

# How to (Not) Start an Electrical Fire



*About 16 people die every year because of lightning hitting a house; most of those deaths are from people who were in their home when the lightning hit.*

**A**lthough people have gotten used to thinking that electricity is a tame form of energy, the truth is that it can and does start fires in the U.S. and all over the world. There are several different causes of electrical fires, some under your control and some not. But if you can fix some of the problems that lead to electrical fires, you will reduce the chances of one occurring.

The usual causes are:

- Lightning strikes
- Appliance defects
- Incorrect installation of electrical wiring
- Old or faulty wiring and worn-out shielding
- Overloaded circuits
- Extension cords or plugs that are misused

The National Fire Protection Association has said that lightning is behind 24,600 fires every year. Damages from these fires are approximately \$407 million. Of these fires, about 4,400 house fires are started each year as a result of lightning, with an associated cost of \$283 million. About 16 people die every year because of lightning hitting a house; most of those deaths are from people who were in their home when the lightning hit.

A whole-house lightning-protection system can be installed to protect your home from lightning strikes. Thank Benjamin Franklin, whose study of lightning made lightning-production systems possible because of the understanding he gained and shared. Such a system would direct lightning to the ground, where it can be safely dissipated through conductors and grounding electrodes, and it would also include surge protection in the circuit-breaker box.

Of the remaining causes, some of the most dangerous are old or faulty wiring and worn-out shielding because all of these problems can create sparks. If gas or combustible materials are close enough to the sparks, then those sparks can create explosions and fires.

Maybe the wiring system in your home is fine. If you live in a new home that was professionally built, for example, then the chances are good that everything is fine. However, you should still have the wiring checked periodically in order to make sure that the wires are working the way they are supposed to, and to see whether anything needs to be replaced or upgraded.

You can also do other things to safeguard your home. One of the simplest involves nothing more complicated than hiring a professional instead of trying to do the work yourself. The alternative might, frankly, take more effort and time on your part than it is really worth. Do you understand electrical installations and fixtures? Are you willing to do some research and learn from people who have the right kind of expertise? Have you thought about how each part of an installation is to be done, or are you just thinking of winging it? When it comes to electricity, winging it is not a good idea.

What else can you do to protect your home?

- Don't overload outlets or extension cords.
- Check cords, outlets, appliances, and anything that uses electricity on a regular basis. The more you use something, the more important that you check its condition periodically.
- Supervise your children and pets when there is electricity around. If they are in an area where there is some risk because of wiring or some other hazard, have them move to a safer area.
- Create a disaster plan for your family that includes how you want everyone to get out of the house in an emergency, where to meet, and what to do after that.

Your home is more than just a huge financial investment. It's where you eat, sleep, and enjoy your leisure time. Protect it, and all the members of your family, by using preventive maintenance to safeguard the things that matter most.