# West Virginia State Fire Marshal's Office



Monthly Fire Prevention Planning Guide

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#### **Mission Statement**

Work to lower the fire death rate in the state, while being an ambassador for the West Virginia State Fire Marshal's Office.

Our goal in Public Education is to continue building our strong partnerships and implement action plans around the state with agencies and organizations who will help us spread fire prevention initiative and safety.

Through data evaluations we are identifying our high risk geographic areas and population. We are analyzing this information to target the community risk reduction for our best programs and practices.

We utilize our resources like the media, officials and celebrities in the state to promote the importance of smoke alarms and safety in the home.

While working with the local fire departments, the goal is to provide resources to assure that all residential structures have working smoke alarms.

We will begin an After the Fire Canvassing Program focused initially on fire fatality incidents, providing local fire departments with encouragement and resources to conduct door-to-door offering home fire safety surveys. The fire departments will educate and promote what to do in the event of a fire. In particular, promote using escape plans and practicing exit drills and having smoke alarms properly installed.

We will utilize fire integration methods to proximate the area of fire origin and victim location to assist in community risk reduction planning. Canvassing and interviewing friends, family members and neighbors to develop better social demographics on victims where identifiable habits like hoarding and smoking, or mental status and education factor into the way we assess future risks.

This focused approach will be promoted throughout the next 12 months in an effort to support fire prevention in the most comprehensive effort ever in West Virginia. The State Fire Marshal's Office will continue to use data from fire reports, news media articles, investigation reports, and other means to track the fire mortality rate. Maps utilizing GIS technology to analyze social economic conditions and fire mortality data collected over the past 6 years will be studied to further our reach in target areas. The targets are specific – not only locally identified, but developed from census tracks at the street level. Special emphasis will be placed on these areas with individualized programs developed to address local issues.

#### **GOALS: Focused Fire Prevention**

The goal for the Statewide Public Fire Education Program is to focus resources where they matter most. This method of focused fire prevention will specifically target high-risk areas of the state with crucial fire prevention messages. While working with the local fire departments, the goal is to accomplish the following in each of the targeted areas:

- Provide resources to assure that all residential structures have working smoke alarms.
- Provide local fire departments with resources to conduct door-to-door public education programs including offering home fire safety surveys.

- Educate and promote what to do in the event of a fire. In particular, promote using escape plans and practicing exit drills.
- Provide information on how residential fire sprinklers can save your life.
- Promote the public fire education messages that are specific to each community.
- Establish community involvement and awareness about fire safety with local officials.
- Provide outreach to high risk populations within the targeted areas.
- Use local media and other technology to reach high risk targets.

This focused approach will be promoted throughout the next 12 months in an effort to support fire prevention in the most comprehensive effort ever in Tennessee. The SFMO will continue to use data from fire reports, news media articles, death certificates, bomb and arson section reports, insurance reports, and other means to track the fire mortality rate. Maps utilizing GIS technology to analyze social economic conditions and fire mortality data collected over the past 10 plus years will be studied to further our reach in target areas. The targets are specific – not only locally identified, but developed from census tracks at the street level. Special emphasis will be placed on these areas with individualized programs developed to address local issues.

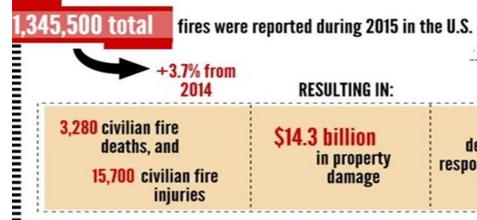
The majority of the public education topics used to support this program are from the National Fire Protection Association (NFPA) publication titled, "NFPA Educational Messages Desk Reference." These topics are introduced into monthly plans from existing state and local sources. The result is a comprehensive public fire education plan or guide for use by state and local officials.

Please utilize the information provided within this guide to promote fire prevention and life safety measures. The participation of local and state resources is critical in reducing the fire mortality rate in Tennessee. Special care, however, must be taken in communicating fire and life safety messages to youth. The following recommendation from the National Fire Protection Association (NFPA) should be the basis for fire safety educational programs for children.

#### Fire in West Virginia

The fire problem varies across the country. This can be a result of regional factors, such as climate, poverty, education and demographics. One of the most useful ways to compare fire fatalities across groups of people is to look at their relative risk of dying in a fire.

The U.S. Fire Administration's (USFA) recent report on "Relative Risk of Dying in a Fire by State" shows West Virginia has a relative risk of (2.2). Relative risk compares the per capita rate of a particular group to the overall per capita rate. Overall, people living in 25 states and the District of Columbia had a higher risk of dying in a fire in 2013 than the U.S. general population



+3.7% from 2014

RESULTING IN:

3,280 civilian fire deaths, and

> 15,700 civilian fire injuries

\$14.3 billion in property damage A fire department responding to a fire every 23 second

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# **JANUARY**

## Theme: Be warm and safe this winter

Week 1 – Senior Safety – Check on your senior neighbors during cold weather

Week 2 - Winter Weather

Week 3 – Heating Hazards: Portable Heaters

Week 4 - Manufactured Home Safety

#### **Events:**

New Year's Day Holiday Celebrations SFMO will present at West Virginia Community Action Partnership Board meeting Updates from SFMO provided at EMS for Children Advisory Committee Meeting

#### **Educator Tip:**

Use social media as a platform to convey safety messages throughout your community. If you keep the conversation going about fire safety, residents can't forget it. Praise good behaviors, like smoke alarm installations and service calls to promoting life saves based on installed smoke alarms. It's important to provide the right messages that capture attention and ultimately create behavior change.

#### National Fire Service History

- January 11, 18<mark>20 GA Fire Damages 463 houses</mark>
- January 13, 1908 Rhodes Opera House Fire (170 deaths)
- January 21, 1924 PA Refinery Explodes (7 FF's Killed)
- January 7, 1950 Iowa Mercy Hospital Fire (41 deaths)
- January 28, 1961 Chicago Warehouse Wall Collapse (9 FF deaths)
- January 30, 2014 Kentucky family dies in a home fire started by baseboard heater (9 deaths)

## West Virginia Fire Service History

On January 3, 1921, the State Capitol in Charleston was destroyed by fire.



#### **NFPA Education Resources:**

#### **Senior Safety**

Knowing what to do in the event of a fire is particularly important for older adults. At age 65, people are twice as likely to be killed or injured by fires compared to the population at large. And with our numbers growing every year - in the United States and Canada, adults age 65 and older make up about 12 percent of the population - it's essential to take the necessary steps to stay safe.

Remembering When: A Fire and Fall Prevention Program for Older Adults, was developed by NFPA and the Centers for Disease Control and Prevention (CDC) to help older adults live safely at home for as long as possible. The program is built around 16 key safety messages – eight fire prevention and eight fall prevention.

#### Safety tips

To increase fire safety for older adults, NFPA offers the following guidelines:

#### Keep it low

If you don't live in an apartment building, consider sleeping in a room on the ground floor in order to make emergency escape easier. Make sure that smoke alarms are installed in every sleeping room and outside any sleeping areas. Have a telephone installed where you sleep in case of emergency. When looking for an apartment or high-rise home, look for one with an automatic sprinkler system. Sprinklers can extinguish a home fire in less time that it takes for the fire department to arrive.

#### Sound the alarm

The majority of fatal fires occur when people are sleeping, and because smoke can put you into a deeper sleep rather than waking you, it's important to have a mechanical early warning of a fire to ensure that you wake up. If anyone in your household is deaf or if your own hearing is diminished, consider installing a smoke alarm that uses a flashing light or vibration to alert you to a fire emergency. View a list of product manufacturers.

#### Do the drill

Conduct your own, or participate in, regular fire drills to make sure you know what to do in the event of a home fire. If you or someone you live with cannot escape alone, designate a member of the household to assist, and decide on backups in case the designee isn't home. Fire drills are also a good opportunity to make sure that everyone is able to hear and respond to smoke alarms.

#### Open up

Make sure that you are able to open all doors and windows in your home. Locks and pins should open easily from inside. (Some apartment and high-rise buildings have windows designed not to open.) If you have security bars on doors or windows, they should have emergency release devices inside so that they can be opened easily. These devices won't compromise your safety, but they will enable you to open the window from inside in the event of a fire. Check to be sure that windows haven't been sealed shut with paint or nailed shut; if they have, arrange for someone to break the seals all around your home or remove the nails.

#### Stay connected

Keep a telephone nearby, along with emergency phone numbers so that you can communicate with emergency personnel if you're trapped in your room by fire or smoke.

#### Winter Weather

Most of the U.S. is at risk for winter storms, which can cause dangerous and sometimes life-threatening conditions. Blinding wind-driven snow, extreme cold, icy road conditions, downed trees and power lines can all wreak havoc on our daily schedules. Home fires occur more in the winter than in any other season, and heating equipment is involved in one of every six reported home fires, and one in every five home fire deaths.

#### Safety tips

- Test all smoke alarms. Do this at least once a month. This way you will know they are working. Install and test carbon monoxide alarms in your home.
- Plan two ways out of the home in case of an emergency. Clear driveway and front walk of ice and snow. This will provide easy access to your home.
- Make sure your house number can be seen from the street. If you need help, firefighters will be able to find you.
- Be ready in case the power goes out. Have flashlights on hand. Also have battery-powered lighting and fresh batteries. Never use candles.
- Stay away from downed wires. Report any downed wires to authorities.

#### Winter fire safety by the numbers

- Home fires occur more in the winter than in any other season.
- Heating equipment is involved in 1 of every 6 reported home fires, and 1 in every 5 home fire deaths

#### Heating Hazards: Portable Heaters

Heating is the second leading cause of U.S. home fires, deaths and injuries. December, January and February are the peak months for heating fires. Space heaters are the type of equipment most often involved in home heating equipment fires, figuring in two of every five fires (40%).

Some simple steps can prevent most heating-related fires from happening.

- Keep anything that can burn at least three feet away from heating equipment, like the furnace, fireplace, wood stove, or portable space heater.
- Have a three-foot "kid-free zone" around open fires and space heaters.
- Never use your oven to heat your home.
- Have a qualified professional install stationary space heating equipment, water heaters or central heating equipment according to the local codes and manufacturer's instructions.
- Have heating equipment and chimneys cleaned and inspected every year by a qualified professional.
- Remember to turn portable heaters off when leaving the room or going to bed.
- Always use the right kind of fuel, specified by the manufacturer, for fuel burning space heaters.
   Make sure the fireplace has a sturdy screen to stop sparks from flying into the room. Ashes should be cool before putting them in a metal container. Keep the container a safe distance away from your home.
- Test smoke alarms at least once a month.

#### Based on 2009-2013 annual averages:

- Space heaters, whether portable or stationary, accounted for two of every five (40%) of home heating fires and four out of five (84%) of home heating fire deaths.
- The leading factor contributing to home heating fires (30%) was failure to clean, principally creosote from solid-fueled heating equipment, primarily chimneys.
- Placing things that can burn too close to heating equipment or placing heating equipment too close to things that can burn, such as upholstered furniture, clothing, mattress, or bedding, was the leading factor contributing to ignition in fatal home heating fires and accounted for more than half (56%) of home heating fire deaths.
- Nearly half (49%) of all home heating fires occurred in December, January and February.

Source: NFPA's "Home Fires Involving Heating Equipment" report by Richard Campbell, April 2016.

#### **Manufactured Home Safety**

Manufactured homes (sometimes called "mobile" 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.

In order to distinguish between modular, prefabricated and recreational trailer homes, the following definition for a manufactured home from NFPA 501, Standard on Manufactured Housing, applies:

A structure, transportable in one or more sections that in the traveling mode is 8 body-ft (2.4 m) or more in width or 40 body-ft (12.2 m) or more in length or that on site is 320 ft2 (29.7m2) or more, is built on a permanent chassis, is designed to be used as a dwelling with or without a permanent foundation, whether or not connected to the utilities, and includes plumbing, heating, air-conditioning, and electrical systems contained therein. Such terms shall include any structure that meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the regulatory agency. Calculations used to determine the number of square feet in a structure are based on the structure's exterior dimensions, include all expandable rooms, cabinets, and other projections containing interior space, but do not include bay windows.

The federal government regulates the 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 backup (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 (post-1976 construction) have a much lower risk of death if fire occurs compared to pre-standard manufactured homes. The latest data (2007-2011) also shows that the overall fire death rate per 100,000 housing units is roughly the same for manufactured homes and for other one- or two-family homes.

