



# FIRE SAFETY

**INFORMATION & QUICK TIPS** 



# **ALTERNATIVE HEATING**

The most popular forms of alternative-heating equipment (space heaters and fireplaces/chimneys) caused 440 deaths and were responsible for 73 percent of home heating equipment fires in the United States between 2014 and 2018, according to the National Fire Protection Association. Space heaters alone accounted for more than 40 percent of home heating fires and about 80 percent of the deaths and injuries in home fires caused by heating equipment. Additionally, nearly half of the home heating fires during this period occurred during the winter months of December, January and February.

During the colder times of the year, alternative-heating sources such as space heaters and fireplaces should always be the last option used. If they cannot be avoided, caution and proper safety should be practiced.

Remember, never use home appliances, such as ovens, as an alternative-heating source. Doing so can cause carbon monoxide poisoning.

## **QUICK TIPS**

- Keep at least a three-foot perimeter around space heaters at all times.
- Plug electrical space heaters directly into wall outlets, not multi-socket power strips.
- Have chimneys regularly cleaned and inspected by a certified professional.
- Keep the fireplace damper open while hot ashes are still in the fireplace. Closing it can lead to carbon monoxide poisoning.
- Extinguish fireplace fires before going to bed or leaving home.

# **ALTERNATIVE-HEATING SAFETY TIPS**

#### SPACE HEATERS

Space heaters can easily become a major fire hazard. Avoid using them whenever possible, but if they become necessary, make sure to:

 Keep space heaters far away from loose or flammable objects, such as clothing, curtains, bedding and furniture.

- Keep at least a three-foot perimeter around space heaters at all times. This distance reduces the chances of nearby flammable items catching on fire.
- Purchase space heaters that come equipped with tip-over safety switches.
- Never leave space heaters turned on in unoccupied rooms, and never go to sleep or leave your home with a space heater turned on.
- Plug electrical space heaters directly into wall outlets, not multi-socket power strips. Only keep one space heater plugged into each electrical outlet.
- Refuel kerosene space heaters outside your home in a well-ventilated area and when they are cooled down.
- Only use the manufacturer's specified gas type for gasoline-powered space heaters.

#### **FIREPLACES**

Fireplaces, commonly found in living rooms, can make a room warm and cozy, but not properly maintaining them can increase the risk of fires and carbon monoxide poisoning. Always remember to:

- Have the chimney regularly cleaned and inspected by a certified professional.
- Provide proper ventilation for gas fireplaces and keep a working carbon monoxide detector nearby.
- Use only dry, seasoned firewood to prevent buildup of creosote (a flammable tar deposited from wood smoke).
- Use a sturdy screen to prevent sparks and embers from flying out of the fireplace.
- Keep the fireplace damper open while hot ashes are still in the fireplace. Closing it can lead to carbon monoxide poisoning.
- Do not use flammable liquid to start fires in fireplaces or wood stoves.
- Keep a fire extinguisher nearby in case the fire gets out of control.
- Extinguish fireplace fires before going to bed or leaving home.



# **CAMPFIRES**

The National Interagency Fire Center reports an average of more than 60,000 wildfires are caused by people every year, burning millions of acres. Campfires that toast marshmallows and hot dogs are a factor in this number. These sources of heat and light are a major part of backyard fun and camping trips, but taking a little time to practice safety will help make campfires safe for everyone.

#### **QUICK TIPS**

- In some areas campfires are not permitted. Check with the local fire department and a campground's visitor center before starting one. Also, know whether there is a burn ban in the county using the statewide burn ban map.
- Keep the fire in a contained unit such as a burn barrel, barbecue unit, hibachi or a small pit with rocks around it. Building a fire directly on the ground without barriers can allow the fire to spread underground through root systems or decaying material.
- Never leave a campfire unattended.
- In case of an emergency (like a sudden change in the weather), douse the fire. Even a small breeze could cause the fire to spread quickly.
- When extinguishing a fire, drown it with water and then stay away from it. The ash, coals and embers of fire sites can retain enough heat to cause severe burns for 12–24 hours.

# **CAMPFIRE SAFETY TIPS**

#### **BEFORE A CAMPFIRE**

Planning ahead when camping can help limit the number of human-caused fires.

- Check the weather forecast. Weather fluctuations, such as sudden gusts of wind, could cause burning debris to spark a wildfire.
- In some areas campfires are not permitted. Check with the local fire department and the campground's visitor center before starting one. Also, know whether there is a burn ban in the county using the statewide burn ban map.

