

Home Fire Safety

Solutions Smoke Alarm Project



Why Read This Guide?

This guide will help you:

- Make sure your smoke alarms and alert equipment are working to help keep you safe from fires.
- Create a home escape map and practice a home fire drill.
- Reduce fire risks in and around your home.
- Be more fire safe at home.

Table of Contents

Why Smoke Alarms?	4
Install Smoke Alarms	5
Specialized Alert Equipment	6
Know Your Smoke Alarms and Alert Equipment.	8
Test Your Equipment Monthly.....	12
Change All Smoke Alarms Every 10 Years.....	15
Consider a Home Fire Sprinkler System	16
Home Fire Drills: Practice the Drill With Your Family	17
In a Fire.....	24
Reduce Home Fire Risks	27
Protect Your Home: Outside	39
Outdoor Burning	41
Agricultural Burning.....	46
Using Gasoline	50
Using Propane	52

Why Smoke Alarms?

Fire makes smoke, heat, and flames. The smoke from fire spreads faster than the flames and the heat.

- Smoke is silent.
- Smoke can kill.
- Most fires that kill are the ones that start while people are sleeping.

Smoke alarms detect the smoke before it reaches you. Smoke alarms are loud to wake you up. For people with hearing loss the standard smoke alarm sound alone may not wake them.

People who are deaf and people with hearing loss need special alert equipment to notify them of a fire.

Install Smoke Alarms

This project installs battery operated smoke alarms:

- on every level of your home
- inside all sleeping rooms and outside every sleeping area

In mobile homes and RV's smoke alarms are installed:

- in every room
- on inside walls only
- **NOT** on ceilings or on any outside walls

There is a higher risk for fires and deaths in homes where people smoke.



Specialized Alert Equipment

This project installs special alert equipment for people with hearing impairments.

For people who are hard of hearing and deaf:

- A Lifetone alert device is installed where they sleep.
- It works with the smoke alarms.
- It “listens” for the smoke alarm sound.
- It makes a low loud sound and shakes the bed.



This alert technology is an effective way to awaken everyone.

For people who are deaf:

- A Gentex smoke alarm is installed that provides a visual alert for people while they are awake.
- This is in addition to the smoke alarms and Lifetone alert device.
- It has the standard smoke alarm audible alert sound.
- It has a 177 candela strobe light.
- It is installed high on the wall.
- It is plugged into a wall outlet.
- It has a 9 volt backup battery.



Know Your Smoke Alarms and Alert Equipment

Smoke Alarms - Battery operated:

- Your smoke alarms will make a high pitched sound when they detect smoke. The sound is a very loud 3 beeps and a pause,
- 3 beeps and a pause, that is continuous. It means “Get out!”
- If the alarms have a sealed battery compartment and one begins to “chirp”, replace the smoke alarm.
- If your smoke alarms have a removable battery, and one begins to “chirp”, change the battery. A single chirp every 30 to 60 seconds tells you to replace the battery with another long life (lithium) battery.
- Replace all smoke alarms after 10 years!





Lifetone Alert Device:

- Your Lifetone alert device plugs into an electrical outlet. It has 4 D cell batteries that supply standby power for up to 7 days if the power goes out. Replace these batteries once a year.
- Your The Lifetone does NOT detect smoke. It responds to the sound your smoke alarms make when there is smoke. When the Lifetone “hears” a smoke alarm, the display will show “FIRE,” it will make a very loud low sound and say “Fire! Get Out!” in English and Spanish, and the bed shaker will shake.

Know Your Smoke Alarms and Alert Equipment (continued)

Gentex Smoke Alarm:

For people who are deaf a Gentex smoke alarm is installed in addition to the smoke alarms and Lifetone alert equipment.

- The Gentex detects smoke and makes the standard smoke alarm alert sound.
- It also has a 177 candela strobe light.
- When it detects smoke the strobe light provides a visual signal for you when you are awake.

