

The Great Escape

LESSON 1

SMOKE ALARMS:

Most fire deaths are caused by smoke and toxic gases—not flames. Most fatal fires occur at night, when people are asleep. Properly installed and maintained smoke alarms could save your life! If a fire occurs in your home, your chances of survival are increased by 50% if properly working smoke alarms are present. Why are smoke alarms important? In the event of a fire, you have about two and a half minutes to get out of your home safely. Since most house fires occur when people are asleep, properly installed and maintained smoke alarms will provide an early warning alarm that will wake you and your family, giving you time to escape. In addition, the earlier a fire is discovered, the less damage there will be to your property. Where should I put them? A smoke alarm should be located on every level of your home, including the basement. Consider placing one inside and outside sleeping areas. Follow the manufacturer's installation instructions to be sure your smoke alarms are placed correctly on the ceiling or the wall. Avoid "dead air space", where the ceiling and the wall meet, and in corners. What kind should I buy? Most general merchandise and home supply stores that have a hardware department carry smoke alarms. Many smoke alarms are inexpensive, but they still serve the purpose of providing an early warning signal. The important thing to know is that there are two basic types: ionization and photoelectric.

Ionization alarms sound more quickly when a flaming, fast moving fire occurs. Photoelectric alarms are quicker at sensing smoldering, smoking fires. There are also combination smoke alarms that combine both types into one unit called dual sensor smoke alarms. Because it is impossible to predict what type of fire might start in a home, it is recommended that both types be installed, or install the dual sensor smoke alarms. There are also alarms made with strobe lights that flash and/or vibrate to meet the needs of people with hearing disabilities. How do I install a smoke alarm? For battery powered smoke alarms, all you will need is a screw driver and the manufacturer's instructions. Some smoke alarms are adhesive-backed and require no other tools. If your smoke alarms are "hard wired" (connected to the household electrical system) you will need a qualified electrician to install them. Many hard wired alarms have battery backup in case of an electrical failure. Make sure you check batteries in your smoke alarms every month, and replace with fresh batteries yearly, or sooner, if you hear the "chirping" signal that the batteries are running low.

WHAT ABOUT MAINTENANCE?

- Vacuum and dust your smoke alarms regularly. Dust particles and webs can interfere with the smoke sensors.
- When replacing batteries, use only the batteries recommended by the manufacturer.
- All smoke alarms should be replaced with a new unit every 8—10 years.

IMPORTANT REMINDERS:

- Plan and practice escape plans with your family at least twice a year.
- Teach children when and how to call emergency telephone numbers.
- Keep a charged fire extinguisher handy, and know how to use it!
- Install carbon monoxide detectors in your home if you burn fuel like wood, gas, oil or kerosene, etc. for heat or cooking.
- Test your smoke alarms monthly, and change batteries yearly, or sooner if you hear the "chirping" signal that the batteries are low.
- Do not remove batteries for other use, even temporarily. You may forget to replace them!
- If your smoke alarm does not have the manufacture date on it, write the date of purchase on the unit. Replace unit every 8—10 years.

SMOKE ALARM FACT SHEET/ANSWERS

More fire deaths are caused by **SMOKE** and **TOXIC GASES**, not **FLAMES**.

Most fatal fires occur at **NIGHT** when people are **ASLEEP**.

Properly installed and maintained alarms could **SAVE YOUR LIFE!**

If a fire occurs in your home, your chances of survival are increased by **50%** if properly working smoke alarms are present.

WHY ARE SMOKE ALARMS IMPORTANT?

In the event of a fire, you have about **TWO AND A HALF** minutes to get out of your home safely.

Since most house fires occur when people are **ASLEEP**, properly installed and maintained **SMOKE ALARMS** will provide an **EARLY WARNING** alarm that will **WAKE** you and your family, giving you **TIME** to escape.

WHERE SHOULD I PUT THEM?

A smoke alarm should be placed on **EVERY LEVEL** of your home, including the **BASEMENT**.

Consider also placing them inside and outside **SLEEPING** areas.

IMPORTANT REMINDERS

Plan and practice **YOUR ESCAPE PLAN** with your family at least **TWICE** a year.

Teach children when and how to **CALL EMERGENCY NUMBERS**.

Keep a charged **FIRE EXTINGUISHER** handy and know how to **USE IT**.

Install **CARBON MONOXIDE** alarms in your home.

Test your smoke alarms **MONTHLY** and change the batteries **YEARLY OR SOONER IF THEY ARE CHIRPING**.

