

April

MANUFACTURED HOME SAFETY



Manufactured homes are transportable structures that are fixed to a chassis and specifically designed to be towed to a residential site. They are not the same as modular or prefabricated homes, which are factory built and then towed in sections to be installed at a permanent location.

The federal government regulates construction of manufactured housing. Since 1976, manufactured homes have been required to comply with U.S. Department of Housing and Urban Development (HUD) manufactured housing construction and safety standards, which cover a wide range of safety requirements, including fire safety. Post-1976 manufactured homes bear a label certifying compliance with these standards.

The HUD standard has been enhanced over the years and the HUD “Final Rule” for smoke alarms in manufactured homes is largely based upon NFPA 501. Today, new construction of manufactured housing is required to contain, among other provisions:

- Factory installed hard wired or 10 year battery source, interconnected smoke alarms with battery back-up (including alarms inside or immediately adjacent to all rooms designated as sleeping areas, top of the stairs and on the basement ceiling near the stairs)
- Provisions for special devices for hearing and visually impaired persons.

NFPA’s national fire data indicate that manufactured homes built to HUD standards have a much lower risk of death and a significantly reduced risk of injury if fire occurs compared to the pre-standard manufactured homes.

Despite the federal requirements for factory-installed smoke alarms, 38% of 1999 fires in post-HUD Standard manufactured homes were reported as having no smoke alarms present. Since the homes are required to be

sold with installed or readily installable smoke alarms, this suggests a problem with detection devices being removed by occupants.

Safety Tips

- **Choose a HUD-certified manufactured home:** If you are in the market to purchase or rent a manufactured home, select a home built after 1976 that bears the HUD label certifying compliance with safety standards.

- **Keep smoke alarms working:** Never remove or disable a smoke alarm. If you experience frequent nuisance alarms, consider relocating the alarm further away from kitchen cooking fumes or bathroom steam. Selecting a photoelectric smoke alarm for the areas nearest kitchens and baths may reduce the number of nuisance alarms experienced. As an alternative, NFPA

501 permits a smoke alarm with a silencing means to be installed if it is within 20 feet of a cooking appliance. Test all smoke alarms at least once a month by pushing the "test" button. It is not necessary to use smoke or a real flame to test the smoke alarm's operability, and it is risky to do so. Replace batteries at least once a year, and when the alarm "chirps," signaling low battery power. Occasionally dust or lightly vacuum smoke alarms.

- **Make sure you have enough smoke alarms:** If your older manufactured home does not have smoke alarms in or near every sleeping room and in or near the family/living area(s), immediately install new alarms and fresh batteries to protect these rooms. For the best protection, interconnect all smoke alarms throughout the home. When one sounds, they all sound.
- **Plan your escape:** Know ahead of time how you will get out if you have a fire. Develop an escape plan which includes having an alternate exit out of every room. Make sure you can open and get out of windows and doors. All post-HUD Standard manufactured homes are required to provide windows designed for use as secondary escape routes for the bedroom. Familiarize yourself with their operation and don't block access to them. Immediately fix any windows that have been painted or nailed shut, doors that are stubborn or "stuck," and locks that are difficult to operate. Security bars or grates over windows or doors should have quick-release devices installed inside, which allow you to open them in an emergency. Hold a fire drill twice a year to rehearse how you will react if the smoke alarm sounds.
- **Electrical:** Hire a licensed electrician if you notice flickering lights, frequent blown circuits, or a "hot" smell when using electricity. Use extension cords for temporary convenience, not as a permanent solution. Avoid overloading electrical receptacles (outlets). Electrical cords should not be run under carpets or rugs, as the wires can be damaged by foot traffic, then overheat and ignite



the carpet or rug over them. Ground-fault circuit interrupters reduce the risk of electrical shock and should be installed by electricians in kitchens and baths. Arc Fault Circuit Interrupters monitor electric circuits for arcing and should be installed by electricians on bedroom circuits.

- **Cooking:** Unattended cooking is the leading cause of cooking fires in U.S. homes. Supervise older children who cook and stay in the kitchen when heating anything on the stove. Keep cooking surfaces clean and place anything that can burn well away from the range. Heat oil slowly and know how to slide a lid over a pan if you experience a grease fire. Read more cooking safety tips.
- **Heating:** Keep space heaters at least three feet away from anything that can burn. When purchasing new space heaters, select appliances with automatic shut-off switches. Kerosene heaters are illegal for home use in some jurisdictions. Check with your local fire department before purchasing a kerosene heater. Turn off portable space heaters before falling asleep or when leaving the room. Refill kerosene heaters outdoors, after the heater has cooled down. Supervise children and pets when space heaters are operating. Read more heating safety tips.
- **Walls:** All post-HUD Standard manufactured homes are required to have wall linings that do not promote rapid flame spread, with special protection around primary heating and cooking equipment, such as the furnace and cooking range. Presently, gypsum wallboard has replaced plywood wall paneling and wood based ceiling panels in the fabrication of manufactured housing walls and ceilings. This action has dramatically reduced the impact of fires in manufactured homes. Do not mount anything on the walls – such as paneling, drapery, or wall hangings – that would reduce this protection, especially near major heat sources.
- **Smoking:** If you have smokers in your home, ask them to smoke outside. Wherever people smoke, set out large, non-tip ashtrays on level surfaces and empty them frequently. Thoroughly douse butts with water before discarding. Check around and under cushions for smoldering butts. Read more smoking safety tips.
- **Protect yourself from intruders:** Install outdoor lighting to deter intruders, including would-be arsonists. Keep gasoline, charcoal lighter and other flammable liquids locked in an outdoor shed. Don't store items underneath your home. Store firewood away from your home and keep trash and other flammable debris cleaned up. Report any suspicious activity in your neighborhood.

