

# At Home Fire Safety Guide

According to the Red Cross, you may have as little as two minutes to safely escape a fire. While escape is essential, prevention is always better. Here's what you should know about how fires start and what you can do to stop them from ever happening in the first place.

## What Causes House Fires?

Fires don't start on their own. They need the opportunity to begin and fuel to continue. You likely have many possible areas in your home that could become a fire if left neglected or unattended.

### **MOST COMMON HOUSE FIRE CAUSES (AND LOCATIONS)**

#### **KITCHEN**

The most obvious cause of potential fires is your cooking appliance, with 178,100 fires in 2019 caused in this manner. Whether it be a gas stove, electric stove, cooktop, or hot plate, anything that heats up enough to cook food can create a fire. Well-maintained appliances are less likely to start fires while cooktops with food or debris can catch fire during use.

#### **BATHROOM**

Fires can start from the small appliances used in the bathroom including curling and flat irons, hairdryers, and anything that can be plugged in. If it doesn't warm up, it could still pose an electrical hazard from frayed or damaged wiring. Electrical malfunction of all types led to 24,200 fires in 2019.

#### **GARAGE**

The garage poses all kinds of risks since this is where many homeowners store appliances and DIY electronics, as well as flammable supplies. Vehicles stored in the garage can also cause fire hazards. If you have an attached garage, fires from flammable materials can easily spread to your living spaces.

#### **BEDROOMS**

Small heaters, electric blankets, and phone chargers have all been known to cause fires in bedrooms. Since these areas are smaller, and people use them while sleeping, careless fires may be more common.

## **MOST COMMON TIMES FOR HOUSE FIRES**

While fires can and do happen at any time, the Red Cross estimates fires happen more in the fall and winter (this may be due to peak use of heating appliances and heating fuels). Fires occur more often on weekends and between 6pm and 7pm as well.

## **HOUSE FIRE DEATHS AND COSTS**

In 2019, a total of 354,300 residential fires caused \$7,866,900,000 in losses including 2,830 deaths and 12,625 injuries. Of these fires, 7,000 were connected to smoking, and 15,800 were intentionally started.

## **Home Fire Safety Tips**

The best fires safety practices focus on prevention. Consider this home fire safety checklist.

### **BE AWARE OF FIRE HAZARDS IN YOUR HOME**

Some of the most obvious fire hazards are also the most dangerous. They include fireplaces and woodstoves, which need regular cleaning and maintenance to ensure safety. Do not continue to run fireplaces after you go to bed.

Anything with a cord can catch fire. Inspect your electronics and appliances regularly for frayed cords or damaged plugs. If you see signs of fire damage (scorch marks, burning smell, etc.) stop using the appliance.

Only use appliances for their original intent. Don't use a cooking stove, for example, to heat your home. Keep portable generators outside where they belong. Never use outdoor heating tools or power equipment inside your home or garage.

### **NEVER LEAVE BURNING CANDLES UNATTENDED**

Candles smell nice and add some charm to the look of your home. They can also cause a fire in seconds. Don't use candles in empty rooms, when you aren't home, or around kids or pets. If you find yourself forgetting about them, consider switching to flameless candles or wax warmers that use lightbulbs instead of an open flame.

## **KEEP AN EYE ON YOUR COOKING**

Don't leave cooking unattended, even for a minute. Children should be kept away from cook stations. Wipe up cooking oil spills immediately. Keep toasters free of crumbs, and always unplug appliances when not in use. Don't leave warming appliances like coffee makers or kettles on when you aren't home. Wear appropriate clothing for the job (something without loose or dangling sleeves), and keep a fire extinguisher handy at all times.

## **TEACH KIDS EARLY**

Always supervise children around flammable materials and heat sources. Teach them home fire safety tips and review often. Keep dangerous items, like candles, well outside of their reach – or avoid using them in the home altogether. Remind children that firefighters are there to help in an emergency and can be trusted.

## **MORE FIRE SAFETY TIPS**

Other ways to prevent fires:

- Keep flammable or electronic items away from soft bedding and never charge phones or tablets on the bed or sofa.
- Maintain a clean workspace, unplug things when not in use, and prevent spills of flammable liquids when doing art, home repair, or cleaning projects.
- Never use a 3-prong plug in a 2-prong outlet. Avoid linking extension cords or power strips for extra length. Don't overload outlets. When possible, use the charging accessories that came with your phones or computers.

## **Home Fire Preparedness**

What would you do if there was a fire in your home? Start these home fire safety plans for maximum readiness.

## **CREATE AND PRACTICE A FIRE ESCAPE PLAN**

Remember that it takes just two minutes to go from danger to a serious injury or death. A fire escape plan lets you get the most out of every second. Find two ways out of all rooms if possible, including doors and windows. Plan for how upper-floor rooms can be safely evacuated with fire ladders or fire escapes. Practice how you would get out of a smoky room, even in the dark. Go over this plan at least twice a year.

## **SMOKE ALARMS**

Smoke alarms give you those extra minutes that count. Check your smoke alarm to see that it isn't expired, and replace batteries twice a year in devices that have replaceable batteries. All levels of your home and all bedrooms should have alarms, including those in the basement. Consider the accessibility needs of those who can't hear or see well; some alarms come with visual cues for those who won't hear them.