- Safe burning sites are away from power lines, overhanging tree limbs, buildings, rotten stumps, shrubs and dry grass or leaves. The fire should have a vertical clearance at least three times the height of the wood pile, as heat from the fire extends far past the flames that are visible.
- Flammable objects such as tents and camping gear need to be at least 15 feet away from and upwind of the burn site.
- The ground around the fire or burn site should be surrounded by gravel or dirt for at least 10 feet in all directions. Keep the surrounding area watered down.

#### BUILDING THE FIRE

Below are safety guidelines to follow when building a fire.

- Start with dry twigs and small sticks. Add larger sticks as the fire grows. Add the largest pieces of wood last, pointing them toward the center of the fire and gradually pushing them into the flames.
- Keep the fire contained in a burn barrel, barbecue unit, hibachi or a small pit with rocks around it. Building a fire directly on the ground without barriers can allow the fire to spread underground through root systems or decaying material.
- Never use gasoline, diesel fuel, lighter fluid and other dangerous fuels to ignite or keep the fire burning.
- After lighting the fire, do not discard the match until it is cold. Douse it with water to be sure.
- Keep campfires small and do not let them get out of hand. The suggested size is no more than two feet tall and wide.
- Stack extra firewood upwind and away from the fire so wind will not accidentally blow sparks onto the additional wood.

#### **DURING A CAMPFIRE**

Campfires need constant supervision to remain under control. Follow these tips and always stay diligent.

- Never allow children or pets near the fire. Do not leave them unsupervised.
- Teach kids how to stop, drop and roll if clothing catches fire. Have a fire extinguisher on hand for emergencies and teach children how to use it.
- If in an area where drinking alcoholic beverages is permitted, do not throw the empty containers into the fire. Also, designate people who will remain sober to maintain the fire, call for help in case of emergencies and watch the group for safety.
- Never leave a campfire unattended. In the event of an emergency, such as a sudden change in the weather, douse the fire. Even a small breeze can cause the fire to spread quickly.
- In the event of a burn, immediately place cool water on the skin for three to five minutes, and wrap the area in a clean, dry cloth. Call medical personnel if a burn is severe.

#### **EXTINGUISHING CAMPFIRES**

Properly extinguishing a campfire is important for safety. Many of the campfire burns children receive stem from day-old fire sites that are still hot.

- When extinguishing the fire, drown it with water. Make sure all embers, coals and sticks are wet. If you do not have water, use dirt. Mix plenty of soil and sand with the embers. Continue adding and stirring until all material is cooled.
- Keep plenty of water nearby and have a shovel for throwing sand on the fire if it gets out of control.

- For uncontrolled fires, immediately call 911, the nearest park ranger or the campground host. Provide information about the location so the fire can quickly be found.
- Do not bury used charcoal briquettes or hot coals. These can smolder and start to burn again.



# **CARBON MONOXIDE**

According to the Centers for Disease Control and Prevention (CDC), more than 400 Americans die from accidental carbon monoxide (CO) poisoning every year. CO is a gas that is odorless and colorless, and it can be fatal if too much is inhaled. CO poisoning can be prevented by watching for symptoms, testing CO alarms in your home and regularly checking common CO producers for leaks, blockages or faults.

## **QUICK TIPS**

- Install CO alarms outside each sleeping area and on every floor of your home.
- Never use home appliances, such as ovens, as an alternative-heating source.
- Never use generators indoors or within 20 feet of any door, window or vent.
- Have your heating system, water heater and gas, oil or coal-burning appliances serviced annually.

# **CARBON MONOXIDE SAFETY**

#### **COMMON SOURCES**

Multiple household items can produce CO. Proper ventilation, operation and maintenance are important in making sure these items remain useful and do not become harmful. Some of the most common causes of household CO poisoning include:

- A clogged chimney
- A gas or wood-burning furnace
- A vehicle running in a closed garage
- Portable kerosene or gas heaters
- A gas or charcoal grill used indoors or in a closed garage
- Improperly installed kitchen range or vent
- A cracked or loose furnace exchanger
- A corroded or disconnected water heater vent pipe

## POISONING SYMPTOMS

CO poisoning symptoms are described as being flu-like. Individuals suffering from carbon monoxide poisoning may show one or more of the following symptoms:

- Headache
- Dizziness
- Weakness
- Upset stomach
- Vomiting
- Chest pain
- Confusion