Do not remove **BATTERIES** for other use, even **TEMPORARILY**.

Replace smoke alarm units every **TEN** years.

LESSON 2

SMOKING AND HOME FIRES:

Smoking materials, including cigarettes, pipes, and cigars, started an estimated 17,200 home structure fires reported to U.S. fire departments in 2014. These fires caused 570 deaths, 1,140 injuries and \$426 million in direct property damage. Smoking materials caused 5% of reported home fires, 21% of home fire deaths, 10% of home fire injuries, and 6% of the direct property damage from home fires.

- The risk of dying in a home structure fire caused by smoking materials rises with age.
- One out of four fatal victims of smoking-material fires is not the smoker whose cigarette started the fire.

Smoking Safety Tips

- Smoking materials (i.e., cigarettes, cigars, pipes, etc.) are the leading cause of fire deaths in the United States.
- If you smoke, smoke outside.
- Use deep, wide ashtrays on a sturdy table.
- Before you throw out butts and ashes, make sure they are extinguished, and dousing in water or sand is the best way to do that.
- Check under furniture cushions and in other places people smoke for cigarette butts that may have fallen out of sight.
- Never smoke in a home where oxygen is being used.
- If you smoke, choose fire-safe cigarettes. They are less likely to cause fires.

- To prevent a deadly cigarette fire, you have to be alert. You won't be if you are sleepy, have been drinking, or have taken medicine or other drugs.
- Keep matches and lighters up high, out of children's sight and reach.
- Do not discard cigarettes in vegetation such as mulch, potted plants or landscaping, peat moss, dried grasses, leaves or other things that could ignite easily.
- Never smoke and never allow anyone to smoke where medical oxygen is used. Medical oxygen can cause materials to ignite more easily and make fires burn at a faster rate than normal. It can make an existing fire burn faster and hotter.
- Electronic cigarettes: Fires have occurred while e-cigarettes were being used, the battery was being charged, or the device was being transported. Battery failures have led to small explosions. Never leave charging e-cigarettes unattended. E-cigarettes should be used with caution.

FIREWORKS SAFETY

- Fireworks cause life changing injuries....There are NO safe fireworks.
- Fireworks start an average of 18,500 fires per year, including 1,300 structure fires, 300 vehicle fires, and 16,900 outside and other fires. These fires caused an average of three deaths, 40 civilian injuries, and an average of \$43 million in direct property damage.

DO:

- Consider safe alternatives such as glow sticks, confetti poppers or colored streamers
- Observe your local and state laws
- Have a designated sober adult light all legal fireworks

DON'T:

- Allow children to handle fireworks – INCLUDING sparklers
- Attempt to alter, modify or relight fireworks
- Point or throw lit fireworks at anyone
- Allow children to pick up the spent fireworks – some may still be active

Sparkler Safety

- Sparklers are legal in the majority of the 50 states, and can often be readily available in your local grocery store. They are often viewed as one of the more "harmless" fireworks, which couldn't be farther from the truth!
- Sparklers are responsible for the vast majority of fireworks-related injuries, mainly as a result of parents giving them to their young children.

- In 2017, U.S. hospital emergency rooms treated an estimated 12,900 people for fireworks related injuries; 54% of those injuries were to the extremities and 36% were to the head. Children younger than 15 years of age accounted for more than one-third (36%) of the estimated 2017 injuries.

- Keep children and other observers at a safe distance – behind a protective barrier
- Store fireworks out of children's reach
- Keep a bucket of water close for disposal of fireworks

- EVER hold lit fireworks in your hand
- Consume alcohol or drugs when lighting fireworks
- Forget you can be held legally and financially liable for injuries caused by using fireworks

- Children under five lack the physical coordination to safely handle sparklers, and they may not understand the hazards associated with them.
- Sparklers account for one third of related injuries to children under the age of five.
- Sparklers reach temperatures upwards of 2000°F!! That's hotter than a blow torch!

GRILLING SAFETY

Each year, the National Fire Protection Association reports 8,800 home fires that start from grills, hibachis, or barbecues. In fact, one out of every six residential structure fires involves a grill as the ignition source. Causes can include failed grill components, defective grill design, defective propane cylinders, improper assembly or maintenance, and user error.

These explosions and fires can have serious consequences. In addition to the property damage associated with the nearly 9,000 annually reported home fires, there are thousands of emergency room visits and multiple deaths each year associated with burn injuries and carbon monoxide exposure.