Despite the federal requirements for factory-installed smoke alarms and the fact that eight out of ten manufactured homes now are and seven out of ten manufactured home fires now involve post-HUD-Standard units (based on 2007-2011 data), 51 percent of fires in manufactured homes were reported as having no smoke alarms present. This suggests a problem with detection devices being removed by occupants.

#### Safety tips

To increase fire safety in manufactured homes, NFPA offers the following guidelines:

•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.

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STATE FIRE MARSHAL EST. 1909

# **February**

## Theme: Burn Awareness and Prevention

Week 1 - Preventing Scalds & Burns

Week 2 – Fire Safety for Children

Week 3 – Kitchen Grease Fire Safety

Week 4 - Candle with Care

#### **Events:**

National Burn Awareness Week Feb. 5<sup>th</sup>-11th
Fire Commission Meeting
West Virginia ESCAPe 2017 – Emergency Services Conference at Pipestem

Educator Tip: Kitchen display for cooking fire safety: Mistakes in the kitchen are the leading cause of fires nationwide. This is a key issue in any community. Ask a local appliance dealer if they have any stove tops they've used for displays and plan to get rid of. Check with people who are upgrading to new appliances; often they junk the old ones. You can use the whole appliance or just the stovetop on a table. Get a pan, a lid and a pot holder and you'll have an interactive display. I'm not a big fan of starting a fire to extinguish in front of people unless you're set up with safety features for that specific action, but you can talk through how to handle a fire in a pan and stress the importance of having a lid nearby.

#### National Fire Service History

- February 5, 1898 Boston Building Collapse 6 FF's Killed
- February 7, 1904 Great Baltimore Fire
- February 13, 1909 WI Wall Collapse kills 6 FF's
- February 3, 1939 NY Building Collapse 9 FF's Killed
- February 16, 1955 Baltimore Building Collapse Kills 6 FF's
- February 14, 1958 NY Building Collapse Kills 6 FF's
- February 26, 1993 World Trade Center Bombing
- February 20, 2003 RI Station Nightclub Fire (100 Deaths)

#### **NFPA Education Resources:**

#### **Preventing Scalds and Burns**

A scald injury can happen at any age. Children, older adults and people with disabilities are especially at risk. Hot liquids from bath water, hot coffee and even microwaved soup can cause devastating injuries. Scald burns are the second leading cause of all burn injuries.

Scald burns can be caused by any hot liquid, fluid, or vapor, including hot tap water, overheated beverages, steam, and hot oil.

Treat a burn right away. Cool the burn with cool water for 3–5 minutes. Cover with a clean, dry cloth. Get medical help if needed.

Prepackaged microwavable soups are a frequent cause of scald burn injuries (especially noodle soups) because they can easily tip over, pouring hot liquid (and noodles) on the person.

#### **Facts and figures**

- There were 70,800 scald non-fire burn injuries reported to hospital emergency rooms in 2012, up from 68,700 in 2011.
- Scald burns accounted for almost one-third (31%) of all non-fire burn injuries reported to hospital emergency rooms in 2012.

#### **Scald Safety**

- Teach children that hot things can burn. Install anti-scald devices on tub faucets and shower heads.
- Always supervise a child in or near a bathtub.
- Test the water at the faucet. It should be less than 100° Fahrenheit (38° Celsius).
- Before placing a child in the bath or getting in the bath yourself, test the water.
- Test the water by moving your hand, wrist and forearm through the water. The water should feel warm, not hot, to the touch.
- Place hot liquids and food in the center of a table or toward the back of a counter.
- Have a "kid-free zone" of at least 3 feet around the stove and areas where hot food or drink is prepared or carried.
- Open microwaved food slowly, away from the face.
- Never hold a child while you are cooking, drinking a hot liquid, or carrying hot foods or liquids.
- Never heat a baby bottle in a microwave oven. Heat baby bottles in warm water from the faucet.
- Allow microwaved food to cool before eating.
- Choose prepackaged soups whose containers have a wide base or, to avoid the possibility of a spill, pour the soup into a traditional bowl after heating.

#### Fire Safety for Children

- Young firesetters cause hundreds of deaths and injuries each year. Preschoolers and kindergartners are most likely to start these fires, typically by playing with matches and lighters, and are most likely to die in them.
- Children experience fire interest. They may ask questions such as how hot is fire or show an interest in fire through playing with fire trucks or cooking on a play stove. This is healthy, and it is time to begin educating about fire.
- Firestarting happens when children begin to experiment with fire using matches and lighters. Many fires happen when young children are left alone, even for a short period of time, and have access to matches and lighters. Parents must have clear rules and consequences about fire misuse.
- Grown-ups can help keep fire out of the hands of children.
- Store matches and lighters out of children's reach and sight, up high, preferably in a locked cabinet or container.
- Never leave matches or lighters in a bedroom or any place where children may go without supervision.
- Teach young children and school-age children to tell a grown-up if they see matches or lighters. Children need to understand that fire is difficult to control, it is fast and can hurt as soon as it touches you.
- A child with an interest in fire can lead to fire starting and result in repeated firesetting behavior.
- It is important for grown-ups to discourage unsupervised fire starts.
- Never use lighters or matches as a source of amusement for children; they may imitate you.
- Never assign a young child any tasks that involve the use of a lighter or matches (lighting candles, bringing a lighter to an adult to light a cigarette or the fireplace, etc.
- If your child expresses curiosity about fire or has been playing with fire, calmly but firmly explain that matches and lighters are tools for adults only.
- Use only lighters designed with child-resistant features.

#### **Curious kids set fires**

- Children 14 and under make up 10-15 percent of all fire deaths.
- Fifty-two percent of all child fire deaths involve those under 5. These children are usually unable to escape from a fire independently.
- At home, children often play with fire in bedrooms, in closets and under beds to avoid detection. These locations just so happen to contain a lot of flammable materials.
- Too often, child fire-setters are not given proper guidance and supervision by parents and teachers. Consequently, they repeat their fire-settingbehavior.

#### **Kitchen Grease Safety**

Oil is a key ingredient found in the majority of today's kitchens. Whether a recipe calls for frying or sautéing, we include oil in almost all of our daily cooking. When using any of the many oils to prepare your meals like olive, canola, corn or soybean, consider the following safety tips when cooking:

- Always stay in the kitchen when frying on the stovetop.
- Keep an eye on what you fry. If you see wisps of smoke or the oil smells, immediately turn off the burner and/or carefully remove the pan from the burner. Smoke is a danger sign that the oil is too hot.

- Heat the oil slowly to the temperature you need for frying or sautéing.
- Add food gently to the pot or pan so the oil does not splatter.
- Always cook with a lid beside your pan. If you have a fire, slide the lid over the pan and turn off the burner. Do not remove the cover because the fire could start again. Let the pan cool for a long time. Never throw water or use a fire extinguisher on the fire.
- If the fire does not go out or you don't feel comfortable sliding a lid over the pan, get everyone out of your home. Call the fire department from outside.

Cooking is the number one cause of home fires and home injuries. Being mindful while you cook, however, can go a long way to helping prevent these fires.

#### Cooking fires by the numbers

Based on 2010-2014 annual averages:

- Cooking equipment was the leading cause of home fires and fire injuries, causing 46% of home fires that resulted in 19% of the home fire deaths and 44% of the injuries.\*\*
- Two-thirds (66%) of home cooking fires started with the ignition of food or other cooking materials.
- Clothing was the item first ignited in less than 1% of these fires, but clothing ignitions led to 18% of the home cooking equipment fire deaths.
- Ranges or cooktops accounted for the majority (62%) of home cooking fire incidents.
- Unattended equipment was a factor in one-third (33%) of reported home cooking fires and half (49%) of the associated deaths..
- Frying dominates the cooking fire problem.
- Thanksgiving is the peak day for home cooking fires.

**Source:** NFPA's "Home Fires Involving Cooking Equipment" report by Marty Ahrens, Nov. 2016. **Source\*\*:** NFPA's "Home Structure Fires" report by Marty Ahrens, September 2016.

\*Homes include one- and two-family homes, apartments (regardless of ownership), and manufactured housing.

#### Candle with Care

From 2009-2013, U.S. fire departments responded to an estimated 9,300 home structure fires that were started by candles. These fires caused 86 deaths, 827 injuries and \$374 million in direct property damage.

#### Facts and figures

During the five-year period of 2009-2013:

Source: NFPA "Home Candle Fires" report (December 2015)

- Candles caused 3% of reported home fires, 3% of home fire deaths, 6% of home fire injuries, and 5% of the direct property damage in home fires.
- Roughly one-third (36%) of home candle fires started in bedrooms. These fires caused 32% of the associated deaths and 47% of the associated injuries.
- Falling asleep was a factor in 11% percent of the home candle fires and 30% of the associated deaths.
- On average, 25 home candle fires were reported per day.
- More than half (58%) of home candle fires occurred when some form of combustible material was left or came too close to the candle.

• December is the peak time of year for home candle fires. In December, 11% of home candle fires began with decorations compared to 4% the rest of the year.

#### Safety tips

- Remember that a candle is an open flame, which means that it can easily ignite anything that can burn.
- Blow out all candles when you leave the room or go to bed. Avoid the use of candles in the bedroom and other areas where people may fall asleep.
- Keep candles at least 12 inches away from anything that can burn.
- Think about using flame-less candles in your home. They look and smell like real candles.
- Use candle holders that are sturdy, and won't tip over easily.
- Put candle holders on a sturdy, uncluttered surface.
- Light candles carefully. Keep your hair and any loose clothing away from the flame.
- Don't burn a candle all the way down put it out before it gets too close to the holder or container.
- Never use a candle if oxygen is used in the home.
- Have flashlights and battery-powered lighting ready to use during a power outage. Never use candles.

#### Religious candle safety

• Lit candles are used in religious services, in places of worship, and in the home. Whether you are using one candle, or more than one on a candelabra, kinara, or menorah, make sure you use them safely.

JUNE

- Candles should be placed in a sturdy candle holder.
- Handheld candles should not be passed from one person to another at any time.
- When lighting candles at a candle lighting service, have the person with the unlit candle dip their candle into the flame of the lit candle.
- Lit candles should not be placed in windows where a blind or curtain could catch fire.
- Candles placed on, or near tables, altars, or shrines, must be watched by an adult.
- Blow out candles when you leave the room or go to sleep.
- If a candle must burn continuously, be sure it is enclosed in a glass container and placed in a sink, on a metal tray, or in a deep basin filled with water.

# March

# Theme: Change your clock, change your batteries

Week 1 – Smoke alarms, change your clock, change your battery

Week 2 – Fire Safety for Children

Week 3 – Hoarding

Week 4 – Home Escape Plan

#### **Events:**

West Virginia Deaf Awareness Day at State Capitol Firefighter Day at Capitol

Educator Tip: Posters with your NFIRS data: Provide information on your community's most common types of fire calls and ways to avoid those situations. If you don't have your own data, you can use the statewide or national data. Make flyers available with tips on how to avoid these calls.

EST. 1909

National Fire Service History:

- March 17, 1890 Bldg Collapse, IL (13 FFs Killed)
- March 4, 1908 School Fire Ohio (174 deaths)
- March 25, 1911 Triangle Shirtwaist Fire, NY (145 deaths)
- March 18, 1937 School Explosion, TX (296 Deaths)
- March 10, 1946 Strand Theater Fire, MA (13 FFs killed)
- March 26, 2014 Boston Brownstone Fire (2 FFs killed)

West Virginia Fire Service History:

Woolworth Fire, Charleston, WV March 4, 1949

In total, seven Charleston Firefighters lost their lives in the blaze. Those men are:

- Frank Miller
- Freddie Summers
- James Paul (Jiggs) Little
- T. Frank Sharp
- Richard McCormick
- George Coates
- Emory Pauley



Fifteen additional firefighters were injured, including two who were critically injured: Capt. Charles Clendenin, who was overcome by smoke inhalation, and Carl Wiblin, who suffered severe burns.

- March 24, 1910 Mount Hope, the entire town was devastated by the most disastrous fire in history, leaving hundreds homeless.
- March 24, 2012 Charleston, Arlington Ave. Six children, two adults killed in worst house fire in city's history.