#### **PREVENTION TIPS**

You can protect yourself and family from the harmful effects of CO poisoning at home by:

- Installing CO alarms outside each sleeping area and on every floor of your home
- Testing each alarm monthly to ensure the batteries are still working, and replacing each alarm with a new one every five years
- Exiting your home immediately after a CO alarm goes off and calling emergency personnel to check all fuel-burning equipment
- Parking running vehicles in driveways or on the street to keep CO from building up in your home and garage
- Checking dryer, furnace and stove vents regularly for debris blockage
- Never using home appliances, such as ovens, as an alternative-heating source
- Never using generators indoors or within 20 feet of any door, window or vent
- Having fuel and charcoal-powered equipment regularly inspected by a professional to verify they are operating properly



# COOKING

The National Fire Protection Association (NFPA) reported there were more than 172,000 cooking fires per year between 2014 and 2018. These cooking fires peaked during the Thanksgiving and Christmas holidays.

Whether it is for a quick bite to eat or a large meal, cooking is a part of everyday life, so it is important Hoosiers understand and take proper cooking precautions.

## **QUICK TIPS**

- Keep an all-purpose fire extinguisher in or near your kitchen.
- Remain at home and turn off the stove or other appliances when leaving is necessary.
- Never try using water to douse a grease fire. Smother small grease fires by sliding a lid over the pan and turning off the stovetop.
- Completely thaw meat before placing it inside a deep fryer.
- Place grills away from the home, deck railings and out from under overhanging branches.

# **COOKING SAFETY TIPS**

#### KITCHEN SAFETY

Across the United States, fire departments respond to more than 470 residential cooking fires each day, according to a July 2020 report by the NFPA. Before you begin to fix a meal in the kitchen, always make sure to:

- Use a timer as a reminder to check on cooking food.
- Regularly check simmering, baking, roasting or boiling food.
- Remain at home and turn off the stove or other appliances when leaving is necessary.
- Keep children and pets at least three feet away from the stove.
- Never operate an oven or stovetop when drowsy or after consuming alcohol.
- Move flammable items, such as oven mitts, cooking utensils and food packaging, away from the stovetop.
- Regularly clean food and grease residue from the stovetop and oven.

#### **DFFP FRYING SAFFTY**

According to the United States Department of Agriculture, deep frying oil can reach temperatures of over 400°F, is highly flammable and can cause severe bodily injury when it comes into contact with water. Avoid the extreme dangers and fire risks of deep frying by:

- Using deep fryers outdoors at a safe distance from buildings and any other flammable materials
- Never using deep fryers on wooden decks or inside garages
- Never leaving a deep fryer unattended
- Completely thawing meat before placing it inside a deep fryer
- Following the manufacturer's instructions to determine the proper amount of deep fryer oil to use
- Making sure deep fryers are used on a flat surface to reduce accidental tipping
- · Covering bare skin when adding or removing food in a deep fryer
- Immediately turning off the gas supply if the deep fryer oil begins to smoke

#### OUTDOOR COOKING

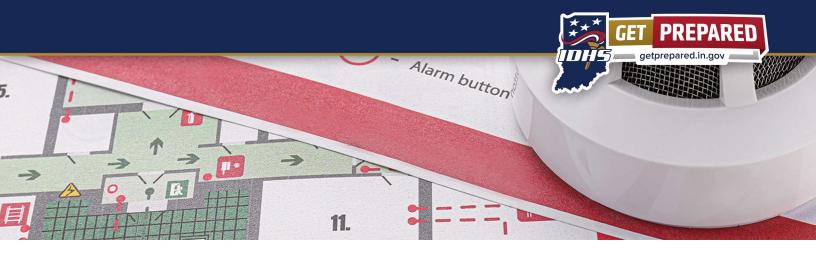
More than 10,500 home fires were started by a grill between 2014 and 2018, according to the NFPA. Before firing up the barbecue, always make sure to:

- Clean the grill by removing any grease or fat buildup.
- Never leave an outdoor charcoal or gas grill unattended.
- Place the grill away from the home, deck railings and out from under overhanging branches.
- Regularly check propane grills for gas leaks. If one is found, have a professional service the grill before
  using it again.
- Step away and immediately call the fire department if gas can be smelled during cooking.
- Avoid placing the grill on dry grass or leaves.
- Never add charcoal starter fluid to the flame of a grill.
- Finish your grilling session by letting the coals cool completely and disposing them in a metal container.