Information provided by NFPA <http://www.nfpa.org/public-education/by-topic/safety-in-the-home/escape-planning/fire-safety-in-manufactured-homes> and USFA <https://www.usfa.fema.gov/prevention/outreach/>



Heat your home safely.

**Keep anything that can burn
3 feet away from a fireplace,
wood stove or space heater.**

U.S. Fire
Administration



JANUARY

CARBON MONOXIDE HAZARDS

Dangers of Carbon Monoxide

- Carbon Monoxide (CO) is a gas you cannot see, taste or smell. It is often called “the invisible killer.” It is created when fossil fuels, such as kerosene, gasoline, coal, natural gas, propane, methane, or wood do not burn completely. CO gas can kill people and pets.
- CO poisoning can result from malfunctioning or improperly vented furnaces or other heating appliances, portable generators, water heaters, clothes dryers, or cars left running in garages.
- Headache, nausea, and drowsiness are symptoms of CO poisoning. Exposure to CO can be fatal.



Installation of CO Alarms

- Choose a CO alarm that has the label of a recognized testing laboratory.
- Install and maintain CO alarms inside your home to provide early warning of CO.
- When traveling or staying away from home, bring a travel CO alarm.
- Install and maintain CO alarms outside each separate sleeping area, on every level of the home, and in other locations as required by laws, codes, or standards. Follow the manufacturer’s installation instructions for placement and mounting height.
- For the best protection, have CO alarms that are interconnected throughout the home. When one sounds, they all sound.
- If you have combination smoke-carbon monoxide alarms, follow the directions for smoke alarm installation.
- CO alarms are not substitutes for smoke alarms and vice versa. Know the difference between the sound of smoke alarms and the sound of CO alarms.

Testing and Replacement

- Test CO alarms at least once a month and replace them if they fail to respond when tested. The sensors of CO alarms have a limited life. Replace the CO alarm according to manufacturer’s instructions or when the end-of-life signal sounds.
- Know the difference between the sound of the CO alarm and the smoke alarm, and the low battery signals. If the audible low-battery signal sounds, replace the batteries or replace the device. If the CO alarm still sounds, get to a fresh air location and call 9-1-1.
- To keep CO alarms working, follow manufacturer’s instructions for cleaning. The instructions are included in the package or can be found on the internet.

Inside the Home

- Have fuel-burning heating equipment (fireplaces, furnaces, water heaters, wood stoves, coal stoves, space heaters, and portable heaters) and chimneys inspected by a professional every year.
- Open the damper for proper ventilation before using a fireplace.
- Never use an oven or stovetop to heat your home.
- Purchase heating and cooking equipment that is listed by a qualified testing laboratory.
- Vent the exhaust from fuel-burning equipment to the outside to avoid CO poisoning. Keep the venting clear and unblocked.

The Garage

- Remove vehicles from the garage right away after starting. The CO gas can kill people and pets.
- Never run a vehicle or other fueled engine or motor in a garage, even if garage doors are open.
- Make sure the exhaust pipe of a running vehicle is not blocked by snow, ice, or other materials.

Appliances

- Make sure vents for the dryer, furnace, stove and fireplace are clear of snow and other debris.
- Always use barbecue grills outside, away from all doors, windows, vents and other building openings. Grills can produce CO gas. Never use grills inside the home or the garage, even if the doors are open.

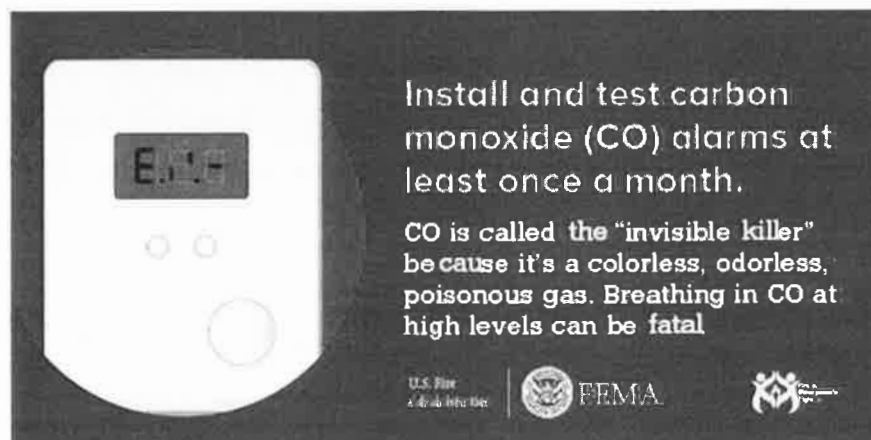
Portable Generators

- Use portable generators outdoors in well-ventilated areas away from the home.
- If you are using a portable generator, make sure you have battery-operated CO alarms or plug-in CO alarms with a battery backup in the home.