The Gentex must be plugged into an electrical outlet. • In case of a power outage the 9 volt backup battery will supply standby power for the audible signal for at least 24 hours.

- The backup battery will NOT power the strobe light.
- Replace this battery once a year.



**Read the instructions provided by the manufacturers for all your equipment.
Keep them for future reference.**

Test Your Equipment Monthly

If your smoke alarms and alert equipment are not working they cannot save your life. It is important to test the equipment every month.

Testing the Smoke Alarms:

- There is a test button on the smoke alarm.
- Press the test button on the alarm for several seconds.
- The alarm will sound 3 beeps and a pause, 3 beeps and a pause.
- Test each smoke alarm individually.

Note:

This test will NOT cause the Lifetone to activate after the initial setup.

Testing the Lifetone Alert Device (Self-test):

- Press the red test/silence button on the back of the unit.
- The display will show “FIRE”. It will announce “Fire! Get Out!,” make a low loud sound, and the bed shaker will shake.

Testing the System is Important:

It is important to ensure the Lifetone and your smoke alarms are working together as a “system” by one of these methods:

- For 2 minutes after the Lifetone self-test (above) it enters an enhanced sensitivity mode. During that time you may press the test button of the smoke alarm farthest from the
- Lifetone, to verify your system is working. **Or,**
- At any other time, press and hold the test button of the smoke alarm farthest away from your Lifetone until the visual and audible signals, and bed shaker activate your Lifetone (at least 6 repetitions).

Test Your Equipment Monthly (continued)

Testing the Gentex Smoke Alarm with Strobe Light:

- Turn the black test knob on the front of the unit to the left, to the “Test 1” mark.
- The red light will flash rapidly, the horn will sound 3 beeps and a pause, 3 beeps and a pause, continuously.
- The strobe light will flash.
- After the successful test, turn the test knob back to the “Normal” position.
- When you test your Gentex smoke alarm the Lifetone alert device will also activate.



Change All Smoke Alarms Every 10 Years



- Smoke alarms are made to last for 10 years.
- After 10 years, you must install new smoke alarms.
- Write the date the alarm is installed on the back of the alarm.



Consider a Home Fire Sprinkler System

- Home fire sprinklers give you a higher level of safety.
- Fire sprinklers along with smoke alarms are your best protection.
- A sprinkler system keeps fires small and reduces the heat, flames, and smoke produced in a fire. This allows people more time to escape safely.
- For more information: 1-877-550-4372
- www.homefiresprinkler.org

Home Fire Drills:

Practice the Drill With Your Family

A home escape map shows the way out of your home if you have a fire.

- Practice your family fire drill using your escape map.
- All family members should practice the fire drill every six months, including at night.
- Practice the fire drill including everyone who may need assistance such as young children, older adults, and people with disabilities.
- The more you practice, the more prepared you will be to take quick action in an emergency.
- Update your plan and make changes to your escape map when needed.

1. Draw arrows in red to show the best way out of each room. This is the way you normally go out.
2. Draw arrows in blue to show the second way out of each room. It should be the next best way to the outside.
3. Choose an outside meeting place in front of your home and mark it on the escape map.
4. Write 9-1-1 or your local emergency number to call the fire department on your escape map.
5. Assign a person to call the fire department from a cell phone or be prepared to call from a neighbor's home.

How Do I Practice a Family Fire Drill?

1. Push the test button on one of your smoke alarms.
2. Practice the fire drill using the best way out of sleeping areas (usually down the hall and out the front door) with all family members.
3. Help children and anyone with a disability to get out fast.
4. Close the door when you are out.



5. Meet outside at the family meeting place in front of your home.
6. Decide who will contact the fire department by calling 9-1-1 or your local emergency number.

REPEAT THE FIRE DRILL until everyone can get out quickly.

PRACTICE THE FIRE DRILL during the day and at night.

What Other Things Should I Do?