#### EXTINGUISHING COOKING FIRES

According to the NFPA, 55 percent of cooking fire-related injuries occur when residents attempt to extinguish the fire themselves. When it comes to extinguishing cooking fires, always remember to:

- Keep an all-purpose fire extinguisher in or near your kitchen.
- Never try using water to douse a grease fire. Smother small grease fires by sliding a lid over the pan and turning off the stovetop.
- Extinguish an oven fire by turning off the heat and keeping the oven door closed.
- Evacuate the home and call 911 if the cooking fire becomes too large to address safely.



# **FIRE ESCAPE**

A residential fire can become life-threatening in less than two minutes, making every second valuable. Escaping a fire quickly and safely should always be the main priority. Creating a household fire escape plan is simple and practicing it regularly can mean the difference between life and death.

## **QUICK TIPS**

- Identify two ways out of every room and decide on a safe meeting place away from the house.
- Write down the escape plan.
- Practice the escape plan at least twice a year with everyone in the household.

# FIRE ESCAPE SAFETY TIPS

#### **BFFORF A FIRE**

Residential fires, like other disaster types, require an ample amount of planning and preparation. As you develop an escape plan with your loved ones at home, always remember to:

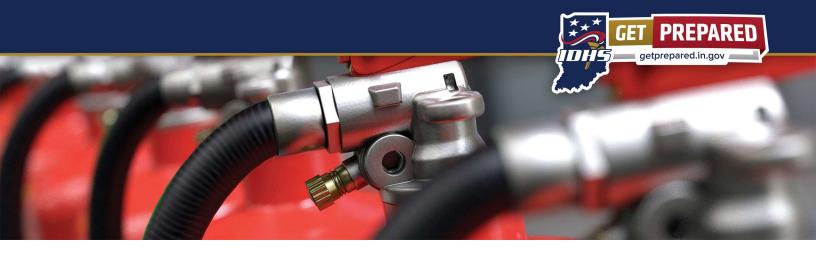
- Regularly practice escaping from every room of the home during both the day and night.
- Identify two ways out of every room. If one passageway is blocked, having an established second option will help save valuable time.
- Teach every household member how to quickly remove any security bars from windows and doors.
- Designate a meeting place away from the home, such as a front-yard tree or on the sidewalk.
- Make sure everyone knows when and how to call emergency telephone numbers.
- Inform house guests about fire escape plans.

#### **DURING A FIRE**

When it comes to escaping a residential fire, every second counts. When a fire occurs at home, remember to:

- Help individuals with limited mobility evacuate the property.
- Close doors to keep the fire from spreading.

- Get low and go! Practice getting low or crawling in case there is smoke. Smoke and hot air rise, so staying low to the floor may help you breathe and see better as you escape.
- If smoke, heat or flames block both planned escape routes, stay in the room and immediately call the fire department. Open the room's window and use a bright-colored object or flashlight to signal the location.
- Home fires progress quickly, so do not spend time trying to save personal property.
- Call 911 after reaching the meeting place.
- Once outside, do not go back inside. If someone is missing, inform the 911 dispatcher. Firefighters have the proper equipment and training to handle rescues.



# FIRE EXTINGUISHERS

In 2021, fires caused almost \$16 billion in property damage. Fire extinguishers, when used properly, can save lives and significantly reduce property damage. While all types of fire extinguishers are effective fire safety tools, they should only be used if a fire is contained to a single object and not spreading.

#### **QUICK TIPS**

- Have fire extinguishers available for the types of fires that may occur at your location.
- Store fire extinguishers next to exits to ensure the fire is not blocking a safe escape if it spreads.
- Before using the fire extinguisher, make sure your path to evacuate is clear. If you cannot extinguish the fire, you will need to escape.

# FIRE EXTINGUISHER SAFETY TIPS

#### TYPES OF FIRE EXTINGUISHERS

There are five types of extinguishers designed to put out the different types of fire classes. Knowing the different fire classes will help you determine which types of fire extinguishers to have available for use.

- Class A: Ordinary combustibles such as cloth, wood, rubber paper and many plastics
- Class B: Flammable liquids such as gasoline, oils, oil-based paint, alcohols, petroleum gases and tars
- Class C: Energized electric equipment such as appliances, tools and computers
- Class D: Combustible industrial metals such as sodium, lithium, titanium, magnesium and potassium
- Class K: Cooking oils and greases such as animal and vegetable fats

#### USING A FIRE EXTINGUISHER

After identifying the appropriate type of fire extinguisher to use, know how to use it:

- Use a fire extinguisher only when the fire is contained to a single object and not spreading.
- Use a fire extinguisher that is large enough to put out a small fire, but not so heavy that it makes handling it difficult.