## **KEEP A FIRE EXTINGUISHER IN THE HOUSE**

Have at least one fire extinguisher accessible to adults and older children who have been trained in its use. If possible, include one in your home fire safety kit for the kitchen and near any wood-burning stoves or fireplaces, as well. Check the expiration date every year to make sure it's functional for when you need it.

## **What to Do in Case of a Fire**

If a fire happens, don't panic! Follow these strategies to get out safely.

### **EXTINGUISH THE FIRE IF YOU CAN**

If the fire is small and you have an extinguisher, try putting out the fire -- if it is safe to do so. Know when it's time to give up, especially if the fire is starting to block your escape route.

### **ALERT OTHERS IN THE HOUSE**

If you can't put out the fire, begin your evacuation plan. Alert others to the fire by yelling "Fire!" and instructions to evacuate. Don't yell "help!" as this can cause family members to run toward you and the fire.

### **STAY CALM AND STAY LOW**

Keep as close to the floor as possible to avoid smoke inhalation and heat as you exit the home. Don't panic. Check doors for fire behind them by feeling the surface of the door and doorknob. If it's hot, try to use another way out.

### **GET OUT**

Make sure all family members can exit safely. Stay in the home only long enough to help children or adults who have mobility issues. Do not go back for pets or possessions, or to try to put out the fire. If you can't get to someone, alert emergency personnel when you call 911. Give the location of the person, or let them know of any pets at this time.

## **WHAT TO DO IN CASE TRAPPED**

If you can't get out of an exit, shut the door or window fully and cover the cracks around it with towels, blankets, or tape. It seals out smoke and gives you time until help arrives. If you can call for help via 911, do so right away. If you or your clothing catch fire, don't run! Use the stop, drop, and roll method to smother the fire.

## **Garage and Shop Fire Safety**

Don't forget your shop when making a fire safety plan for home use. Whether your shop is attached or a stand-alone building, care is a must to prevent fires.

### **TOP FIRE RISKS IN YOUR GARAGE OR SHOP**

Garages and shops are full of materials that are flammable or could throw sparks or electric current while in use.

- Gasoline, diesel, car charging accessories
- Rags and other flammable fabrics
- Remodeling supplies, like paint, varnish, paint thinner, epoxies, and wood stains
- Power tools and appliances, including weed trimmers, lawnmowers, power saws, and chainsaws
- Shop heaters and small appliances used to keep the area warm while working
- Welders, welding gases, and accessories

### **GARAGE FIRE PREVENTION TIPS**

Some of the tips for keeping kids and pets safe in the garage or shop also work to prevent fires. They include:

- Keep flammable liquids and gases in a separate, locked cabinet away from sources of heat or flame.
- Clean up spills immediately, using special cleaning solutions, if needed. Allow time for fumes to dissipate before using heat, welders, or open flame in the area.
- Have adequate ventilation.

- Use heating sources wisely.
- Don't leave appliances, heaters, or welders plugged in when not around.

## **WELDING FIRE PREVENTION TIPS**

The American Welding Society recommends these tips for avoiding welding-related fires:

- Check your surroundings before you begin, making sure flammable objects aren't nearby.
- Cover holes and cracks in pipes, flooring, and other surfaces to prevent hot metal particles and sparks from being thrown into them, where fires can start.
- Keep a fire extinguisher handy.
- Wear appropriate personal protective equipment (PPE).
- Know what to do if a welding-related fire begins.

## Home Fire Safety FAQ

### **What are the four types of fires?**

- Class A (solid combustibles like cloth, paper, wood, and other organic materials)
- Class B (flammable liquids, including gasoline, alcohol, and cooking grease)
- Class C (electrical fires, including those started in appliance wiring)
- Class D (flammable metals, such as potassium)

### **What are the four types of fire extinguishers?**

Fire extinguishers come in four designs: water, foam, dry powder, and CO<sub>2</sub>.

Water extinguishers are the most affordable fire safety equipment for home use. They work best on burning organic materials such as wood or clothing. Never use a water extinguisher on a kitchen fire, electrical fire, or to put out flammable gases.

Foam extinguishers create a blanket over the flammable vapors that keep a fire going. They are used most often for flammable liquid fires caused by fuel but can also be used for wood or clothing fires. Avoid using them for kitchen or electrical fires, as well as flammable metals.

Dry powder extinguishers can handle most fires but should be avoided in enclosed areas where humans live or work because they can cause breathing problems. Residue may ruin motors and electronic parts inside your belongings.

Carbon dioxide (CO<sub>2</sub>) extinguishers are a top choice for electrical fires and work by suffocating the air supply that feeds a fire. They are ideal for computer and electronic spaces.

### **What is the first rule of fire safety?**

The first and best rule of fire safety is to always have a plan. If you encounter fire, you will feel stressed, and knowing what to do ahead of time is the best way to protect yourself and your loved ones. Don't wait until a fire happens to figure out how to escape, warn others, and call for help.

### **Should my fire detector also have a carbon monoxide detector?**

Many fire detectors are combination smoke alarms that include carbon monoxide detection for little additional cost. Since many home heating appliances can emit carbon monoxide when malfunctioning and the gas is odorless and hard to detect on your own, consider adding one to your safety plan, if at all possible.

## **Conclusion**

Fire safety at home is something everyone should learn as soon as possible in their lifetimes. Sharing this guide with loved ones is a great first start to ensure everyone is on the same page and knows what to do to prevent and survive fire incidents.