1. Make sure you and your children can get out fast if there is a fire. Children will need your help to wake up and get out. Plan for this.
2. Clear the way out. Keep hallways, stairs, and doors clear of any items that could trip you, keep you from getting out, or could slow you down.
3. Make sure windows and doors open easily and are not blocked by furniture or other items.
4. Mark the entrance to your property to be easily seen.

5. Make sure your house number can be seen from the street. Make sure the numbers are at least three inches tall.
6. If you live in an apartment, the landlord should ensure the apartment number is easy to see and all building numbers can be seen from a distance.
7. If you have a multi-level home, consider an escape ladder for bedrooms on the second or third floors.
8. Make sure the ladder fits the window. Use the ladder only in a **real emergency**.

In a fire...

GET OUT AND STAY OUT!

Never go back into your home for ANY reason.

Not for people or pets.

NOT FOR ANYTHING!

GET OUT AND STAY OUT!

Call 9-1-1 or your Local Emergency Number!

In a Fire

- If there is a fire, escape must be fast.
- If there are closed doors between you and the exit to the outside (such as a closed bedroom door), you should feel the doorknob with the back of your hand for heat.
- If it is hot, do not open the door.
- Use your second way out.
- Get out fast and stay out.



In a Fire (continued)

If the knob does NOT feel hot, open it slowly. There still may be smoke and heat on the other side. If you open the door and the path to the outside is clear of smoke, get out fast using your best way.



But if you find smoke or heat, close the door and use your second way out.

Smoke is deadly. If there is smoke, get low and go under the smoke to your way out.

Reduce Home Fire Risks Cooking



- Cook only when you are alert. Do not cook if you are sleepy, or drowsy from alcohol or medication.
- Do not wear loose fitting clothes when you cook. Roll up long sleeves.
- Keep children and pets away. Create a 3-foot safe zone around the cooking area.
- Turn off the stove if you must step away, even for a moment.
- **Never** leave food unattended while cooking.

Cooking (continued)

Stoves and Ovens

- Keep all items that can burn away from the stove. This includes paper towels, oven mitts, napkins, curtains, boxes, or packages of food.
- Keep the handles of pans turned in.
- Use a timer to remind you when your food is ready. When the timer goes off, turn off the stove or oven.
- Keep the stove, oven, and surrounding area clean of any food or grease.
- Danger! Never use water to put out a grease fire. Water causes that type of fire to spread!



- Keep a pan lid nearby to smother any flames.
- If a pan of food catches on fire, slide the lid onto the pan to smother the fire. Turn off the burner. Slide the pan off the burner and move away from the stove.
- If a fire starts in the oven, keep the door closed. Turn the oven off and move away.
- Go outside and call the fire department.



Microwaves

- Only use microwave-safe containers.
- Never use metal, silverware, or aluminum foil in a microwave.
- If there is a fire in the microwave, keep the door closed. Turn the microwave off and move away.
- Go outside and call the fire department.

Smoking

- Smoking and smoking materials are the number one cause of fatal home fires. If you smoke, you and your family are at greater risk for fires, burns, and death.
- Smoke outside, if you must smoke.
- Never smoke in bed. If a cigarette fire starts in your bed, you are too close to the fire and may not be able to escape.
- Do not smoke when drinking alcohol or taking medication that makes you drowsy.
- You must be alert if you smoke.





- Never leave a lit cigarette unattended.
- Keep lighters and matches locked away where children cannot see them or get them.
- Only use deep ashtrays that will not tip over.
- Pour water on cigarette butts BEFORE you put them in the trash.

**NEVER SMOKE IN AREAS WHERE
MEDICAL OXYGEN IS BEING USED.**

Candles

BURNING CANDLES IS DANGEROUS.

Use flameless candles. Flameless candles will not start a fire. They are:

- safe
- long lasting
- battery operated

Candles with a real flame are the cause of many home fires.

- Never leave burning candles unattended.
- Blow out candles before you leave the room or go to sleep.