- Store fire extinguishers next to exits to ensure the fire is not blocking a safe escape if it spreads.
- Before using the fire extinguisher, make sure your path to evacuate is clear. If you cannot extinguish the fire, you will need to escape.
- Follow the word "PASS":
  - **P**ull the pin at the top of the extinguisher that keeps the handle from being accidentally pressed.
  - Aim the nozzle toward the base of the fire, standing approximately eight feet away.
  - **S**queeze the handle slowly and evenly.
  - **S**weep the nozzle back and forth at the base of the fire.



# **FIREWORKS**

Fireworks can brighten celebrations, and proper fireworks use can protect you and others from injury to help keep the festivities going longer. Whether you plan to purchase fireworks, use them or observe a display, remember the following.

#### **QUICK TIPS**

- If you do not have a permit, buy only consumer-grade fireworks (1.4g fireworks).
- Check your local ordinances for fireworks hours restrictions.
- Only use fireworks at locations where you have approval to set them off.
- Always have a supply of water or a fire extinguisher available to put out fireworks. Douse spent fireworks with water before throwing them away.
- Do not hold lit fireworks in your hands.

## FIREWORKS SAFETY TIPS

#### **BE CAREFUL**

Fireworks are combustible or explosive devices, and they should be handled cautiously. Sparklers, for example, burn at about 2,000 degrees Fahrenheit, which can melt some metals, not to mention burn skin. Always remember the following safety tips when interacting with fireworks:

- Only light one firework at a time and never attempt to re-light or fix a "dud" firework.
- Always have a fire extinguisher or water supply, such as a hose or bucket of water, nearby.
- **Do not allow young children to use fireworks**, and only let older children handle them under close adult supervision.
- Store fireworks in a cool, dry place away from the reach of children.
- Never smoke or consume alcohol when lighting fireworks.
- Do not hold lit fireworks in your hands, and do not point or throw fireworks at others.
- Use extreme caution when lighting fireworks in the wind. Keep spectators where the wind is blowing smoke and debris away from them.

- Steer clear of others setting off fireworks. They can backfire or shoot off in the wrong direction.
- After a firework has finished burning, **douse it with plenty of water** before throwing it away to prevent starting a trash fire.
- Do not attempt to make or alter any fireworks or firework devices.
- Keep pets indoors, away from fireworks. Set up an area away from windows where they cannot see or hear fireworks, as many pets are terrified of them. Consider buying medication from a veterinarian ahead of time to calm pets.



# OPEN BURNING

Open burning is the burning of materials in a manner that releases smoke and other emissions directly into the

## **QUICK RULES**

- Open burning is not allowed at mobile home parks, apartments, condominium complexes or buildings of more than four dwelling units.
- Fires must be extinguished if they create a fire hazard, nuisance, pollution problem or threat to public health.
- Burning must comply with all other federal, state and local laws, rules or ordinances. For example, some counties may not allow open burning of leaves or yard waste.
- Only vegetation can be burned for agricultural maintenance purposes.
- Businesses are not allowed to open burn business waste.

air without passing through a chimney or smokestack from an enclosed chamber. Pollution from open burning is a serious concern because it can harm human health and the environment. Learn the rules of open burning and be sure to check for area burn bans beforehand.

For full information on open burning, please visit the Indiana Department of Environmental Management (IDEM)'s Open Burning in Indiana page. IDEM is the state agency that enforces Indiana's open burning rules and works with locals on open-burning education and complaint resolution.

# **OPEN BURNING RULES**

#### RESIDENTIAL BURNING

Indiana's air pollution control rules generally prohibit open burning, though there are certain agriculture and maintenance exceptions to the open burning rules. Smoke from burning household trash, including plastic containers, is more toxic than the smoke from burning clean wood. Residents are always encouraged to recycle rather than open burn. Protecting your health is worth the small fee for proper waste disposal. These rules must always be followed for residential open burning:

