DISASTER PREPAREDNESS

Kitchen Fire and Food Safety



Disasters such as home fires happen to 2 million Americans each year, with almost half caused by cooking equipment.

After a fire, cleaning up the kitchen and determining what to keep and what to toss can be an added stress. For the most part, saving and re-using food is not a safe practice. Learn more about preventing, handling, and cleaning up after kitchen fires.

Kitchen fire prevention

- Never leave food that is boiling, broiling, frying, or grilling unattended. When baking, roasting, and simmering, set a timer to check on food frequently.
 Unattended cooking is the number one cause of cooking fires.
- After cooking, ensure the stove or oven is turned off.
 Unplug small appliances when not in use.
- Use a dry oven mitt or potholder, rather than a towel, to remove food from the oven and stove. Towels can easily fall onto heat and ignite.
- Do not use the oven as storage. Preheating an oven filled with storage containers could easily lead to a fire.
- Avoid storing pots, pans, plastic, paper, and cloth above the stove. Items can easily fall onto the stove and catch fire, and individuals can quickly be burned if reaching for an item when the stove is on.
- Roll-up long sleeves when cooking to prevent them from catching fire.
- Turn pot and pan handles towards the back of the stove.

- Maintain a kid-free and pet-free zone three feet around the oven or stove to prevent accidental burns and to keep flammable items out of the area.
- Clean up spills on cooking surfaces to prevent buildup of grease and potential fires.
- If the oven has been used recently, ensure the appliance is completely cool before cleaning.
- Store household cleaners away from the stove, oven, and other kitchen heat sources.
- Keep baking soda easily accessible in case of a grease fire. Additionally, keep baking sheets or lids for pots and pans close by to quickly smother a fire.
- Know where kitchen fire extinguisher is located, what type of fire extinguisher it is, and how to use it.
- Install battery-powered smoke detectors on each house level and in the garage; test twice a year.

Toaster safety

- Keep the appliance unplugged when not in use. If the toaster is located near something flammable, it can spark a fire whether the lever is up or down.
- Clean the toaster on a regular basis. Crumbs that accumulate in bottom of the toaster can spark a fire.
- Do not force thick foods into a toaster. This may cause the food to get stuck in the toaster, burn, and ignite a fire.





Microwave safety

Read manufacturer labels to learn if items are oven- or microwave-safe or resistant to other heat sources.

DO NOT USE IN MICROWAVE:

- Aluminum foil.
- Twist ties.
- Metal cookware, including utensils, bowls, pans, and measuring cups.
- Recycled paper products, such as napkins and paper towels. They may contain minute metal flecks that can spark.

Oven safety

- To prevent flames, put a baking sheet under foods that are high in fat or likely to drip.
- Use correct oven settings. Accidentally turning on broil rather than bake may lead to burning food and a potential fire.
- Use thermal-shock resistant glass in the oven. To avoid the risk of thermal-shock, which can cause glass to shatter, do not store glassware in oven, and always preheat the oven before cooking food in glassware.
- Parchment paper is heat-resistant and oven-safe. Another option is a silicone baking mat.
- When in doubt, always look for cookware or material that is explicitly labeled as oven-safe.

DO NOT USE IN OVEN:

- Plastics.
- Wax paper is not heat-resistant and may catch fire.
- Naper products: paper towels, plates, or bowls.
- Net or damp potholders, oven mitts, or towels. Wet material transfers heat quicker than dry material and can cause a burn.

Tips for frying safely

- Heat oil slowly to temperature.
- If oil smells or starts to smoke, it is getting too hot. Turn off the burner and remove the pan from the heat.
- **Smoke point**: most cooking oils reach their smoke point between 350-450°F.
- **Flash point**: the point where most cooking oils start creating flammable vapors is 600°F.