Flameless candle

- Keep burning candles at least 12 inches from anything that can burn such as curtains, decorations, furniture, or towels.
- Make sure children and pets cannot reach candles or knock them over.
- Do not use candles with a real flame in your bedroom. You may fall asleep and forget about them.
- Most candle fires begin in the bedroom.

If the power goes off, use a flashlight.

Electrical

- If you use an extension cord, make sure it has a UL label and is the right size for the electrical load.
- Do not put electrical cords or wires under rugs.
- If there are young children in your home, plug plastic covers into unused outlets.
- Only plug two items into a duplex (two plug) outlet.
- If a fuse blows or a circuit breaker trips,
- do not just replace or reset it. Find out what is overloading the system, and correct the problem.



- Immediately unplug any appliance that sparks, smells unusual, or overheats. Replace it or have it professionally repaired.
- When an electrical appliance cord frays or cracks, replace it.
- Extension cords are only for short-term use, two weeks or less.
- Never use extension cords with any major appliance such as a refrigerator, freezer, stove, washer, or dryer.
- Unroll extension cords when in use to reduce the amount of heat put off by the cord.

Heating

Portable Electric Space Heaters

- Give a space heater at least 3 feet of clear space in all directions.
- Keep everything at least 3 feet away from all sides of a space heater: clothes, bedding, furniture, and walls.
- Turn off space heaters when you leave the room.
- Turn off space heaters when you go to bed.
- Portable space heaters with an automatic shutoff are safer. If they tip over, they will shut off.

Space heaters are a major cause of home fires.

Gas-Fueled Space Heaters

- Give space heaters at least 3 feet of clear space in all directions.
- Keep everything at least 3 feet away from all sides of a space heater: clothes, bedding, furniture, and walls.
- Only use the fuel specified by the manufacturer. **THIS IS NEVER GASOLINE.**
- When refueling, allow the heater to cool and refuel outside or in a well-ventilated area.
- Open a window to ensure proper ventilation when using a gas-fueled heater.
- Make sure your heater has an oxygen depletion sensor. If it does not, replace it with one that does.

Heating (continued)

Fireplaces and Wood Burning Stoves

- Keep anything that can burn at least 3 feet away from the fireplace or wood burning stove.
- Only use old, dry wood.
- Start the fire with newspaper or kindling, never with a flammable liquid such as lighter fluid, kerosene, or gasoline.
- Always use a fire screen.
- Inspect your chimney for cracks or obstructions every year before winter.
- Have fireplaces, wood burning stoves, chimneys, and flues professionally cleaned and inspected annually.

Protect Your Home: Outside

Wildland Fire

- Create a 30 to 100 foot “fire break” or “safety zone” around your home by keeping debris, vegetation, and wood piles away from exterior walls.
- Use fire-resistant materials to construct fences, decks, and sheds. Metal fencing, metal siding, brick, and stone are fire-resistant.
- Prune tree limbs so they are at least 6 feet off the ground.
- Remove all branches that overhang the roof of any building.
- Remove any dead branches.

Protect Your Home: Outside (continued)

Wildland Fire

- Remove cedar trees. They are a serious fire risk.
- Clear leaf debris from the roof and gutters.
- Remove tall, dry grasses. Keep the lawn cut low and clear of leaf debris.
- Cover home soffit vents with 1/8 inch metal screen. This keeps sparks from burning into the attic.
- Enclose any space under decks and porches with 1/8 inch metal screen. The metal screen acts as a spark arrester to keep fire from spreading into these areas.
- Visit www.firewise.org for more information.

Outdoor Burning

Burning Household Trash

Outdoor burning is only allowed in certain rural areas in Oklahoma. If you live in one of these areas and burn your trash, it is important that before you begin:

- Contact your County Sheriff's office and/or fire department first. These calls will tell you if there is a burn ban in effect and will confirm if weather conditions are safe for any outdoor burning.
- Outdoor burning is not safe in windy or dry conditions.
- Check the internet for burn ban information at: www.forestry.ok.gov/burn-ban-information.