#### **NFPA Education Resources:**

Daylight Savings Time when we spring forward one hour for the purpose of making better use of daylight. As we set our clocks ahead, the National Fire Protection Association (NFPA) recommends testing your smoke alarms.

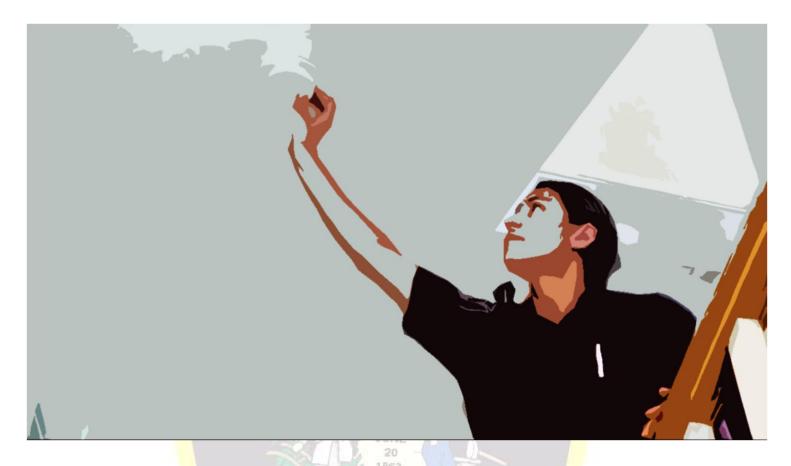


Roughly two-thirds of home fire deaths occur in homes with no smoke alarms or working smoke alarms. When smoke alarms should have worked but failed to operate, it is usually because batteries were missing, disconnected, or dead. NFPA provides the following guidelines around smoke alarms:

- Test smoke alarms at least once a month using the test button.
- Make sure everyone in the home understands the sound of the smoke alarm and knows how to respond.
- Replace all smoke alarms when they are 10 years old.
- Replace the smoke alarm immediately if it doesn't respond properly when tested.
- Smoke alarms with nonreplaceable (long-life) batteries are designed to remain effective for up to 10 years. If the alarm chirps, a warning that the battery is low, replace the entire smoke alarm right away.
- For smoke alarms with any other type of battery, replace batteries at least once a year. If the alarm chirps, replace only the battery.

#### **Installing smoke alarms**

- Choose smoke alarms that have the label of a recognized testing laboratory.
- Install smoke alarms inside each bedroom, outside each sleeping area and on every level of the home, including the basement.
- On levels without bedrooms, install alarms in the living room (or den or family room) or near the stairway to the upper level, or in both locations.
- Smoke alarms installed in the basement should be installed on the ceiling at the bottom of the stairs leading to the next level.
- Smoke alarms should be installed at least 10 feet (3 meters) from a cooking appliance to minimize false alarms when cooking.
- Mount smoke alarms high on walls or ceilings (remember, smoke rises). Wall-mounted alarms should be installed not more than 12 inches away from the ceiling (to the top of the alarm).
- If you have ceilings that are pitched, install the alarm within 3 feet of the peak but not within the apex of the peak (four inches down from the peak).
- Don't install sm<mark>ok</mark>e alarms near windows, doors, or ducts where drafts might interfere with their operation.
- Never paint smoke alarms. Paint, stickers, or other decorations could keep the alarms from working.
- For the best protection, interconnect all smoke alarms. When one smoke alarm sounds they all sound. Interconnection can be done using hard-wiring or wireless technology.
- When interconnected smoke alarms are installed, it is important that all of the alarms are from the same manufacturer. If the alarms are not compatible, they may not sound.
- There are two types of smoke alarms ionization and photoelectric. An ionization smoke alarm is generally more responsive to flaming fires, and a photoelectric smoke alarm is generally more responsive to smoldering fires. For the best protection, both types of alarms or combination ionization-photoelectric alarms, also known as dual sensor smoke alarms, are recommended.
- Keep manufacturer's instructions for reference.



#### **Testing smoke alarms**

- Smoke alarms should be maintained according to manufacturer's instructions.
- Test smoke alarms at least once a month using the test button.
- Make sure everyone in the home understands the sound of the smoke alarm and knows how to respond.
- Follow manufacturer's instructions for cleaning to keep smoke alarms working well. The instructions are included in the package or can be found on the internet.
- Smoke alarms with non-replaceable 10-year batteries are designed to remain effective for up to 10 years. If the alarm chirps, warning that the battery is low, replace the entire smoke alarm right away.
- Smoke alarms with any other type of battery need a new battery at least once a year. If that alarm chirps, warning the battery is low, replace the battery right away.
- When replacing a battery, follow manufacturer's list of batteries on the back of the alarm or manufacturer's instructions. Manufacturer's instructions are specific to the batteries (brand and

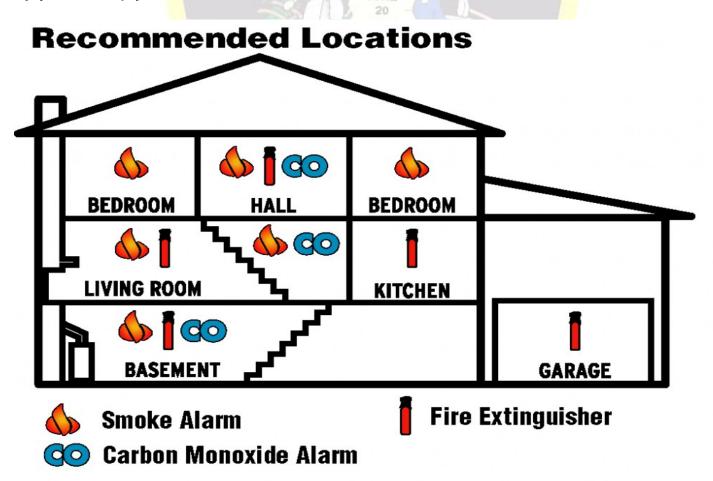
model) that must be used. The smoke alarm may not work properly if a different kind of battery is used.

#### **Interconnected Smoke Alarms**

In a Consumer Product Safety Commission (CPSC) survey of households with any fires, including fires in which the fire department was not called, interconnected smoke alarms were more likely to operate and alert occupants to a fire.1 People may know about a fire without hearing a smoke alarm.

- When smoke alarms (interconnected or not) were on all floors, they sounded in 37% of fires and alerted occupants in 15%.
- When smoke alarms were not on all floors, they sounded in only 4% of the fires and alerted occupants in only 2%.
- In homes that had interconnected smoke alarms, the alarms sounded in half (53%) of the fires and alerted people in one-quarter (26%) of the fires.

1 Michael A. Greene and C<mark>raig</mark> Andres. 2004-2005 National Sample Survey of Unreported Residentia<mark>l Fi</mark>res. U.S. Consumer Product Safety Commission, July 2009.



# Smoke Alarm Safety at Home

Smoke alarms are an important part of a home

fire escape plan. When there is a fire, smoke spreads fast. Working smoke alarms give you early warning so you can get outside quickly.

#### SAFETY TIPS

- INSTALL smoke alarms inside every bedroom, outside each sleeping area and on every level of the home, including the basement.
- Larger homes may need ADDITIONAL smoke alarms to provide enough protection.
- ))) For the best protection, INTERCONNECT all smoke alarms so when one sounds they all sound.
- An IONIZATION smoke alarm is generally more responsive to flaming fires and a PHOTOELECTRIC smoke alarm is generally more responsive to smoldering fires. For the best protection, both types of alarms or combination ionization and photoelectric alarms (also known as dual sensor alarms) are recommended.
- Smoke alarms should be INSTALLED away from the kitchen to prevent false alarms. Generally, they should be at least 10 feet (3 meters) from a cooking appliance.
- >>> REPLACE all smoke alarms when they are 10 years old.

#### FACTS

- (!) Roughly two thirds of home fire deaths happen in homes with no smoke alarms or no working smoke alarms.
- (!) Working smoke alarms cut the risk of dying in reported home fires in half.

AND DON'T FORGET All smoke alarms should be tested at least once a month using the test button





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#### Children and fire safety tips

- Young firesetters cause hundreds of deaths and injuries each year. Preschoolers and kindergartners are most likely to start these fires, typically by playing with matches and lighters, and are most likely to die in them.
- Children experience fire interest. They may ask questions such as how hot is fire or show an
  interest in fire through playing with fire trucks or cooking on a play stove. This is healthy, and it is
  time to begin educating about fire.
- Firestarting happens when children begin to experiment with fire using matches and lighters. Many fires happen when young children are left alone, even for a short period of time, and have access to matches and lighters. Parents must have clear rules and consequences about fire misuse.
- Grown-ups can help keep fire out of the hands of children.
- Store matches and lighters out of children's reach and sight, up high, preferably in a locked cabinet or container.
- Never leave matches or lighters in a bedroom or any place where children may go without supervision.
- Teach young children and school-age children to tell a grown-up if they see matches or lighters. Children need to understand that fire is difficult to control, it is fast and can hurt as soon as it touches you.
- A child with an interest in fire can lead to fire starting and result in repeated firesetting behavior.

- It is important for grown-ups to discourage unsupervised fire starts.
- Never use lighters or matches as a source of amusement for children; they may imitate you.
- Never assign a young child any tasks that involve the use of a lighter or matches (lighting candles, bringing a lighter to an adult to light a cigarette or the fireplace, etc.
- If your child expresses curiosity about fire or has been playing with fire, calmly but firmly explain that matches and lighters are tools for adults only.
- Use only lighters designed with child-resistant features.





Children playing with fire cause hundreds of deaths and injuries each year. Preschoolers and kindergartners are most likely to start these fires, typically by playing with matches and lighters, and are most likely to die in them.

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- If your child expresses curiosity about fire or has been playing with fire, calmly but firmly explain that matches and lighters are tools for adults only.
- Use only lighters designed with child-resistant features.
   Remember, child-resistant does not mean child-proof.



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# Important!

Children and fire are a deadly combination.
Some children play with fire out of curiosity, not realizing its danger.
Troubled children may set a fire as a way of acting out their anger, disappointment or frustration.

If you suspect your child is intentionally setting fires or unusually fascinated with fire, get help. Your local fire department, school, or community counseling agency can put you in touch with trained experts who know how to teach children about fire in an appropriate way.

#### Name of Organization Here

Contact Information Here



#### **Hoarding And Fire Safety**

• Many fire departments are experiencing serious fires, injuries, and deaths as the result of compulsive hoarding behavior. The excessive accumulation of materials in homes poses a significant threat to firefighters fighting fires and responding to other emergencies in these homes and to residents and neighbors. Often, the local fire department will be contacted to help deal with this serious issue. Since studies suggest that between three and five percent of the population are compulsive hoarders, fire departments must become familiar with this issue and how to effectively handle it.

## What is hoarding?

Hoarding is defined as collecting or keeping large amounts of various items in the home due to strong urges to save them or distress experienced when discarding them. Many rooms in the home are so filled with possessions that residents can no longer use the rooms as designed. The home is so overloaded with things that everyday living is compromised.

#### Why do people become hoarders?

 Hoarding is a mental disorder that can be genetic in nature, triggered by traumatic events, or a symptom of another disorder, such as depression, obsessive compulsive disorder, or dementia.
 Studies have found that hoarding usually begins in early adolescence and gets worse as a person ages. It is more common among older adults.

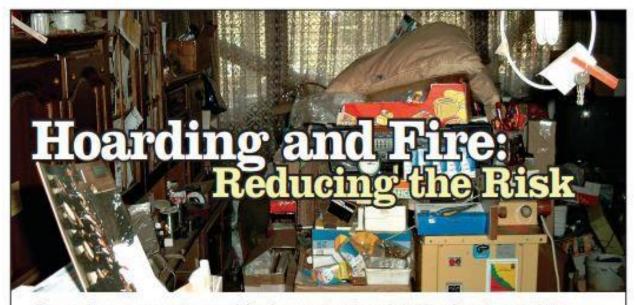
#### Why is hoarding an issue for the fire service?

• Hoarding can be a fire hazard. Many occupants die in fires in these homes. Often, blocked exits prevent escape from the home. In addition, many people who are hoarding are injured when they trip over things or when materials fall on them.

