

5 COMMON CULPRITS IN RESIDENTIAL ELECTRICAL FIRES EVERYONE NEEDS TO BE AWARE OF

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Dishwashers. Refrigerators. Computers. Toasters. Exhaust Fans. Our homes are filled with appliances and electronics, but most of us do not think of them as potential fire hazards. The first step in protecting yourself and your family from the dangers of a fire in your home is to ensure you have working smoke alarms throughout the house.

Here is a list of five household items that can potentially overheat or catch fire, with some helpful tips for preventing electrical and electronic failures. >>>

CULPRIT #1 CORDS AND POWER BARS

Power and extension cords that are pinched, pierced, bent or otherwise damaged do not look very threatening, but the truth is, they are serious fire and shock hazards.

TO PREVENT A CORD OR POWER BAR FAILURE FROM CATCHING YOU OFF GUARD MAKE SURE YOU DO THE FOLLOWING:



Keep power bars and cords away from moist or wet environments. Salt-water aquarium electrical should be installed by a professional to provide protection from moisture and contaminants. Normal power bars and extension cords will not do. Also keep weather-proofing covers closed on outdoor outlets.

Look behind the sofa. Pressing furniture against an outlet where a cord is plugged in can cause damage to the plug. Make sure there is enough space behind the couch, bookcase, bed, or desk to ensure you are not pushing against the plug.

Check your kitchen counters. Pinching a cord under or behind an appliance or wrapping it around a toaster or kettle can damage or melt the insulation around the wire.

Keep cords away from carpets. Running a cord under a carpet may keep it out of sight, but it also keeps it from properly cooling and makes it easy to damage by foot traffic or furniture.

Keep cords free and clear. Leaving combustible items near cords or power bars is a bad idea – they will just end up feeding the fire in the event of a failure. Do not place boxes or furniture on cords either.

Keep animals away. Do not let your pets chew on cords. (And if you have mice in your house, they can do some serious damage too.)

Inspect regularly. Check for nicks, damage or signs of overheating at plug connections. If your cords are hidden away or in a tangled mess, you will probably be less likely to check them. Spending some time bringing order to your cords is well worth the effort.

Replace damaged cords. Never patch power and extension cords. Look out for corroded and bent plug blades. It is far safer to replace the cord – or even the entire appliance – than to tape a damaged cord.

Use as intended. Extension cords are classified as temporary wiring. Do not drape wiring over nails or fix extension cords to walls to create an extra outlet. Get a permanent outlet installed by an electrician instead. Avoid long runs and daisy chaining multiple cords together. A heavy duty cord is always a safer bet.

CULPRIT #2 APPLIANCES

Dishwashers, refrigerators, toasters and dryers are all common household appliances that can cause fires due to manufacturers' defects or misuse.

- Dishwashers: the heating element can be defective and water infiltration can cause circuit board failures.
- Refrigerators: compressor components and wiring can fail.
- Toasters and other small appliances: circuit boards and electrical contacts can fail. Food can catch fire during use or afterwards if left in toaster.

- Dryers: thermostats can fail, allowing the dryer to over-heat. If the main heating element fails, it can send molten metal into the drum, igniting your clothes.

TO PREVENT AN APPLIANCE FIRE FROM CATCHING YOU OFF GUARD MAKE SURE YOU DO THE FOLLOWING:

Register your appliances. If there is a manufacturer's defect, you will automatically be made aware of any recalls. Sign up on Health Canada's recall page to get email alerts for your products.



Unplug it. Not only should you be disconnecting your kettle, coffee maker and toaster when you go on vacation, but you should unplug them whenever they are not in use! Even when your appliance is not on, the cord is still energized when it is plugged in. If you do not already do this it will take some time to get into the habit of unplugging the appliance after you have used it but it is a practice that literally can save lives... not to mention saves a bit of energy too!

Stay close when appliances are in use. People often run their appliances overnight while they are sleeping or when they are out for the day. Although these times may be more convenient for your lifestyle, they pose a possible threat to your safety! Appliance failures are not an infrequent occurrence, they happen all the time, at any time. If you are home and awake when an issue occurs, you can detect the

danger, escape to safety and call for help much more readily. And of course, working smoke alarms are a critical safety precaution for every home.

Get your dryer cleaned by the pros. Call in a company that will clean your dryer interior and exhaust ductwork. You would be surprised how much flammable material (lint) can build up in there.

CULPRIT #3 ELECTRONICS

Lithium ion batteries that power our gadgets cram a lot of power in a very small package. When they fail (usually due to damage, improper charging or a defect) their high-energy density can cause an explosion with a fire that can be fierce and spreads rapidly. Faulty circuit board components can fail and catch fire too.

BE SURE TO DO THE FOLLOWING TO ENSURE YOUR SAFETY:

Charge electronics according to manufacturer's instructions. Keep your laptops, tablets, cell phones and wearable electronics from becoming fire hazards by charging them with the right charger in the right setting. Aftermarket chargers should be selected with care. Do not just look at the price tag.

Unplug it. Remember, when the cord is plugged into an outlet, it is energized even if the device is off. Better to disconnect and be safe, especially when sleeping or when leaving the room or house.

CULPRIT #4 COOKING STOVES AND OVENS

Fires on cooking appliances are caused more often by user error than by manufacturer defects. They are so common they deserve their own section.

HERE ARE A FEW BASIC TIPS I RECOMMEND YOU IMPLEMENT AS HOUSE RULES IN YOUR HOME:

Stay in the kitchen when you are cooking. Unattended cooking is one of the most common causes of household fires. It is a simple rule but you would not believe the percentage of fires we are involved in investigating that would have never happened if someone did not leave the room. We hear it all the time, "I only left the room for a minute!" Consider using an electric deep-fryer instead of a pot on the stove to make fries.

Do not overuse the self-cleaning feature. It uses temperatures greater than 900°F to burn off food particles – much higher than anything used for cooking. Some claim that it can wear away the oven's electronics and cause the control panel or other features to stop working properly. My advice to you is be sure to follow the instructions in the user manual and if it is unclear as to what the recommended frequency of use of the self-cleaning feature is, call the manufacturer to inquire. When using it, keep the cooktop and storage drawer under the oven clear so the extreme heat does not melt or ignite combustibles.

CULPRIT #5 EXHAUST FANS

Bathroom and laundry room exhaust fans are another common source of electrical fires. The dust on a fan that has not been cleaned is an excellent fuel source for a fire, should one break out due to a fan malfunction. Sometimes it is not clear that the fan has caused a fire inside the ceiling space. An ignited plastic fan grille can drip down and set fire to bath mats, clothes and other flammable items.

Check for heat. Feel the plastic grille while the fan is operating. If there is a lot of heat radiating from it, you may have uncovered a problem.

Open it and dust it. This is probably the easiest way to see if there is a problem. After removing the dust, examine the fan for signs of overheating such as discoloration or melting of plastic components around the motor. If you do detect any signs of overheating, stop using the fan immediately and call a professional to replace it.

As consumers we tend to appreciate the conveniences of these electronics and appliances but underestimate the dangers of their improper use. Make a conscious effort to frequently check on the 5 common culprits to ensure everything is operating as it should and that you are using them as recommended. The fact is, preventing electrical and electronic fires in your home is easy and pretty straight forward!



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