Outdoor Burning (continued)

Burning Household Trash

- Burn household trash only in allowable areas, closely following all local regulations.
- Sort it carefully.
- It is best to burn trash in a metal barrel in good condition (no rust on the sides).
- Cover the barrel with a spark arrester of metal mesh screen that is 1/8 inch or finer.
- Clear at least a 10 foot area all the way around the burn barrel or any burn site.
- Keep trash fires small.





Emphasize Safety When Burning

- Never leave a fire.
- Keep children and pets far away from the fire site.
- Keep a water supply and shovel nearby.
- Be prepared to immediately extinguish the fire if the wind picks up.
- To ensure the fire is extinguished, drown the fire with water, turn over the ashes with a shovel, and drown it again.
- Ashes must be cool, not hot.

Outdoor Burning (continued)

Never Burn Plastics!

- Medicine bottles
- Toys
- Oil jugs
- Styrofoam
- Empty detergent bottles
- Foam take-home food containers
- Trash bags
- Feed sacks
- Shipping and mailing materials
- Plastic bags and wrap
- Hay twine and wrap

**Burning plastic releases dioxins into the air.
Dioxins cause cancer.**

Sort all trash. Do not burn:

- glass, aluminum, or other metals
- plastics, construction materials (such as treated lumber), or tires

Never burn pressurized containers such as deodorant, insect repellent, or household cleaners. These will explode if heated.

Agricultural Burning

Burning Agricultural Waste

Preparing to Burn:

- Call your local County Sheriff's office and/or fire department before you burn.
- Follow all Oklahoma outdoor burning regulations including any burn bans.
- Continue to check weather conditions including wind speed and humidity levels.
- Choose a safe burn site.
- Do not burn under power lines or overhanging limbs.
- Do not burn where there is anything overhead.

Safety and Control are Key

- Allow at least 50 feet of space from any structure.
- Stay away from fences, vehicles, and equipment.
- Establish a minimum 10 foot wide clearance, or fire break, surrounding any burn pile.
- Keep burn pile small. Add to it slowly as the waste burns.
- Keep a water supply and shovel nearby.
- Stay until the pile is completely burned and the fire is out.
- Drown ashes with water to ensure the fire is completely out.

Agricultural Burning (continued)

Prescribed agricultural burning is the use of fire to reduce or dispose of plant debris from farming and ranching.

Some examples include:

- burning large areas of crop residue after harvest to reduce excess plant material; to control crop diseases, weeds, or pests; or to maintain crop yields
- disposing of piles of agricultural debris such as orchard trees, limbs, or haystacks; and clearing vegetation out of irrigation ditches and canals





Safety and control are the most important issues to remember in prescribed burning.

- If you use an open burn site, keep burn piles small and add to them slowly to control the fire.
- Important information is available from your local fire department and also at:
www.oklahomaprescribedfirecouncil.okstate.edu