- Responding firefighters can be put at risk due to obstructed exits, falling objects, and excessive fire loading that can lead to collapse. Hoarding makes fighting fires and searching for occupants far more difficult.
- Those living adjacent to an occupied structure can be quickly affected when a fire occurs, due to excessive smoke and fire conditions.

http://www.nfpa.org/public-education/by-topic/safety-in-the-home/hoarding-and-fire-safety





Do you have a person in your life who may be a hoarder? Hoarding is a condition where a person has persistent difficulty discarding personal possessions. The large amount of possessions fill the home and prevent the normal use of the space. Living space becomes cluttered. It may be unusable. Hoarding brings distress and emotional health concerns.

#### WHY HOARDING INCREASES FIRE RISKS

- Cooking is unsafe if flammable items are close to the stove or oven.
- Heating units may be too close to things that can burn. They might also be placed on unstable surfaces.
   If a heater tips over into a pile, it can cause a fire.
- Electrical wiring may be old or worn from the weight of piles. Pests could chew on wires. Damaged wires can start fires.
- Open flames from smoking materials or candles in a home with excess clutter are very dangerous.
- Blocked pathways and exits may hinder escape from a fire.

#### HOW HOARDING IMPACTS FIRST RESPONDERS

- Hoarding puts first responders in harm's way.
- Firefighters cannot move swiftly through a home filled with clutter.
- Responders can be trapped in a home when exits are blocked. They can be injured by objects falling from piles.
- The weight of the stored items, especially if water is added to put out a fire, can lead to building collapse.
- Fighting fires is very risky in a hoarding home. It is hard to enter the home to provide medical care.
   The clutter impedes the search and rescue of people and pets.

# NEPA

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# How Can You Help Reduce the Risk of Fire Injury

- When talking a person who hoards, focus on safety rather than the clutter. Be empathetic. Match the person's language. If they call it hoarding, then you can call it hoarding.
- Help the residents make a home safety and escape plan. Stress the importance of clear pathways and exits. Practice the plan often. Exit routes may change as new items are brought into the home.
- Install working smoke alarms in the home. Test them at least once a month.
- Reach out to community resources. Talk to members of the fire department to alert them of your concerns. They may be able to connect you with members of a hoarding task force for additional help.

#### Name of Organization Goes Here

Contact Information Goes Here



#### **Home Escape Planning**

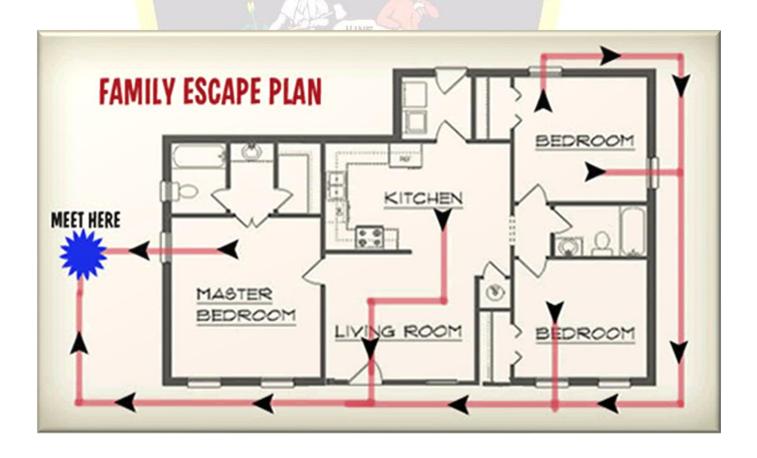
Your ability to get out depends on advance warning from smoke alarms and advance planning.

- Pull together everyone in your household and make a plan. Walk through your home and inspect all possible exits and escape routes. Households with children should consider drawing a floor plan of your home, marking two ways out of each room, including windows and doors. Also, mark the location of each smoke alarm. For easy planning, download NFPA's escape planning grid (PDF, 1.1 MB). This is a great way to get children involved in fire safety in a non-threatening way.
- A closed door may slow the spread of smoke, heat and fire. Install smoke alarms in every sleeping room, outside each sleeping area and on every level of the home. NFPA 72, National Fire Alarm Code® requires interconnected smoke alarms throughout the home. When one sounds, they all sound.
- Everyone in the household must understand the escape plan. When you walk through your plan, check to make sure the escape routes are clear and doors and windows can be opened easily.
- Choose an outside meeting place (i.e. neighbor's house, a light post, mailbox, or stop sign) a safe distance in front of your home where everyone can meet after they've escaped. Make sure to mark the location of the meeting place on your escape plan.
- Go outside to see if your street number is clearly visible from the road. If not, paint it on the curb or install house numbers to ensure that responding emergency personnel can find your home.

- Have everyone memorize the emergency phone number of the fire department. That way any member of the household can call from a neighbor's home or a cellular phone once safely outside.
- If there are infants, older adults, or family members with mobility limitations, make sure that someone is assigned to assist them in the fire drill and in the event of an emergency. Assign a backup person too, in case the designee is not home during the emergency.
- If windows or doors in your home have security bars, make sure that the bars have emergency release devices inside so that they can be opened immediately in an emergency. Emergency release devices won't compromise your security but they will increase your chances of safely escaping a home fire.
- Tell guests or visitors to your home about your family's fire escape plan. When staying overnight at other people's homes, ask about their escape plan. If they don't have a plan in place, offer to help them make one. This is especially important when children are permitted to attend "sleepovers" at friends' homes. See NFPA's "Sleepover fire safety for kids" fact sheet.
- Be fully prepared for a real fire: when a smoke alarm sounds, get out immediately. Residents of high-rise and apartment buildings may be safer "defending in place."
- Once you're out, stay out! Under no circumstances should you ever go back into a burning building. If someone is missing, inform the fire department dispatcher when you call. Firefighters have the skills and equipment to perform rescues.
- Practice your home fire escape plan twice a year, making the drill as realistic as possible.
- Make arrangements in your plan for anyone in your home who has a disability.
- Allow children to master fire escape planning and practice before holding a fire drill at night when they are sleeping. The objective is to practice, not to frighten, so telling children there will be a drill before they go to bed can be as effective as a surprise drill.
- It's important to determine during the drill whether children and others can readily waken to the sound of the smoke alarm. If they fail to awaken, make sure that someone is assigned to wake them up as part of the drill and in a real emergency situation.
- If your home has two floors, every family member (including children) must be able to escape from the second floor rooms. Escape ladders can be placed in or near windows to provide an additional escape route. Review the manufacturer's instructions carefully so you'll be able to use a safety ladder in an emergency. Practice setting up the ladder from a first floor window to make sure you can do it correctly and quickly. Children should only practice with a grown-up, and only from a first-story window. Store the ladder near the window, in an easily accessible location. You don't want to have to search for it during a fire.

- Always choose the escape route that is safest the one with the least amount of smoke and heat –
  but be prepared to escape under toxic smoke if necessary. When you do your fire drill, everyone in
  the family should practice getting low and going under the smoke to your exit.
- Closing doors on your way out slows the spread of fire, giving you more time to safely escape.
- In some cases, smoke or fire may prevent you from exiting your home or apartment building. To prepare for an emergency like this, practice "sealing yourself in for safety" as part of your home fire escape plan. Close all doors between you and the fire. Use duct tape or towels to seal the door cracks and cover air vents to keep smoke from coming in. If possible, open your windows at the top and bottom so fresh air can get in. Call the fire department to report your exact location. Wave a flashlight or light-colored cloth at the window to let the fire department know where you are located.

http://www.nfpa.org/public-education/by-topic/safety-in-the-home/escape-planning/basic-fire-escape-planning





Large apartment buildings are built to keep people safe from fire. Fire alarm systems detect smoke and fire. They will warn residents of danger.

- The fire alarm system has many parts that work together. Some of the parts are out of sight. In a fire, smoke detectors sense smoke and activate the fire alarm. Manual fire alarm boxes allow people to sound the alarm. When the fire alarm system activates it will warn residents of danger.
- Everyone in the building should know where to find the manual fire alarm boxes (alarm boxes on the wall with a pull bar). Most are found within five feet of an exit door.
- If there is a fire, pull the manual fire alarm box handle on your way out of the building.
- When the system senses smoke or fire, a loud horn or tone will sound. Everyone must know what this sound means and how to react.
- Leave the building right away if you hear the sound of a fire alarm. Stay outside at your meeting place until you are told the building is safe.
- Treat every fire alarm as an emergency. When the alarms sounds, get outside.
- Only use a manual fire alarm box if there is smoke or fire. Frequent false alarms are a problem. People might ignore the sound if they hear too many false alarms. False alarms also put firefighters at risk.

# Escape 101

Know the locations
of all exit stairs from
your floor. If the
nearest one is blocked
by fire or smoke, you
may have to use another exit.

If the fire alarm sounds feel the door before opening. If it is hot, use another way out. If it is cool, use this exit to leave.

Close all doors behind you as you leave. Take the key to your apartment in case you are not able to get out of the building.

If fire or smoke is blocking all exits, return or stay in your apartment. Keep the door closed. Cover cracks around the door with towels or tape. Call 9-1-1 and let the fire department know you are trapped. Signal from the window by waving a flashlight or light-colored cloth.

Meet with your landlord or building manager to learn about the fire safety features and plans in your building.

Name of Organization Here

Contact Information Here



Your Source for SAFETY Information

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## **APRIL**

Theme: Only you can prevent forest fires

Week 1 - Outdoor Burning

Week 2 – Wildfire Preparedness

Week 3 – Lightning Safety

Week 4 - Pet Fire Safety

#### **Events:**

Partnership with the Kanawha County Humane Society - April 24th

Educator Tip: How do you spread the word about safety efforts? Through Partnerships, teaming up with other departments, agencies and community groups sends your message wide and far. Pooling resources can be beneficial to everyone, that includes time.

#### National Fire Service History

- April 25, 1854 NY Bldg Collapse (11 FF's killed)
- April 9, 1894 Bldg Collapse, WI (6 FF's Killed)
- April 12, 1908 2,800 Bldgs Burn, MA (17,000 homeless)
- April 18, 1924 Chicago Wall Collapse (8 FF's Killed)
- April 20, 1926 Milwaukee Sawdust Explosion (6 FF's Killed)
- April 21, 1930 Ohio Penitentiary fire (322 deaths)
- April 22, 1940 MS Rhythm Nightclub Fire (200+ deaths)
- April 16, 1947 Texas Ship & Plant Explosion (27 FF& 39 civilians killed)
- April 4, 1956 Wall Collapse, NY (6 FF's Killed)
- April 19, 1995 Oklahoma City Bombing (168 Killed)
- April 17, 2013 West Fertilizer Company Explosion (4 citizens, 11 FF'skilled)

#### West Virginia Fire Service History

• April 17th, 1924 – the town of Franklin burned, devastating the town's business district.

The Pendleton County seat of Franklin has flourished along the South Branch of the Potomac River since the 1790s. But on the evening of April 17, 1924, it suffered a severe setback when the town's business district was devastated by fire.

The blaze started in the offices of the Pendleton Times newspaper and spread quickly after flames reached several barrels of gas and oil. The fire was difficult to fight because the town's reservoir was dry and, to make matters worse, strong winds fanned the flames and kept the fire raging. It's said the winds carried burning debris two and a half miles down river, starting smaller blazes. The main fire burned out of control for a couple of hours before the winds shifted, forcing the flames towards the river. Some parts of the town continued to burn into the next day.

By the time the fire had been completely extinguished, virtually all of Franklin's business district had been destroyed. None of the town's approximately 500 residents were killed, but 19 families were left homeless.

Damages were estimated at a half million dollars. People in surrounding communities flocked to Franklin to view the ruins. There were so many visitors that town officials became concerned about looting and called in the state police for protection.

Within a couple of days, Franklin rebounded. Tents were put up for shelter and one resident allowed his home to be used for public business. The post office was located in the basement of the home and the Farmers' Bank was set up in the living room. The Franklin Bank conducted business in the parsonage of a local church. The fire of 1924 wrought much destruction in Franklin, but within six years, the town's business section had been completely rebuilt.