- Only clean wood products may be burned. Treated wood is not clean wood.
- Wood products coated with stain, paint, preservatives, glue or other coatings are not allowed to be burned.
- Residential open burning of clean wood products shall be in a noncombustible and ventilated container.
- Recreational or ceremonial fires, such as fires for scouting activities or cooking, may only burn clean wood products, paper or charcoal.
- Burning must be done during safe weather conditions, not during high winds or on pollution alert days.
- Fires must be attended until completely extinguished, and adequate fire suppression equipment must be present.
- Non-recreational burning must be done during daylight hours and extinguished before sunset.
- Open burning is not allowed at mobile home parks, apartments, condominium complexes or buildings of more than four dwelling units.
- Fires must be extinguished if they create a fire hazard, nuisance, pollution problem or threat to public health.
- Burning must comply with all other federal, state and local laws, rules or ordinances. For example, some counties may not allow open burning of leaves or yard waste.

#### AGRICULTURAL MAINTENANCE

Open burning is prohibited in the state of Indiana. However, Indiana Code 13-17-9-1 and Open Burning Rule 326 IAC 4-1 exempt certain types of open burning for agricultural maintenance purposes.

#### Exemptions

- Only vegetation from maintenance at a farm, orchard, nursery, tree farm, cemetery, drainage ditch or agricultural land can be burned.
- Burning must be conducted on the site where the vegetation was generated.
- The burning of vegetation must be for maintenance purposes only, and not for clearing land or change in land use.
- Farms and businesses may not burn trash or business waste for disposal purposes.

#### Requirements

- Only vegetation can be burned. Materials such as household trash, plastics, tires, building materials, demolition debris, coated or treated wood, asbestos or any non-vegetation items cannot be burned.
- Agricultural land open burning must occur in an unincorporated area.
- Burning must be done during safe weather conditions, not during high winds or when the air is stagnant.
- Fires must be attended until completely extinguished.
- Fires must be extinguished if they create a nuisance or fire hazard.

#### **BUSINESSES AND OPEN BURNING**

Indiana's air pollution control rules prohibit businesses from open burning. It is illegal to burn waste generated by the routine operation of a business. Violations may result in enforcement actions and fines. Businesses are not allowed to open burn:

- As a disposal option for business waste
- Trash, paper or office materials
- Packing materials, boxes or pallets
- Construction waste, demolition debris or scrap materials

- Vegetative debris or clean wood waste from tree removal, tree trimming or land clearing
- Production process materials and by-products, defective and damaged products or job-waste materials

#### **Alternatives**

• Reducing, reusing and recycling business waste can not only be profitable, but also can minimize the overall impact to the environment.



# **SMOKE ALARMS**

Properly installed and maintained smoke alarms provide the entire household an early warning of a fire. In fact, a home with properly placed and working smoke alarms doubles the likelihood of survival. Help keep every loved one safe by learning how to install and maintain smoke alarms.

#### **QUICK TIPS**

- Memorize the sound of smoke alarms so you can react quickly when they are alerting you.
- Test your smoke alarms every month.
- Consider buying a combined smoke and carbon monoxide alarm.
- Install smoke alarms throughout the home, not just near the kitchen.
- Replace smoke alarms every 8-10 years.

# **SMOKE ALARM SAFETY TIPS**

## **IONIZATION VS. PHOTOELECTRIC**

Every smoke alarm may appear to be the same, but there is some difference between the two most common models.

- Ionization: reacts more quickly to a flaming, fast-moving fire.
- Photoelectric: senses a smoldering, smoky fire more quickly.

For maximum safety, install a mix of ionization and photoelectric smoke alarms on every floor.

#### **SMOKE ALARM INSTALLATION**

The National Fire Protection Association reports that in two-thirds of home fire deaths, no smoke alarm was found

- Install smoke alarms on every level, inside every bedroom and outside each sleeping area of the building.
- Place alarms on the ceiling or high on a wall.

- Alarms should be placed no closer than 10 feet from a stove, as everyday cooking may be a trigger.
- Hearing limited or deaf individuals can use alarms with strobe lights and bed shakers.
- Hard-wired alarms need to be installed by a professional.
- Consider purchasing a combined smoke and carbon monoxide alarm, especially if the home uses gas appliances.

#### **SMOKE ALARM MAINTENANCE**

Installing a smoke alarm is important, but they need to be maintained to help make sure the household stays safe. In 17 percent of fatal home fires, smoke alarms were found in the residence but were not working.

- Smoke alarms should be tested every month to make sure they are still working.
- In smoke alarms that use traditional batteries, they should be changed twice a year.
- Alarms should be replaced every eight to 10 years. Over time their sensors become less sensitive.