July is the leading month for grill related fires and with summer just around the corner, here are some important tips for grilling safety.

Grill Safety Tips:

- Barbecue grills are designed for outdoor use only. Never barbecue in your home, trailer, tent, garage, or any enclosed area. Deadly carbon monoxide can quickly build-up.
- When setting up your grill outside, place it in an open area that is away from buildings, overhead combustible surfaces, deck railings, out from under eaves, and dry leaves, or overhanging branches.
- Keep children and pets away from the grill area.
- Keep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- Never leave a lit grill unattended.
- Keep the grill stable, and be sure it cannot tip over.
- Never move a hot grill.
- Always refer to the owner's manual for proper instruction and warnings.

Propane Grills:

- Check the gas tank hose for leaks before using it for the first time each year. Apply a light soap and water solution to the hose. A propane leak will release bubbles. If your grill has a gas leak, by smell or the soapy bubble test, and there is no flame, close the valve on the gas tank and turn

the grill to the off position.

- If the leak stops, get the grill serviced by a professional before using it again.
- If the leak does not stop, call the fire department.
- If you smell gas while cooking, turn off the gas and immediately move away from the grill and call the fire department. Do not move the grill.

Charcoal Grills:

- Hot coals are commonly associated with fires and burns. To reduce these risks wait until coals have cooled completely before removing them from the barbecue and dispose only in suitable metal containers.
- Charcoal chimney starters and electric charcoal starters are two alternatives to traditional charcoal starter fluids, but are not without risks. Both options will be very hot after use and care must be taken to keep them away from children, pets, and flammable objects.
- Charcoal starter fluid can be used safely, but should never be applied to a lit fire. Starter fluids must be kept out of reach of children and away from heat sources. Other liquid fuels (gasoline, kerosene, etc.) must never be used with barbecue grills.

CAMPFIRE SAFETY

- When camping out, take the following precautions:
- Use a tent made of flame-retardant fabric.
- Use a flashlight.
- Make sure the fire is properly extinguished when unattended.
- An extinguisher tool (i.e. shovel, bucket of water, fire extinguisher, etc.) is a must for every camper's equipment. It could be a lifesaver.
- Heat producing appliances (i.e. lights, heaters, cooking appliances) should never be used in a tent.
- Campers carrying fuel for propane/gasoline type stoves in their car trunk should take the precaution of opening the trunk periodically to ventilate the compartment.
- Never add a flammable liquid to a fire or hot coals. Explosions can result.
- All fire laws ordinances and regulations should be strictly observed.
- Adults should always supervise their children around fires.

Campfire Safety—The Facts:

- 70% of campfire burns are caused by embers rather than flames

- Fire pits retain heat up to 12 hours after being extinguished- hot enough to cause a severe burn
- Humans cause 9 of every 10 wildfires. Make sure campfires are permitted in your area.

DO:

- Build your fire in a designated ring/pit at least 15 feet away (and preferable downwind) from the tent, brush and other flammable object
- Keep the fire small and manageable and water nearby
- Talk to children about campfire safety
- Completely extinguish the fire and coals by pouring water, stirring, and pouring water again until it is cool. Never bury a fire.

DON'T:

- Use an accelerant such as gasoline, kerosene, or aerosol sprays to start a fire
- Leave a fire unattended – EVER
- Throw anything other than wood into the fire
- Build a fire if conditions are dry or if forest fire danger is high
- Assume that the fire pit is safe when arriving at a campsite. Coals from previous campers can still be hot!

WINTER HOLIDAY SAFETY

TREES

- When purchasing an artificial tree, look for the label “Fire Resistant.” Although this label does not mean that the tree won’t catch fire, it does indicate that the tree will resist burning and should extinguish quickly.
- When purchasing a live tree, check for freshness. A fresh tree is green. The needles are hard to pull from the branches, and when they are bent between your fingers, they will not break. The trunk butt of a fresh tree is

sticky with resin, and when it’s tapped on the ground, the tree should not lose many needles.

- When setting up a tree at home, place it away from fireplaces and radiators. Heated rooms dry live trees out rapidly, so be sure to keep the stand filled with water.
- Place the tree out of the way of household traffic and do not block doorways.