(From WVCulture.org)



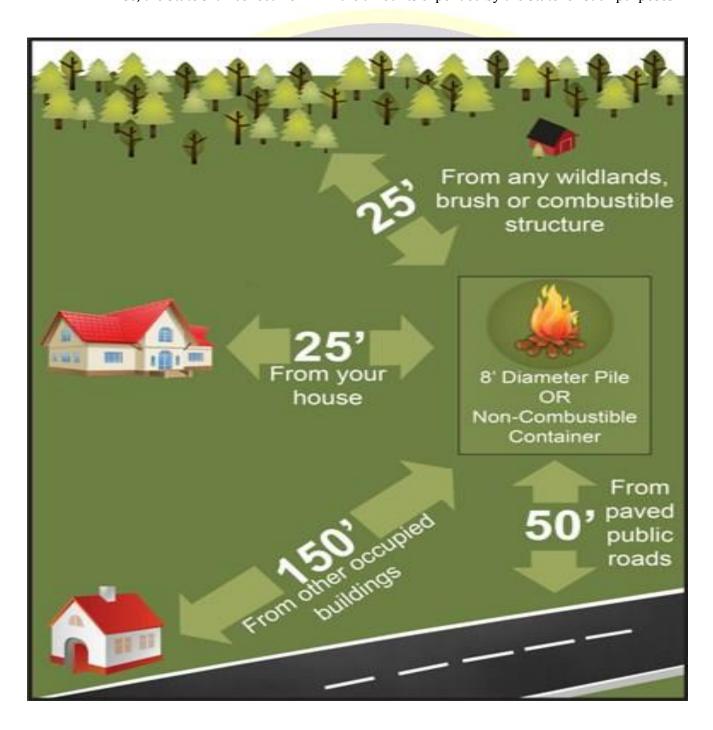
## **OUTDOOR BURNING**

*From the WV Division of Forestry:* 

The periods of each year between March 1 and May 31, inclusive, and October 1 and December 31, inclusive, are hereby designated as Forest Fire Seasons.

- No person shall during ANY such fire season, except between the hours of 5:00 p.m. and 7:00 a.m. prevailing time, set on fire or cause to be set on fire any forest land, or any grass, grain, stubble, slash, debris, or other inflammable materials. Any fire set during this time shall be extinguished prior to 7:00 a.m. prevailing time. Such prohibition of fires between 7:00 a.m. and 5:00 p.m. prevailing time shall not be construed to include (1) small fires set for the purpose of food preparation, or providing light or warmth around which all grass, brush, stubble, or other debris has been removed for a distance of ten feet from the fire, and (2) burning which may be conducted at any time when the ground surrounding the burning site is covered by one inch or more of snow.
- No burning may be done unless all inflammable material has been removed from around the material to be burned as a safety strip for a distance which insures that the fire will not escape and which is not less than 10 feet. If fire escapes beyond the safety strip, the person responsible shall be guilty of misdemeanor.

- Before leaving ANY fire for ANY period of time, it must be totally extinguished.
- Commercial permits to burn during the prohibited periods may be issued by the Division of Forestry.
- All sawmills, power shovels, or an engine or machine capable of throwing sparks must be provided with an adequate spark arrestor if operating on land subject to fire by any cause.
- All inflammable waste disposal areas on ANY land must annually have removed all grass, brush, debris and other inflammable material adjacent to such disposal areas to provide adequate protection to prevent the escape of fire to adjacent lands.
- The State shall recover from the person or persons, firms or corporations whose negligence or whose violations of any provisions of this article cause ANY fire at ANY time on any grass or forest land the amount expended by the State.
- A landowner must take all practicable means to suppress ANY fire on his property. If he fails to do so, the State shall collect from him the amounts expended by the State for such purposes.





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# **WILDFIRES**

#### Facts and figures

- According to NIFC, 2016 saw more than 67,000 wildfires burn over 5.5 million acres. The south led the nation with nearly 1.6 million acres burned.
- A total of 4,312 structures were destroyed by wildfires in 2016, including more than 3,000 homes and more than 70 commercial buildings. Tennessee accounted for the highest number of structures lost in one state in 2016 with more than 2,000 residences and 53 commercial structures destroyed; California was second with 754 residences and 12 commercial structures destroyed.
- There were 1,251 large or significant wildfires reported in 2016 (40,000 acres or more).

- The National Association of State Foresters (NASF) cites more than 72,000 U.S. communities are at risk from wildfires.
- Many people do not realize how often local (municipal or county) fire departments around the country are called to smaller brush, grass and forest fires.
- During 2007-2011, local fire departments responded to an estimated average of 334,200 brush, grass, and forest fires per year. This translates to 915 such fires per day.
- Only 10% of these fires were coded as forest, woods, or wildland fires;
- Two of every five (41%) were brush or brush and grass mixtures;
- More than one-third (37%) were grass fires; and 13% were unclassified forest, brush or grass fires or unclassified natural vegetation fires.
- In three-quarters (76%) of the brush, grass, and forest fires handled by local fire departments, less than an acre burned. Only 4% burned more than ten acres. Fires in forests tended to be larger than other vegetation fires. Only three-fifths (59%) of the forest fires were less than an acre, while 9% consumed more than ten acres.

To check out active wildfires happening right now across the United States just go to:

http://www.nfpa.org/public-education/by-topic/wildfire-and-seasonal-fires/wildland-fires/where-are-the-wildfires-burning

#### Before a wildfire threatens your area...

*In and around your home* 

• Clear leaves and other debris from gutters, eaves, porches and decks. This prevents embers from igniting your home.

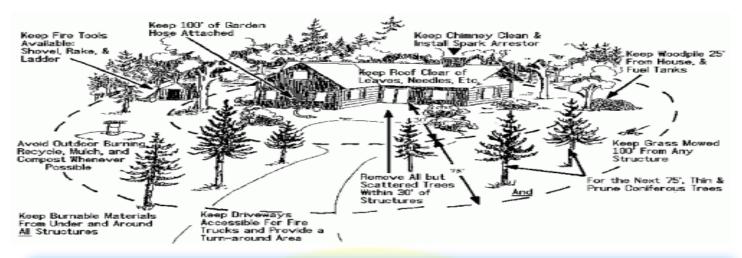
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- Remove dead vegetation and other items from under your deck or porch, and within 10 feet of the house. Learn more about the basics of defensible space on the Firewise website.
- Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- Remove flammable materials (firewood stacks, propane tanks) within 30 feet of your home's foundation and outbuildings, including garages and sheds. If it can catch fire, don't let it touch your house, deck or porch.
- Wildfire can spread to tree tops. Prune trees so the lowest branches are 6 to 10 feet from the ground.
- Keep your lawn hydrated and maintained. If it is brown, cut it down to reduce fire intensity. Dry grass and shrubs are fuel for wildfire.
- Don't let debris and lawn cuttings linger. Dispose of these items quickly to reduce fuel for fire.
- Inspect shingles or roof tiles. Replace or repair those that are loose or missing to prevent ember penetration.
- Cover exterior attic vents with metal wire mesh no larger than 1/8 inch to prevent sparks from entering the home
- Enclose under-eave and soffit vents or screens with metal mesh to prevent ember entry.

#### Creating an emergency plan

- Assemble an emergency supply kit and place it in a safe spot. Remember to include important documents, medications and personal identification.
- Develop an emergency evacuation plan and practice it with everyone in your home.
- Plan two ways out of your neighborhood and designate a meeting place.







#### LIGHTNING SAFETY

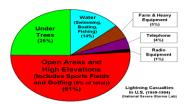
#### Facts & figures

- During 2007-2011, U.S. local fire departments responded to an estimated average of 22,600 fires per year that were started by lightning. These fires caused an average of nine civilian deaths, 53 civilian injuries, and \$451 million in direct property damage per year.
- Only 19% of reported lightning fires occurred in homes, but these accounted for 86% of the associated lightning fire civilian deaths, 76% of the associated injuries and 68% of the direct property damage.
- Almost two-thirds of the lightning fires reported to local fire departments were outside vegetation fires.
- In addition to the fires reported to local fire departments, federal and state wildland firefighting agencies reported an average of 9,000 wildland fires started by lightning to the National Interagency Fire Center per year in 2008-2012. These fires tended to be larger than fires started by human causes. The average lightning-caused fire burned 402 acres, nine times the average of 45 acres seen in human-caused wildland fires.
- Over the 10 years from 2003-2012, 42 U.S. firefighters were killed as a result of lightning-caused fires. These deaths include fatalities during fireground activities, as well as responding or returning to fires. Four of these deaths occurred at structure fires, and the remaining 38 were killed as the result of wildland fires. Eleven of these deaths occurred in helicopter crashes.
- In addition to causing fires, lightning is dangerous on its own. Data from the National Weather Service show that in 2008-2012, an average of 29 people per year died as a result of lightning strikes. The most common location for these deaths was outside or in an open area. The average number of lightning flashes per square mile varies considerably by state, as does the death rate from lightning incidents. See http://www.lightningsafety.noaa.gov for more information.

• In 2003, the last year for which data about fire department responses to non-fire incidents is currently available, 10,200 non-fire lightning strikes were reported to local fire departments. The majority of these, 62%, occurred at home properties.









#### PET FIRE SAFETY

According to reports, many fires are caused by pets, especially when are left alone in the house. NFPA's latest numbers show that local fire departments responded to an average of 700 home structure fires per year in which animals, including pets and wild animals, contributed to the fire's start. A few of the causes include:

- Pets bumping into, turning on or knocking over cooking equipment, lamps, candles or space heaters
- Birds, rodents or other animals building nests in chimneys, or in or on top of equipment
- Animals chewing on cords or wiring

As pet owners, we can take steps to help prevent fires and plan for unexpected emergencies. Important actions to consider are:

- Keeping pets (who are naturally curious!) away from stoves and countertops where they can knock over, bump into or turn on cooking equipment
- Using battery-operated, flameless candles that look just as nice as real candles but won't catch fire if knocked over
- Making sure pets stay away from lamps, spaceheaters and other heat-producing appliances
- Keeping an eye on your pets to make sure they don't chew through electrical cords; inspecting cords regularly and calling a professional if you notice a problem

It's also important to know that in the event of a fire, you should never go back inside for your pets. Instead, tell firefighters that you have a pet trapped inside. They are better equipped and trained to handle these emergency situations.

And what if you live in the wildland/urban interface where forest and wildland fires are more prevalent? And your pets include other animals like horses and cows? Then you know that in the event of a wildfire you may have to quickly evacuate. Planning ahead, like including pets in your family's evacuation plan and creating their own pet evacuation kit is key to helping you stay calm and organized during a stressful time.



### Is Your Dog's Evacuation Kit Ready For an Emergency?

- Accessible carrier for each pet
- A clear, current photo of each pet
- Photocopies of ownership documentation
- 4. A list of important phone numbers
- 5. Water
- 6. Food

- Harness with a ring for a leash
  - 8. Medications
  - Pee pads or newspapers
- Paper towels and wipes
  - Tranquilizers or calming remedies
    - 12. Comfort items

from your friends at dwgster

STATE FIRE MARSHAL EST. 1909

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# PET EVACUATION DE LA FIRE DE LA F

 Keep a 'Pet Alert' sticker in a front door or window so emergency crews know how many pets are inside the house.

Stay.com

- Keep your pets on the main level of your house while you are gone, it makes it easier for them to escape and/or be rescued in event of a fire.
- Fire may occur while you are not home, find a neighbor who would be able to evacuate your pets for you.
   Make sure they are familiar with your house & your pet's favorite hiding places.
- Create a 'Pet Evacuation Kit' including extra collar, leash, tags, bag of food, collapsible water dish, water bottle, waste bags, blanket, and copies of your pet's records & ID tags.
   Keep this kit close to a door, & time permitting, grab it on your way out of the house so you don't waste precious moments looking for these items.



HE WOULDN'T LEAVE YOU.
PLEASE DON'T LEAVE HIM.



MAKE ARRANGEMENTS FOR YOUR ANIMALS' CARE BEFORE A NATURAL DISASTER OCCURS-DON'T WAIT

PETA

#### **MAY**

Theme: Arson Awareness

Week 1 - Arson Awareness

Week 2 - Sky Lantern Information

Week 3 – Building Safety/Fire Sprinklers

Week 4 – Hotel/Motel Safety

**Events:** 

National Arson Awareness Week

Educator Tip: Attend Neighborhood Watch meetings throughout your community. Present the leading fire causes for that specific area and provide tips on how those types of fires can be prevented.

Artifacts: Have you been to a house fire recently where you found artifacts that clearly show the thermal layers? Sooty smoke alarms with no batteries? A burned door with charring and heavy soot at the top and less damage at the bottom? There are safety messages you can develop based on each of these artifacts. Messages about the charred door include keeping bedroom doors closed at night, the engineering of the door, why you need smoke alarms inside and outside of bedrooms, why you should stay low and crawl, using secondary exits, etc.

