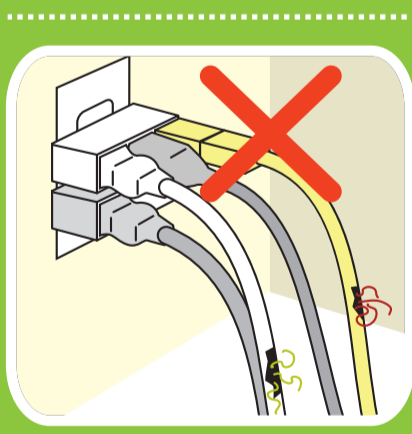
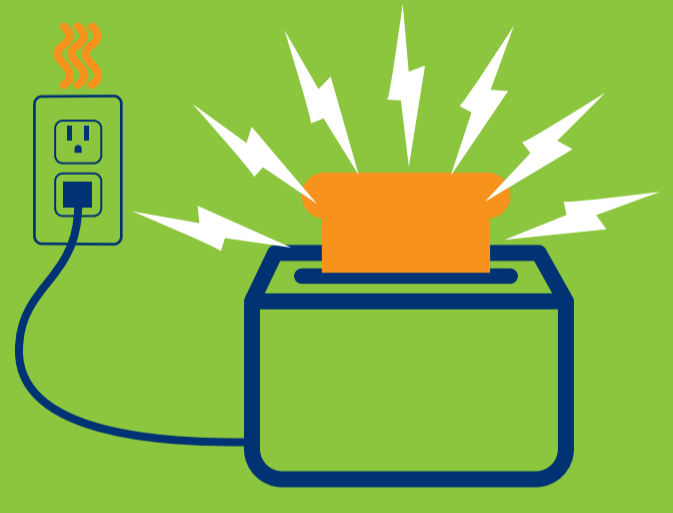
The National Electrical Code (NEC) now mandates that AFCI protection be installed when replacing home electrical outlets in **32 states<sup>3</sup>**

LEVITON'S SMARTLOCKPRO<sup>®</sup> OUTLET BRANCH CIRCUIT (OBC) AFCI RECEPTACLE OFFERS PROTECTION FROM ARCING FAULTS THAT MAY LEAD TO ELECTRICAL FIRES. THE RECEPTACLE IS DESIGNED TO DETECT A WIDE RANGE OF ARCING ELECTRICAL FAULTS TO HELP PREVENT IGNITION AND A RESULTANT FIRE AND FEATURES LEVITON'S PATENTED RESET/LOCKOUT TECHNOLOGY WHICH AUTOMATICALLY TESTS THE AFCI EVERY TIME THE RESET BUTTON IS PUSHED IN. THE AFCI WILL NOT RESET IF THE AFCI CIRCUIT IS NOT FUNCTIONING PROPERLY, REDUCING THE POSSIBILITY OF END-USER ERROR.<sup>10</sup>

## ADDITIONAL TIPS TO PREVENT ELECTRICAL FIRES:

**Know the warning signs<sup>7</sup> of an electrical failure or malfunction and contact an electrician:**

- Discolored or warm wall outlets
- Frequent problems with blowing fuses or tripping circuit breakers
- Sparks from an outlet
- Tingling feeling when you touch an appliance
- Burning or rubbery smell coming from an appliance
- Flickering or dimming lights