LIGHTS

- Indoors or outside, use only lights that have been tested for safety by a recognized testing laboratory, which indicates conformance with safety standards.
- Check each set of lights, new or old, for broken or cracked sockets, frayed or bare wires, or loose connections, and throw out damaged sets.
- Use no more than three standard-size sets of lights per single extension cord.
- Never use electric lights on a metallic tree. The tree can become charged with electricity from faulty lights, and a person touching a branch could be electrocuted.
- Fasten outdoor lights securely to trees, house walls,

or other firm supports to protect the lights from wind damage. Use only insulated staples, not nails or tacks, to hold strings in place. Or, run strings of lights through hooks (available at hardware stores).

- Turn off all lights when you go to bed or leave the house. The lights could short out and start a fire.
- For added electric-shock protection, plug outdoor electric lights and decorations into circuits protected by ground fault circuit interrupters (GFCIs). Portable outdoor GFCIs can be purchased where electrical supplies are sold. GFCIs can be installed permanently to household circuits by a qualified electrician.

DECORATIONS

- Use only non-combustible or flame-resistant materials to trim a tree. Choose tinsel or artificial icicles of plastic or nonleaded metals. Leaded materials are hazardous if ingested by children.
- Never use lit/real candles on a tree or near other evergreens. Always use non-flammable holders, and place candles where they will not be knocked down.
- In homes with small children, take special care to avoid decorations that are sharp or breakable. Trimmings with small removable parts can be easily swallowed or inhaled

and should be kept out of the reach of children. Please avoid trimmings that resemble candy or food that may tempt a child to eat them.

- Wear gloves to avoid eye and skin irritation while decorating with spun glass “angel hair.” Follow container directions carefully to avoid lung irritation while decorating with artificial snow sprays.

LESSON 3

ESCAPE PLANNING

FACTS:

- The majority of fatal fires occur in the home and at night. The smell of smoke won't always awaken you.
- Fire produces toxic gases which can put you into a deeper sleep.
- Having working smoke alarms in your home cuts your chances of dying in a house fire by 50%.
- You can survive a fire in your home if you know how to react quickly and correctly.
 - Plan at least two escape routes from each room. Don't forget to draw a garage and/or porch roof if you have them... They might serve as an escape route from upstairs windows. Sit down with your family and discuss your plan. Then PRACTICE it at least twice a year. Plan an outdoor meeting place where you can count heads to be sure everyone made it out safely.

REMEMBER:

- A proper escape plan includes working smoke alarms on every level of the home and in all sleeping areas; two ways out of each room; an unobstructed and easy-to-use meeting place outdoors; a posted emergency phone number for the fire department.
- If there are infants or family members with special needs, a designated member of the family should plan to assist them.
- Make sure that doors needed for escape can be opened easily and the windows are not nailed or painted shut. Everyone in the family, including children, should practice

unlocking and opening windows and screens as part of the escape plan.

- Consider purchasing a UL approved collapsible ladder for escape from upper story windows. Know how to use it and practice!
- To make sure that the fire is not on the other side of the door, use the back of your hand to feel the closed door, the doorknob and the crack between the door and the door frame. If it is cool, open the door carefully and proceed to your planned exit. Crawl low under smoke, if it is present. If the door is hot, don't open it and use your secondary route. Even if the door feels cool, open it carefully. If heat and smoke come in, slam the door and make sure that it is securely closed then use your secondary escape route.
- If there is no escape from your room, stay low near the floor. Block all spaces around the door and door frame with blankets, pillows, clothing, etc. to keep the smoke out. Signal at the window by waving, or use a cell phone to call 911 and advise them of your location.
- React immediately to the sound of a smoke alarm and make getting out your priority. Do not waste time trying to save property or pets.
- Escape first, then call 911. NEVER go back inside the home for any reason. When firefighters arrive, inform them of anyone or of any pets that may still be inside. Firefighters are equipped and trained to perform rescues safely.
- Teach children not to hide from firefighters.
- Install carbon monoxide detectors in your home if you have an attached garage or burn wood, kerosene, oil and/or gas. You should have at least one detector near the sleeping areas of your home.

LESSON 4

WAYS TO ENGAGE THE COMMUNITY AROUND THE IDEA OF FIRE SAFETY

Over 75% of burn injuries and deaths from fire occur in the home. For that reason it is important that teachers and schools get fire safety information to families. This can be done as follows:

- Conduct fire safety lessons with students (like this one!)
- Send fire safety handouts home with students
- Conduct a brief fire safety review at a PTA meeting
- Have a firefighter trainer visit the school
- Include fire safety activities at school festivals and special events for families