National Fire Service History

- May 4, 1901 Jacksonville FL Conflagration (1,700 buildings burn)
- May 6, 1925 Atlanta Floor Collapse (6 FF's Deaths)
- May 28, 1977 KY Beverly Hills Supper Club Fire (165 deaths)

STATE FIRE MARSHAL EST. 1909 During 2007-2011, an estimated 282,600 intentional fires were reported to U.S. fire departments each year, with associated annual losses of 420 civilian deaths, 1,360 civilian injuries, and \$1.3 billion in direct property damage. Outside or unclassified fires accounted for three-quarters (75%) of these incidents, while 18% involved structures, and 7% were vehicle fires.



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#### Facts and figures

#### STATE FIRE

Based on 2007-2011 annual averages: Although three of every four intentional fires are started outside most of the intentional fire casualties and property loss resulted from structure fires.

- Intentionally set home structure fires are more likely to be set in the afternoon and evening hours, between 3 pm and midnight.
- The bedroom is the leading area of origin for intentional home structure fires, while bathrooms are the leading areas in public properties such as stores, offices or schools.

#### CHAPTER 61. CRIMES AND THEIR PUNISHMENT. ARTICLE 3. CRIMES AGAINST PROPERTY.

§61-3-1. Burning, etc., of a dwelling or outbuilding; first degree arson; penalty; definitions. (a) Any person who willfully and maliciously sets fire to or burns, or who causes to be burned, or who aids, counsels,

procures, persuades, incites, entices or solicits any person to burn, any dwelling, whether occupied, unoccupied or vacant, or any outbuilding, whether the property of himself or herself or of another, shall be guilty of arson in the first degree and, upon conviction thereof, be sentenced to the penitentiary for a definite term of imprisonment which is not less than two nor more than twenty years. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of two years of his or her sentence or the minimum period required by the provisions of section thirteen, article twelve, chapter sixty-two of this code, whichever is greater.

- (b) As used in subsection (a) of this section: (1) "Dwelling" means any building or structure intended for habitation or lodging, in whole or in part, regularly or occasionally, and shall include, but not be limited to, any house, apartment, hotel, dormitory, hospital, nursing home, jail, prison, mobile home, house trailer, modular home, factory-built home or self-propelled motor home; (2) "Outbuilding" means any building or structure which adjoins, is part of, belongs to, or is used in connection with a dwelling, and shall include, but not be limited to, any garage, shop, shed, barn or stable.
- §61-3-2. Burning, etc., of other buildings or structures; second degree arson; penalty. Any person who willfully and maliciously sets fire to or burns, or who causes to be burned, or who aids, counsels, procures, persuades, incites, entices or solicits any person to burn, any building or structure of any class or character, whether the property of himself or herself or of another, not included or prescribed in the preceding section, shall be guilty of arson in the second degree and, upon conviction thereof, be sentenced to the penitentiary for a definite term of imprisonment which is not less than one nor more than ten years. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of one year of his or her sentence or the minimum period required by the provisions of section thirteen, article twelve, chapter sixty-two of this code, whichever is greater.
- §61-3-3. Burning personal property of another of the value of five hundred dollars or more; third degree arson; penalty. Any person who willfully and maliciously sets fire to or burns, or who causes to be burned, or who aids, counsels, procures, persuades, incites, entices or solicits any person to burn, any personal property of any class or character, of the value of not less than five hundred dollars, and the property of another person, shall be guilty of arson in the third degree and, upon conviction thereof, be sentenced to the penitentiary for a definite term of imprisonment which is not less than one nor more than three years. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of one year of his or her sentence.
- §61-3-4. Attempt to commit arson; fourth degree arson; penalty. (a) Any person who willfully and maliciously attempts to set fire to or burn, or attempts to cause to be burned, or attempts to aid, counsel, procure, persuade, incite, entice or solicit any person to burn, any of the buildings, structures, or personal property mentioned in the foregoing sections, or who commits any act preliminary thereto, or in furtherance thereof, shall be guilty of arson in the fourth degree and, upon conviction thereof, be sentenced to the penitentiary for a definite term of imprisonment which is not less than one nor more than two years, or fined not to exceed two thousand five hundred dollars, or both. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of one year of his or her sentence.
- (b) The placing or distributing of any inflammable, explosive or combustible material or substance, or any device in any building, structure or personal property mentioned in the foregoing sections, in an arrangement or preparation with intent to eventually, willfully and maliciously, set fire to or burn, or to cause to be burned, or to aid, counsel, procure, persuade, incite, entice or solicit the setting fire to or burning of any building, structure or personal property mentioned in the foregoing sections shall, for the purposes of this section, constitute an attempt to burn that building, structure or personal property.

§61-3-5. Burning, or attempting to burn, insured property; penalty. Any person who willfully and with intent to injure or defraud an insurer sets fire to or burns, or attempts so to do, or causes to be burned, or who aids, counsels, procures, persuades, incites, entices or solicits any person to burn, any building, structure or personal property, of any class or character, whether the property of himself or herself or of another, which shall at the time be insured or which is believed by the person committing an act prohibited by this section to be insured by any person against loss or damage by fire, shall be guilty of a felony and, upon conviction thereof, be sentenced to the penitentiary for a definite term of imprisonment which is not less than one nor more than five years or fined not to exceed ten thousand dollars, or both. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of one year of his or her sentence or the minimum period required by the provisions of section thirteen, article twelve, chapter sixty-two of this code, whichever is greater.

§61-3-6. Willfully, unlawfully and maliciously setting fire on lands; penalty. If any person willfully, unlawfully and maliciously sets fire to any woods, fence, grass, straw or other thing capable of spreading fire on lands, he or she shall be guilty of a felony and, upon conviction, shall be sentenced to the penitentiary for a definite term of imprisonment which is not less than one year nor more than five years or fined not to exceed five thousand dollars, or both. He or she shall, moreover, be liable to any person injured thereby, or in consequence thereof, for double the amount of damages sustained by such person. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of one year of his or her sentence or the minimum period required by the provisions of section thirteen, article twelve, chapter sixty-two of this code, whichever is greater.

#### §61-3-7. Causing injuries during an arson-related crime; penalties.

- (a) Any person who violates the provisions of sections one, two, three, four, five or six of this article, which violation causes bodily injury, but does not result in death, to any person shall be guilty of a felony, and upon conviction thereof, shall be sentenced to the penitentiary for a definite term of imprisonment which is not less than two nor more than ten years, or fined not more than five thousand dollars, or both. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of two years of his or her sentence or the minimum period required by the provisions of section thirteen, article twelve, chapter sixty-two of this code, whichever is greater.
- (b) Any person who violates the provisions of sections one, two, three, four, five or six of this article, which violation causes serious bodily injury which maims, disfigures, or disables any person, but does not result in death, shall be guilty of a felony and, upon conviction thereof, shall be sentenced to the penitentiary for a definite term of imprisonment which is not less than three nor more than fifteen years, or fined not more than ten thousand dollars, or both. A person imprisoned pursuant to this section is not eligible for parole prior to having served a minimum of three years of his or her sentence or the minimum period required by the provisions of section thirteen, article twelve, chapter sixty-two of this code, whichever is greater.

§61-3-8. Recovery of costs incurred in fighting fires caused by arson. Any person convicted of any felony enumerated in section one, two, three, four, five or six of this article may be ordered to reimburse any fire department or company for the costs expended to control, extinguish and suppress the arson fire, and all reasonable costs associated therewith, including but not limited to, costs for the personal services rendered by any employees of any fire department or company, and operating costs of equipment and supplies used to control, extinguish or suppress the fire.

#### **Youth Firesetting Facts**

Fires started by children playing accounted for an average of 56,300 fires with associated losses of 110 civilian deaths, 880 civilian injuries, and \$286 million in direct property damage per year between 2005 and 2009.

Younger children are more likely to set fires in homes, while older children and teenagers are more likely to set fires outside.

Males are more likely to engage in fireplay than females, as 83 percent of home structure fires and 93 percent of outside or unclassified fires were set by boys when age was coded as a factor.

Lighters were the heat source in half (50 percent) of child-playing fires in homes.

A child's bedroom continues to account for 40 percent of child-playing home fires.

USFA's National Fire Incident Reporting System (NFIRS) data indicate, where age was cited as a factor in a fire's ignition by lighters or matches, that 37 percent of these fires were started by juveniles aged 10-17.

Between 2007 and 2011, an average of 49,300 fires involving playing with fire were reported to U.S. municipal fire departments per year. These fires caused annual averages of 80 civilian deaths, 860 civilian injuries, and \$235 million in property damage.

#### Facts & figures

- Younger children were more likely to set fires in homes, while older children and teenagers are more likely to set fires outside
- Males were are more likely to engage in fire-play than females, as 83% of home structure fires and 93% of outside or unclassified fires were set by boys when age was coded as a factor
- Lighters were the heat source in just over half (52%) of fires in homes involving play
- 39% of home fires involving play began in a bedroom

#### **Playing with Fire**

The subject of this report is fires caused by playing with fire. Most of these fires are started by children involved with fireplay. This report addresses the size of the problem (overall and by property class) and examines how, when, and where these fires occurred, the primary heat sources involved in these fires, the items ignited, age characteristics of involved persons, and loss data (deaths, injuries, and property damage).

#### **Intentional Fires**

An analysis on intentional fires reported to municipal fire departments. Includes information on structure, vehicle, and outside intentional fires, when and where these fires occur, and arrest and clearance information.



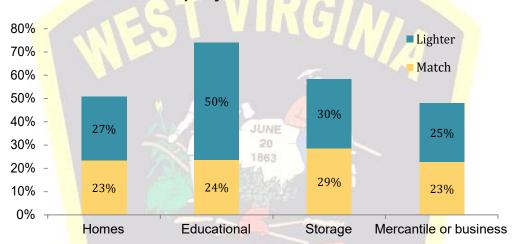


#### Intentional Fires Fact Sheet

During 2007-2011, an estimated 282,600 intentional fires were reported to U.S. fire departments each year, with associated annual losses of 420 civilian deaths, 1,360 civilian injuries, and \$1.3 billion in direct property damage: These fires included:

- 211,500 outside or unclassified fires
- 50.800 structure fires
- 20,400 vehicle fires

#### Percent of Intentional Structure Fires Started by Matches or Lighters 2007-2011 By Property Use



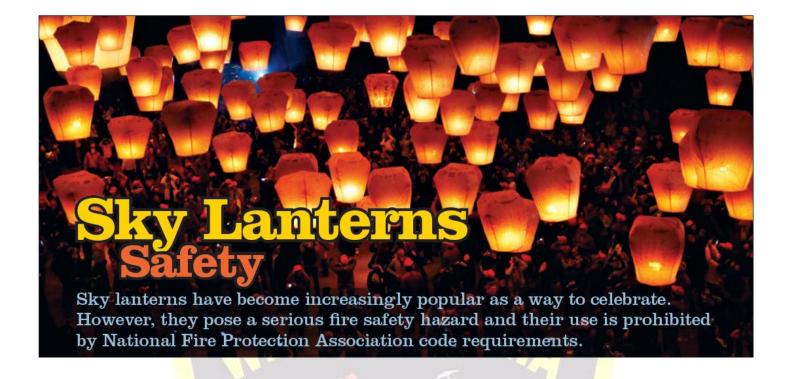
- Despite representing 18% of all intentional fires, intentional structure fires account for 92% of civilian deaths
- Intentionally set home structure fires are more likely to be set in the afternoon and evening hours, between 3 p.m. and midnight
- Three-fifths (60%) of outside or unclassified intentional fires began with a match or lighter

#### **IDENTIFYING INTENTIONAL FIRES**

#### What is an "intentional" fire?

The fire statistics in this analyses use detailed data from the U.S. Fire Administration's National Fire Incident Reporting Systems (NFIRS). The definition of "intentional" in NFIRS 5.0 specifically includes "deliberate misuse of heat source or a fire of an incendiary nature."