Deep fat frying and fire prevention

- Read the directions of the deep fryer before use.
- Always keep the fire extinguisher close.
- Keep direct flames away from oil; oil is highly flammable.
- Keep water away from oil when deep fat frying. Water vaporizes instantly, changing to super-heated steam.
- Remove ice crystals from frozen food and pat thawed or fresh food dry before placing in a deep fryer.
- Avoid overcrowding in the fryer. This can cause uneven cooking and overflow of oil.
- When deep frying a turkey, the bird should be 12 pounds or less.
- Always fry a turkey outdoors in a safe location.
- Never use plastic when deep frying. It can easily melt.
- Never leave a deep fryer unattended.

Putting out a kitchen fire

- **Stovetop fire:** wear an oven mitt, and slide a lid or baking sheet over the pan to smother flames. Turn off the burner, and leave the pan covered until it has completely cooled.
- **Oven fire:** keep the oven door closed and turn off the heat. If flames do not go out, call the fire department. Do not open oven door until the fire is completely out.



- Microwave fire: keep the microwave door closed.
 Turn off and unplug the appliance. Opening the door of an oven or microwave feeds oxygen to the fire.
- **Grease fire:** use salt or baking soda to extinguish small grease fires. *Do not pour water on a grease fire*.
- **Using a fire extinguisher:** stay 4 to 6 feet back and spray directly at the base of the fire. Standing too close while spraying the extinguisher can cause fire to spread up the wall behind the stove.

Kitchen clean-up after a fire

Contact the fire department to assess the severity of fire.

- When in doubt, throw it out: discard food that has been near a fire or exposed to heat, smoke, fumes, extinguishing chemicals, or water.
- Cans, bottles, and jars: heat from a fire can cause food spoilage in cans and jars. Exposure to extreme heat may also split or rupture jars and canned food. Throw these out.
- Food stored on shelves, on counters, and in cabinets: after possible exposure to heat or toxic fumes, discard any food, spices, and extracts packaged in cardboard, plastic wrap, aluminum foil, paper, cloth, screw-topped jars, or storage canisters.
- Food stored in the refrigerator and freezer: refrigerator and freezer seals are not airtight, and toxic fumes from the fire can get inside.
- **Food containers:** chemicals used to fight fires cannot be washed off exposed food or food containers.

- Canned food and cookware, such as pots and pans, can be decontaminated: wash in hot, soapy water. Mix and submerge for 15 minutes in a mixture of 1 tablespoon regular, unscented household bleach per 1 gallon of water.
- Clean countertops and kitchen surfaces: use hot soapy water to wash down surfaces. Rinse and sanitize using 1 tablespoon regular, unscented household bleach per 1 gallon of water. Allow surface to air dry with a contact time of at least 1 minute.

Call your local office

Contact your local Illinois Extension office with your food safety questions: go.illinois.edu/FindILExtension

RESOURCES

Michigan State University Extension. (2015). *Is food safe after a fire?* Retrieved November 22, 2020, from bit.ly/3aXj2Tj

National Fire Protection Association. (2020). *Cooking.* Retrieved November 22, 2020, from bit.ly/205884U

United States Department of Agriculture. (2013). *Deep fat frying and food safety.* Retrieved November 20, 2020, from <u>bit.ly/3rmSJLi</u>

United States Department of Agriculture. (2013). *Fires and food safety.* Retrieved November 22, 2020, from bit.ly/3w2t2Dc

United States Department of Agriculture. (2013). *Keep your food safe during emergencies: Power outage, floods & fires*. Retrieved November 20, 2020, from bitsubschool.org Power outage, floods & fires. Retrieved November 20, 2020, from bitsubschool.org Power outage, floods & fires. Retrieved November 20, 2020, from bitsubschool.org Power outage, floods & fires. Retrieved November 20, 2020, from bitsubschool.org Power outage, floods & fires. Retrieved November 20, 2020, from bitsubschool.org Power outage, floods & fires. Retrieved November 20, 2020, from bitsubschool.org Power outage, floods & fires.

United States Department of Agriculture. (2015). *Kitchen companion: Your food safe handbook.* Retrieved November 22, 2020, from bit.ly/3daJVDl

Published April 2021