If Your Carbon Monoxide Alarm Sounds

- Immediately move to a fresh air location outdoors.
- Call 9-1-1 from the fresh air location. Remain there until emergency personnel arrive to assist you.

Information provided by NFPA <http://www.nfpa.org/public-education/by-topic/fire-and-life-safety-equipment/carbon-monoxide> and United States Fire Administration (USFA) https://www.usfa.fema.gov/prevention/outreach/carbon_monoxide.html



February

HEATING SAFETY: SPACE HEATERS

Heating equipment is a leading cause of home fire deaths. Half of home heating equipment fires are reported during the months of December, January, and February. Some simple steps can prevent most heating-related fires from happening.



Heat your home safely.

Keep anything that can burn 3 feet away from a fireplace, wood stove or space heater.

General Tips

- Have a 3-foot (1 meter) “kid-free zone” around open fires and space heaters.
- All heaters need space. Keep anything that can burn at least 3 feet (1 meter) away from heating equipment.
- Never use your oven or stove for heating. Ovens and stoves are not designed to heat your home.

U.S. Fire
Administration



Portable Electric Space Heaters

- Turn heaters off when you go to bed or leave the room.
- Purchase and use only portable space heaters listed by a qualified testing laboratory.
- Purchase and use space heaters that have an automatic shut off – if they tip over, they shut off.
- Place space heaters on a solid, flat surface and keep them and their electrical cords away from things
 - that can burn, high traffic areas, and

doorways.

- Plug space heaters directly into wall outlets and never into an extension cord or power strip.
- Do not plug anything else into the same circuit as the one you are using for your space heater. Doing so could result in overheating.
- Check often for a secure plug/outlet fit. If the plug does not fit snugly into the wall outlet or if the plug becomes very hot, the outlet may need to be replaced. Have a qualified electrician replace the wall outlet.
- Inspect for cracked or damaged cords, broken plugs, or loose connections. Replace them before using the space heater.

Fuel-Burning Space Heaters

- Always use the proper fuel as specified by the manufacturer.
- When refueling, allow the appliance to cool first and then refuel outside.
- When using the space heater, open a window to ensure proper ventilation.
- Portable kerosene heaters are illegal in some communities. Check with your local fire department before using.
- Use the proper grade of fuel in portable kerosene or other liquid- fueled space heaters.
- All new unvented gas-fired space heaters have an oxygen depletion sensor that detects a reduced level of oxygen in the area where the heater is operating and shuts off the heater before a hazardous level of carbon monoxide accumulates. If you have an older heater without this feature, replace it with one that does.
- If the pilot light of your gas heater goes out, allow 5 minutes or more for the gas to go away before trying to relight the pilot. Follow manufacturer's instructions when relighting the pilot. Do not allow gas to accumulate, and light the match before you turn on the gas to the pilot to avoid risk of flashback.
- If you smell gas in your gas heater, do not light the appliance. Leave the building immediately and call 9-1-1 and the gas company.

Information provided by NFPA <http://www.nfpa.org/public-education/by-topic/top-causes-of-fire/heating/heating-safety-tips> and USFA https://www.usfa.fema.gov/downloads/pdf/publications/winter_infographic.pdf



March

PET FIRE SAFETY

Pets give us comfort, friendship, and unconditional love. Our connection to them can be among the strongest relationships in our lives. But pets can cause fires. We need to be careful with pets in the home. Pets and wild animals have a part in starting about 700 home fires per year. Roughly $\frac{3}{4}$ of these fires were started by cooking equipment, fireplaces or chimneys, lighting or candles.

Safety Tips

- Pets are curious. They may bump into, turn on, or knock over cooking equipment. Keep pets away from stoves and countertops.
- Keep pets away from candles, lamps, and space heaters.
- Always use a metal or heat-tempered glass screen on a fireplace and keep it in place.
- Keep pets away from a chimney's outside vents. Have a "pet-free zone" of at least 3 feet away from the fireplace. Glass doors and screens can stay dangerously hot for several hours after the fire goes out.
- Consider battery-operated, flameless candles. They can look and smell like real candles.
- Some pets are chewers. Watch pets to make sure they don't chew through electrical cords. Have any problems checked by a professional.

Prepare

- Have working smoke alarms on every level of the home. Test your smoke alarms at least once a month.
- If the smoke alarm sounds, get out and stay out.
- Never go back inside for pets in a fire. Tell firefighters if your pet is trapped.
- Make sure pets are included in your family's wildfire evacuation plan.
- Build an evacuation kit for each pet in your household. Ensure each kit is a size and weight that can be quickly and easily loaded into a vehicle when packing to evacuate.

Information provided by NFPA <http://www.nfpa.org/~media/files/public-education/resources/safety-tip-sheets/petsafetytips.pdf?as=1&iar=1&la=en>