Additional resources, including a free downloadable presentation on preventing arson can be found at <a href="https://www.nfpa.org/arson">www.nfpa.org/arson</a>



- >>> The lanterns are made of oiled rice paper with a bamboo frame, materials that can easily catch on fire.
- ))) A candle or wax fuel cell is used with the device.
- ))) The lit flame heats the inside of the lantern, causing it to rise into the air.
- ))) Once lit and airborne, it can travel over a mile in distance.
- Wind can affect the sky lantern, blowing the sides, forcing the hot air out and sending the flaming lantern back to the ground.
- ))) These lanterns have the potential to cause fires.
- A flaming lantern can drop onto a rooftop, field, trees or power lines before the flame is fully extinguished.
- ))) A destructive fire can result when a flaming lantern reaches the ground during dry conditions.
- Sky lanterns should not be used under any circumstances.

#### **Recent fires**

A **sky lantern** landed on the canopy of a country club, igniting the canopy.

Two sky lanterns landed in forested land impacting valuable wildfire firefighting resources.

#### What happens when the event is not typical?

As with any situation in our daily lives, you are ultimately in control of your fate to a great degree. Thus, you are largely responsible for your own personal safety based upon the circumstances. Detailed procedures, verbal instructions and even past experience may not be adequate to help you deal with extraordinary events. RED, the universal color for danger can be used to help you in such circumstances.

**React:** Take any indication of smoke, fire or other potentially threatening situation seriously. Activation of building fire alarms, smell of smoke, visual indication of flames, warning from other occupants, arrival of the fire department are some of the attributes that may signal an imminently dangerous situation.

**Evaluate:** You must judge the level of threat. This includes confirming evidence or presence of smoke or fire; judging the conditions in your immediate area; self-judgment of your physical ability to relocate or evacuate; evaluation of the needs and abilities of others who may need assistance; consider additional information being received.

**Decide:** There are only two, but difficult choices:

- 1. Follow your plan and immediately leave the building. **OR**
- 2. Follow your plan and stay where you are, or descend to the designated level below the fire floor and be prepared to take protective/defensive action. In this case, anticipated action may include alerting the fire department of your location, seal doors, windows and vents that lead into your space. Do not break out the windows. Be prepared to wait for a considerable time period (at least one hour) if you contemplate rescue by the fire department.

This process is iterative. It is not only done at the first hint of a dangerous situation. It is a process that the individual must manage and it needs to be repeated until the danger has passed or, if total building evacuation is in order, when that action is completed.

#### Home fire sprinklers

Because fire sprinklers react so quickly, they can dramatically reduce the heat, flames, and smoke produced in a fire. Properly installed and maintained fire sprinklers help save lives.

Fire sprinklers have been around for more than a century, protecting commercial and industrial properties and public buildings. What many people don't realize is that the same life-saving technology is also available for homes, where roughly 85% of all civilian fire deaths occur.



#### Facts about home fire sprinklers

Automatic sprinklers are highly effective and reliable elements of total system designs for fire protection in buildings. According to an American Housing Survey, 4.6% of occupied homes (including multi-unit) had sprinklers in 2009, up from 3.9% in 2007, and 18.5% of occupied home built in the previous four years had sprinklers. **Source:** U.S. Experience with Sprinklers

- 85% of all U.S. fire deaths occur in the home.
- Home fire sprinklers can control and may even extinguish a fire in less time than it would take the fire department to arrive on the scene.
- Only the sprinkler closest to the fire will activate, spraying water directly on the fire. In 84% of home fires where the sprinklers operate, just one sprinkler operates.
- If you have a fire in your home, the risk of dying is cut by about one-third when smoke alarms are present (or about half if the smoke alarms are working), while automatic fire sprinkler systems cut the risk of dying by about 80%.
- In a home with sprinklers, the average property loss per fire is cut by about 70% (compared to fires where sprinklers are not present.)
- The cost of installing home fire sprinklers averages \$1.35 per sprinklered square foot.

#### **Hotel Motel Safety**

#### Be safe when traveling

- Choose a hotel/motel that is protected by both smoke alarms and a fire sprinkler system.
- When you check in, ask the front desk what the fire alarm sounds like.
- When you enter your room, review the escape plan posted in your room.
- Take the time to find the exits and count the number of doors between your room and the exit. Make sure the exits are unlocked. If they are locked, report it to management right away.
- Keep your room key by your bed and take it with you if there is a fire.
- If the alarm sounds, leave right away, closing all doors behind you. Use the stairs never use elevators during a fire.
- If you must escape through smoke, get low and go under the smoke to your exit.

#### If you can't escape ...

- Shut off fans and air conditioners.
- Stuff wet towels in the crack around the doors.
- Call the fire department and let them know your location.
- Wait at the window and signal with a flashlight or light colored cloth.

U.S. fire departments responded to an estimated average of 3,700 structure fires per year at hotel or motel properties between 2006-2010. These fires caused average annual losses of 12 civilian deaths, 143 civilian injuries, and \$127 million in direct property damage each year.

#### **Facts & figures**

- In an average year, one of every 12 hotels or motels reported a structure fire.
- Smoking materials started 10% of the fires in hotels and motels; these fires caused 79% of the deaths.
- Only 8% of hotel and motel fires were intentionally set, but these accounted for 12% of the associated property damage.
- Twelve percent of fires in hotels and motels began in a bedroom; these fires caused 72% of the associated civilian deaths and 31% of civilian injuries.
- When sprinklers were present and operated, 91% of sprinklers in hotel or motel fires operated effectively when present.



Vacations and business travel make hotels and motels our home away from home. It is just as important to be prepared and know what you would do in a hotel/motel emergency as it is in your own home.

#### BE SAFE WHEN TRAVELING!

- ))) Choose a hotel/motel that is protected by both smoke alarms and a fire sprinkler system.
- When you check in, ask the front desk what the fire alarm sounds like.
- When you enter your room, review the escape plan posted in your room.
- Take the time to find the exits and count the number of doors between your room and the exit. Make sure the exits are unlocked. If they are locked, report it to management right away.
- Keep your room key by your bed and take it with you if there is a fire.
- ))) If the alarm sounds, leave right away, closing all doors behind you. Use the stairs — never use elevators during a fire.
- ii) If you must escape through smoke, get low and go under the smoke to your exit.

#### IF YOU CAN'T ESCAPE...

SHUT off fans and air conditioners.

STUFF wet towels in the crack around the doors.

CALL the fire department and let them know your location.

WAIT at the window and signal with a flashlight or light colored cloth.

#### FACTS

- On average, one of every
   12 hotels or motels
   reported a structure fire
   each year.
- The majority of hotel fire deaths result from fires that started in the bedroom.
- Cooking equipment is the leading cause of hotel/ motel fires.



#### June

#### Theme: Fire Safety and Safe Summer Fun

Week 1: Marina/Boating Electrical safety

Week 2: Outdoor Grilling Safety

Week 3: Campfire Safety

Week 4: Fireworks Safety

**Events:** 

Junior Firefighter Camp

Educator Tip: Fire Safety starts with a simple conversation, get your fire department involved in that conversation at community gatherings, ask to speak at a monthly rotary club or board of education meeting. Make handouts available to people as they walk in or are leaving, so they'll have something to remind them about the information you presented. You can also use these settings to meet people who can make a difference in your community.

#### National Fire Service History

- June 11, 1805 Detroit, MI Destroyed by Conflagration
- June 5, 1853 Oswego, NY Great Fire
- June 19, 1867 Philadelphia Wall Collapse (9 FF deaths)
- June 5, 1946 Chicago LaSalle Hotel Fire (61 deaths)
- June 17, 1972 Boston Hotel Fire (9 FF's Killed)
- June 7, 1997 Chelsea, MA Conflagration (8 Alarms)
- June 16, 2003 Memphis Family Dollar Fire (2 FFs Killed)
- June 18, 2007 Charleston, SC Super Sofa Fire (9 FFs Killed)
- June 30, 2013 Arizona Wildfire (19 FFs Killed)

#### West Virginia Fire Service History:

• June 5, 1915: The Old Mill at Rock Springs Park in Chester burned, killing four young people.

MARSHAL EST. 1909



**Electrical Safety Tips for Marina Owners** 

Unknowingly, many swimmers and boat and marina operators place themselves in the face of danger by swimming near electric-powered boats and docks. This innocent act of fun can turn tragic as electric shock drowning occurs each year. Raising awareness among marina and boat operators can help prevent electric shock drowning or other electrical injuries while out on the water. Additionally, there are electrical safety precautions boaters must adhere to to ensure the electrical safety of the entire marina.

#### Learn how to keep marinas and docks safe with these tips from the Electrical Safety Foundation International (ESFI):

- Do not allow swimming in or around your marina. While you cannot prevent individuals from acting on their own accord, posting signs prohibiting swimming is an easy way to help prevent an electric shock drowning incident. Place warning signs in prominent areas around your marina such as: "ELECTRIC SHOCK HAZARD RISK: SWIM AT YOUR OWN RISK."
- Have your dockside electrical system (pedestal) inspected and updated by a qualified electrician annually.
   If you are thinking of having a new one installed, have it installed by a qualified electrician to be sure it meets the NEC and NFPA safety codes and standards.
- Have Ground Fault Circuit Interrupters (GFCI) installed on the dock and test them once a month. Use
  portable "UL- Marine Listed" GFCIs when using electricity near water. They will decrease the chances of
  electrically related injuries and deaths.
- Require boat owners and renters to use only "UL- Marine Listed" shore or marine power cords, plugs, receptacles, and extension cords that have been tested by Underwriters Laboratories (UL), Canadian Standards Association (CSA) or ETL SEMKO (ETL). They are specifically designed to keep people safe when using them near water. Never use cords that are frayed or damaged or that have had the prongs removed or altered. Damaged cords exposed to water could result in electric shock drowning or other electrically-related injuries.
- If you question the safety of your dock's electrical system, immediately turn off the power supply at the electrical panel and do not turn it back on until it has been checked by a certified marine electrician.
- Immediately fix all electrical safety hazards and maintain routine inspections to prevent problems before they occur.
- Never stand or swim in water when turning off electrical devices or switches.
- Plan annual safety events at your marina where owners can learn about boat and dock electrical safety and have their boats inspected by licensed electricians.



## BOAT AND MARINA ELECTRICAL SAFETY DEVICE REFERENCE GUIDE

#### What is a circuit breaker?

A circuit breaker is an automatically operated electrical switch designed to protect an electrical circuit from damage caused by an overload or short circuit. Circuit breakers were designed to detect faulty electrical conditions within electrical systems and interrupt current flow.

#### What is a GFCI?

GFCIs are electrical safety devices that trip electrical circuits when they detect ground faults or leakage currents. These outlets or circuit breakers prevent shock and electrocutions by quickly shutting off power to the circuit if the electricity flowing into the circuit differs by even a slight amount from that returning.

#### What is a portable GFCI?

While most GFCIs are outlets, a portable GFCI requires no special knowledge or equipment to install. It adds flexibility in using receptacles that are not protected by GFCIs. Portable GFCIs should only be used on a temporary basis and should be tested prior to every use.

#### What is an ELCI?

Equipment Leakage Circuit Interrupters (ELCIs) are Circuit Breakers that provide protection from current leakage and overcurrent. ELCIs measure current flow within electrical wires and immediately switches electricity off if an imbalance of current flow is detected. ELCIs provide whole-boat protection.

#### What is a shore power cord or marine power cord?

A shore power cord is a cord designed specifically for use near water to provide shore side electrical power to ships and boats while its main and auxiliary engine is turned off.

#### What is a pedestal or dockside electrical system?

A pedestal or dockside electrical system is a power box designed with corrosion-resistant materials to provide electricity safely on the dock meeting safety standards for use in marine environments.





For more information on boat and marina electrical safety visit: www.esfi.org



Boats can be a great source of summer fun and leisure. But, boaters, swimmers, and marina staff must be aware of dangers in and around the water. Electrical hazards and carbon monoxide (CO) bring unique risks to the boating world. Learn to protect people and pets from these dangers.

#### **ELECTRICAL SAFETY**

- Never allow swimming near the boat, marina, or launching ramp. Residual current could flow into the water from the boat or the marina's wiring. This can put anyone at risk of electrical shock drownings (ESD).
- Be sure your boat is well maintained. Have it inspected each year. Ask a qualified marine electrician to do this job.
- 33) Ground fault circuit interrupters (GCFIs) and equipment leakage circuit interrupters (ELCIs) should be installed and tested monthly. Run tests to find out if electrical current is leaking from the boat.
- Only use cords intended for marine use. Never use household cords near water.
- M Know where your main breakers are on both the boat and the shore power source. This will help you respond quickly in an emergency.