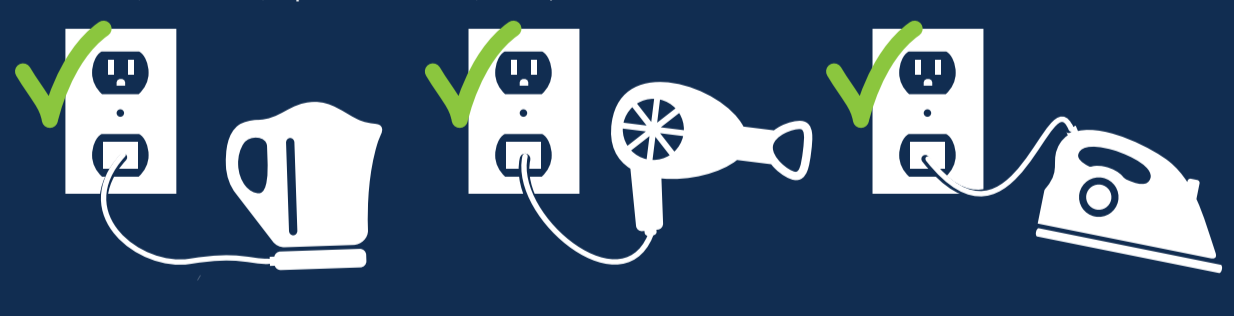


**REPLACE CRACKED OR DAMAGED CORDS<sup>8</sup>**

**EXTENSION CORDS SHOULD ONLY BE USED TEMPORARILY<sup>8</sup>**

**DO NOT PINCH CORDS AGAINST WALLS OR FURNITURE OR RUN THEM UNDER CARPETS OR ACROSS DOORWAYS<sup>8</sup>**

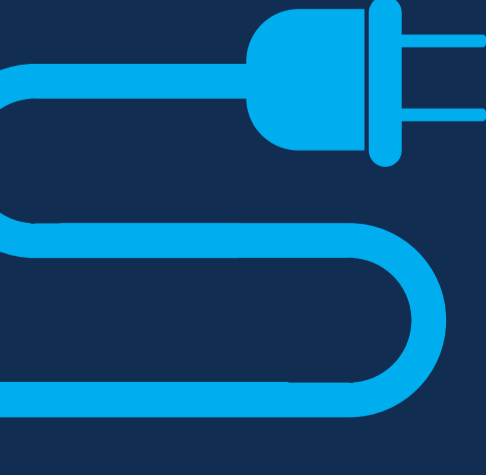
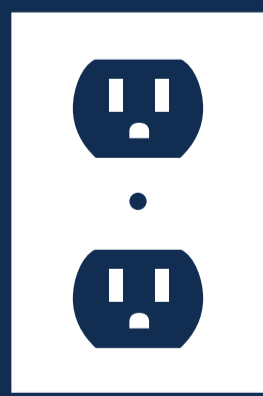
**PLUG ONLY ONE HEAT-PRODUCING APPLIANCE** (such as a coffeemaker, toaster, space heater, etc.) into an outlet at a time<sup>8</sup>



**UPGRADE YOUR HOME'S RECEPTACLES** with tamper-resistant AFCI and GFCI receptacles and test them monthly<sup>8</sup>

**Ground Fault Circuit Interrupters (GFCIs)** reduce the risk of shock by shutting off an electrical circuit when it becomes a shock hazard.<sup>8</sup>

**70%** of the electrocutions that occur each year in the home could be prevented by installing Ground Fault Circuit Interrupters (GFCIs) in older homes.<sup>12</sup>



Tamper-resistant receptacles have spring-loaded shutters that close off the slots of the receptacle,<sup>8</sup> preventing most foreign objects from being inserted into the receptacle when not in use.



**The NEC requires that tamper-resistant receptacles be installed in all newly constructed homes<sup>9</sup>**

**Leviton produces several tamper-resistant receptacles, including the SmartlockPro AFCI**

Leviton is the smart choice, providing the most comprehensive range of solutions to meet the needs of today's residential, commercial and industrial buildings. Leveraging more than a century of experience, Leviton helps customers create sustainable, intelligent environments through its electrical wiring devices, network and data center connectivity solutions, and lighting energy management systems. From switches and receptacles, to daylight harvesting controls, networking systems, and equipment for charging electric vehicles, Leviton solutions help customers achieve savings in energy, time and cost, all while enhancing safety. For more information, visit [www.leviton.com](http://www.leviton.com), [www.facebook.com/leviton](http://www.facebook.com/leviton), [www.twitter.com/leviton](http://www.twitter.com/leviton) or [www.youtube.com/Levitonmfg](http://www.youtube.com/Levitonmfg).



**Sources:**  
<sup>1</sup> National Fire Protection Association (NFPA) website  
<sup>2</sup> National Fire Protection Association (NFPA) - Electrical Fire Fact & Figures handout  
<sup>3</sup> Leviton - "Leviton's AFCI Receptacle Meets Newly Adopted National Electrical Code Mandates" press release  
<sup>4</sup> Electrical Safety Foundation International website  
<sup>5</sup> U.S. Fire Administration website  
<sup>6</sup> National Fire Protection Association (NFPA) website  
<sup>7</sup> National Fire Protection Association (NFPA) - Electrical Safety: Talking Points handout  
<sup>8</sup> Electrical Safety Foundation International website  
<sup>9</sup> Leviton - "Leviton Introduces New SmartlockPro<sup>®</sup> Outlet Branch Circuit AFCI Receptacle" press release  
<sup>10</sup> Electrical Safety Foundation International website  
<sup>11</sup> National Fire Protection Association (NFPA) fact sheet