4

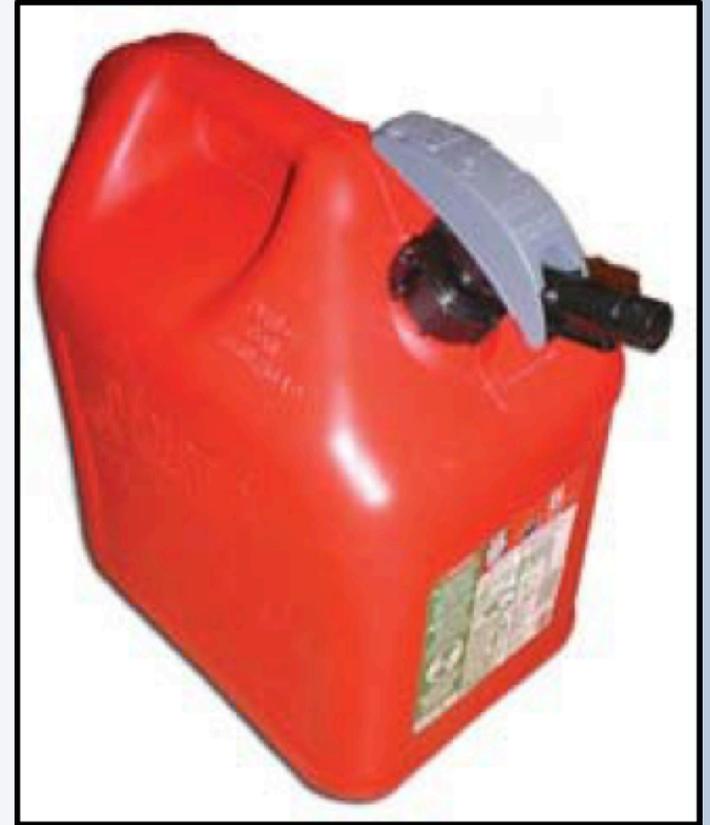
Call your local County Sheriff's office and/or fire department before you burn.

Using Gasoline



- Gasoline is flammable.
- Gasoline constantly gives off flammable vapors that are heavier than air and settle at the lowest level.
- Keep gasoline away from all potential heat sources such as cigarette smoking, hot water heaters, space heaters, and furnaces.
- Keep gasoline out of the sight and reach of children.

- Keep gasoline at least 50 feet away from any ignition source such as a pilot light or a burning trash pile.
- Store gasoline outside the home in a storage or lawn shed.
- Store in a tightly closed metal or plastic container approved and marked for gasoline storage.
- Refill portable containers outdoors on the ground.
- Engines must be cool before refueling.
- Never use gasoline in place of kerosene.



Using Propane

- If you smell a strong odor of gas, you must leave the area immediately and call the fire department from outside the home.
- If a pilot light repeatedly goes out or is difficult to light, there may be a safety problem. Shut off the gas to the appliance. Do not try to fix the problem yourself. Call a professional.
- Refill propane tanks when the fuel level reaches 20%. Running out of gas is a serious safety hazard.
- If you run out of gas, turn off the gas connector to your house and at each appliance.
- If your propane tank runs out of gas, pilot lights will go out. This is dangerous when the gas is back on.

Using Propane (continued)

- Before refilling your propane tank, make sure the gas is turned off to all appliances. Follow the manufacturer's instructions for refilling your tank.
- Follow all manufacturer's instructions and warnings if you light your pilot lights. It is best to have a propane retailer or service technician light any pilot light that has gone out.
- Propane burns with a blue flame in a properly operating appliance. Soot buildup or a yellow flame may mean the gas is not burning completely and could be creating dangerous carbon monoxide gas. Turn the gas connector off at the appliance and call a service technician to fix the problem.

Funding for Solutions Smoke Alarm Project
is provided by the
Department of Homeland Security,
Fire Prevention and Safety Assistance to
Firefighters Grant Program



Oklahoma Assistive Technology Foundation



A partial circular logo is visible on the left side of the slide. It features a stylized graphic of three diagonal lines and a dot, with the word "Alarm" written below it. The logo is partially cut off by the edge of the slide.

Grant Project Partners:

Oklahoma Assistive Technology Foundation
Oklahoma ABLE Tech, OSU
Fire Protection Publications,
OSU Fire Service Training,
OSU Oklahoma State Fire
Marshal
Oklahoma Council on Firefighter Training

REMEMBER!

- You and your family can be fire safe at home.
- Install smoke alarms and alert equipment.
- Test your alarms and equipment every month.
- Practice your family fire drill every six months.
- Reduce home fire risks.



Fire Protection Publications
Tech Oklahoma State University
research@osufpp.org



Oklahoma ABLE Tech
Oklahoma State University
www.okabletech.okstate.edu