#### CARBON MONOXIDE SAFETY

- Poorly tuned engines produce more CO. Keep your engine properly maintained. Follow manufacturer's instructions for service.
- Proper ventilation for engine and generator exhaust vents must be clear and pipes should be inspected for leaks.
- Set into fresh air right away and get help if you feel symptoms of CO poisoning. These include headache, fatigue, confusion, dizziness, nausea, or seizures. The symptoms can be similar to seasickness. Assume it is CO exposure until you are sure the boat is safe.
- Do not swim near the boat's exhaust vents. CO accumulates there.
- Install CO alarms inside your boat. Test CO alarms before each trip.
- Choose a CO alarm that is listed by a qualified testing laboratory.
- If the CO alarm sounds, move to a fresh air location right away.



#### Your Source for SAFETY Information

NFPA Public Education Division - 1 Battery march Park, Quincy, MA 02169

#### KNOW THE RISKS

Electrical shook drownings can coour when marina electrical systems leak electrical current into the water. Boats can also serve as the source of an electrical leakage. Leakage can cause a shook that can injure, disable, or kill a person.

Carbon Monoxide is a gas you cannot see, taste, or smell. It is often called the "invisible killer." CO is created when fuels such as gasoline, diesel, or propane do not burn fully. CO is also produced when wood or charcoal is burned.

Sources of CO on your boat may include engines, gas generators, and cooking ranges. Space and water heaters can also be sources of CO. CO can collect anywhere in or around a boat. The gas is harmful to both people and to pets.

#### FACT

CO can remain in or around your boat at unsafe levels even if the engine has been turned off.

Name of Organization Here

Contact Information Here



#### 5 Tips for Boat Owners:

- Swimming Safety Never allow swimming near the boat, marina, or launching ramp. Residual current could flow into the water from the boat, or the marina's wiring, potentially putting anyone in the water at risk of Electric Shock Drowning.
- Put It to the Test Be sure your boat is properly maintained and consider having it inspected annually.
   GFCIs and ELCIs should be tested monthly to ensure functionality. Conduct leakage testing to determine if electrical current is escaping the vessel.
- Use the Right Too<mark>l Never use household cords near water. Use only portable GFCIs or shore power cords (including "Y" adapters) that are "UL- Marine Listed" when using electricity near water.</mark>
- Know Your Surroundings Know where your main breaker(s) are located on both the boat and the shorepower source so that you can respond quickly in case of an emergency. Be aware of any potential electrical hazards by checking for nearby power lines before boating, fishing, or swimming.
- Learn the Code Regularly have your boat's electrical system inspected and upgraded by a certified marine electrician to be sure it meets your local and state NEC, NFPA, and ABYC safety codes and standards.

#### Safety Device Guide:

What is a circuit breaker?

Circuit breakers are designed to detect faulty electrical conditions within electrical systems and interrupt current flow.

What is a Ground Fault Circuit Interrupter (GFCI)?

These outlets or circuit breakers prevent shock and electrocutions by quickly shutting off power to the circuit if the electricity flowing into the circuit differs by even a slight amount from that returning. *What is a portable GFCI?* 

A portable GFCI requires no special knowledge or equipment to install. Portable GFCIs should only be used on a temporary basis and should be tested prior to every use.

What is an Equipment Leakage Circuit Interrupter?

ELCIs measure current flow within electrical wires and immediately switches electricity off if an imbalance of current flow is detected.

What is a shore power cord or marine power cord?

Shore power cords and Y-adapter cords are designed specifically for use near water to provide shore side electrical power to ships and boats while its main and auxiliary engine is turned off.

What is a power pedestal or dockside electrical system?

A power pedestal or dockside electrical system is a power box designed with corrosion-resistant materials to provide electricity safely on the dock.

#### *Electric Shock Drowning:*

Electric Shock Drowning occurs when a body makes contact with electrified water and becomes a conductor of electricity leading to the possibility of complete loss of muscle control, rapid or irregular heart beat (ventricular fibrillation), and even electric shock death.

#### Common Causes:

Docks and boats can carry sources of electricity. Faulty wiring or the use of damaged electrical cords and other devices can cause the surrounding water source to become energized.

#### How to Avoid:

Obey all "No swimming signs".

NEVER swim near a marina.

NEVER swim near a boat while it is running.

If you feel any tingling sensations while in the water, tell someone and swim back in the direction from which you came. Immediately report it to the dock or marina owner.

#### *How to Respond:*

Do not enter the water!

Call 911 or VHF Channel 16 immediately

If possible turn off all nearby power sources

Extreme caution should be taken when removing the victim from the water.

If the victim does not have a pulse and not breathing begin CPR or use (AED) Artificial Electrical Defibrillator if available.

#### Marina Safety Checklist:

Familiarize yourself with your marina and help prevent electrical hazards. Use this checklist to talk with the marina manger or owner about potential safety concerns.

- Are any cords cracked or frayed?
- Is there corrosion or other damage on any of the power pedestals?
- When was the marina last inspected? Inspections should be performed yearly.
- What edition of the codes (NEC, NFPA, ABYC) does the marina comply with?
- What type of ground fault protection does the marina provide?



## WARNING: PREVENT ELECTRIC SHOCK DROWNING FOR MARINA AND DOCK OWNERS AND OPERATORS

Unknowingly, many swimmers and boat operators place themselves in the face of danger by swimming near electric-powered boats and docks. This innocent act of fun can turn tragic as electric shock drowning occurs each year. Help prevent electric shock drowning or other electrical injuries with these tips from ESFI.

Do not allow swimming in or around your marina.

1

ESF<sub>1.org</sub>

Circuit Interrupte Circuit Inter

> Never use cords that are frayed or damaged or that have had the prongs removed or altered

4



For more information on boat and marina electrical safety visit: www.esfi.org



No matter what outdoor event you organize this year, food will surely play a major role in the festivities, and when you're away from home, portable grills will most likely be at the center of all the activities. Fortunately, by following some simple safety tips and guidelines you, your family and friends can reduce the risk of injuries.

Consider the following as you head out to the nearest campground, park or beach:

- Certain areas have restrictions regarding campfires and grills. Check if your area has any fire restrictions in place. Choose only those areas where fires are permitted.
- Check the fire danger rating in your area to determine if weather, or other factors make it dangerous to light a fire.

#### To start charcoal for cooking:

- There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to ignite the charcoal using newspaper as a fuel
- If you use a charcoal chimney, use a long match to avoid burning your fingers when lighting the paper
- If you choose to use lighter fluid, use only fluid intended for charcoal grills
- Never add charcoal starter fluid to coals or kindling that has already been ignited
- Never use gasoline or any other flammable liquid except charcoal starter or lighter fluid to start a charcoal fire

#### While cooking:

- Place the grill well away from overhanging branches according to the manufacturer's instructions
- Place the grill a safe distance from lawn games, play areas and foot traffic
- Keep children and pets, and anything that can burn like food wrappers, an oven mitt or towel, at least 3-feet away from open flames and the grill
- Use long-handled grilling tools to give the chef plenty of clearance from heat and flames
- Have an adult present at all times when a campfire or grill is burning. Keep the fire small and never leave a fire unattended!

#### To dispose of charcoal after cooking:

- Before going to sleep or leaving the area, douse the fire with water and make sure the area is cool to the touch.
- Five percent of outside or unclassified grill fires occurred in a lawn, field or open area
- Empty the coals into a metal container with a tight-fitting lid that is used only to collect coals
- Place the container outside and away from anything that can burn

- Never empty coals directly into a trash can
- Store the charcoal starter fluid out of reach of children and away from heat source

Three out of five households own a gas grill, according to NFPA's latest "Home Grill Fires" report, which translates to a lot of tasty meals. But it also means there's an increased risk of home fires. In 2009 – 2013, an annual average of 8,900 home fires involved grills, hibachis or barbecues, and close to half of all injuries involving grills were due to thermal burns. While nearly half of the people who grill do so year-round, July is the peak month for grilling fires followed by May, June and August.

#### SAFETY TIPS

- Propane and charcoal BBQ grills should only be used outdoors.
- The grill should be placed well away from the home, deck railings and out from under eaves and overhanging branches.
- Weep children and pets at least three feet away from the grill area.
- Xeep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- ))) Never leave your grill unattended.
- Always make sure your gas grill lid is open before lighting it.

#### CHARCOAL GRILLS

- There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to start the charcoal using newspaper as a fuel.
- If you use a starter fluid, use only charcoal starter fluid. Never add charcoal fluid or any other flammable liquids to the fire.
- Weep charcoal fluid out of the reach of children and away from heat sources.
- There are also electric charcoal starters, which do not use fire. Be sure to use an extension cord for outdoor use.
- When you are finished grilling, let the coals completely cool before disposing in a metal container.



Your Source for SAFETY Information

IFPA NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169

#### 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, turn off the gas tank and grill. 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, immediately get away from the grill and call the fire department. Do not move the grill.

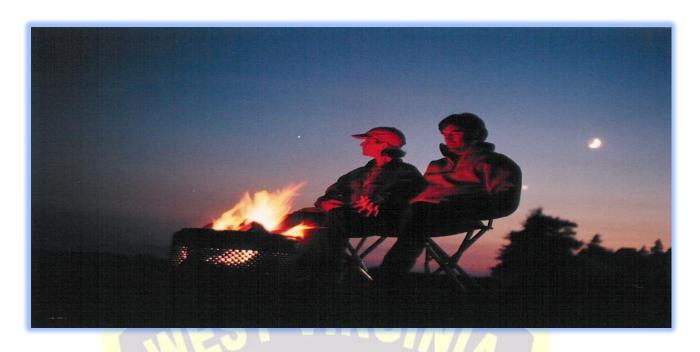
If the flame **goes out**, turn the grill and gas off and wait at least **15 minutes** before re-lighting it.

#### FACTS

- 1 July is the peak month for grill fires.
- Roughly half of the injuries involving grills are thermal burns.







#### **Campfire Safety**

Basic campfire safety should be a skill for everyone heading out on a camping adventure. Did you know that more than four out of every five forest fires are started by people? You don't want to start a wildfire. Not only because of the disastrous consequences a wildfire can have for the nature and nearby settlement but also because a wildfire could trap you.

Remember the campfire safety rules:

- Build a fire only on bare rock, sand or mineral soil clear all vegetation away from your fireplace.
- Use stones to surround your campfire.
- Keep your campfire small.
- Keep water nearby for throwing on the fire if it gets out of control.
- Never leave a campfire unattended

#### When putting out your campfire:

- Drown the campfire with water.
- Make sure all embers, coals, and sticks are wet.
- Feel all materials with your bare hand. Everything including the stones surrounding the campfire should be cool to the touch.
- When you think you are done add more water take the time to completely put out your campfire.
- If you don't have water at hand, or if it is scarce, then use dust and dirt to put out your campfire.
   Check your fireplace even more carefully before leaving.
   (from wilderness-survival-skills.com)





#### Fireworks Safety

Fireworks during the Fourth of July are as American as apple-pie, but did you know that two out of five fires reported on that day are started by fireworks, more than for any other cause? The good news is you can enjoy your holiday and the fireworks, with just a few simple safety tips:

#### Proceed with caution!

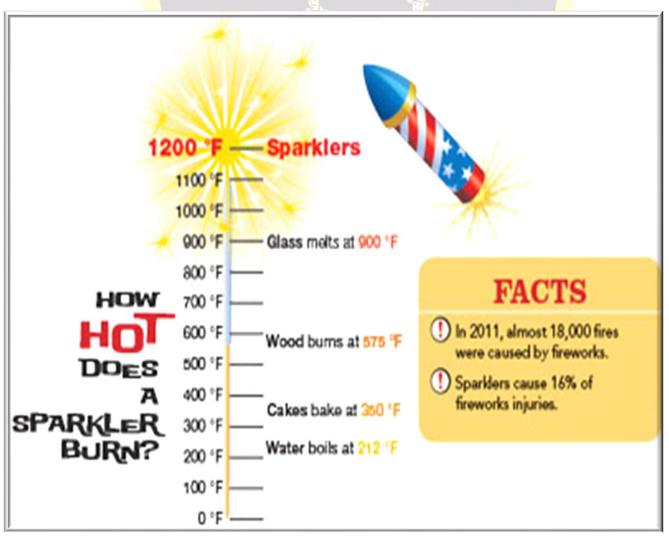
- Leave fireworks to the professionals. Do not use consumer fireworks.
- The safest way to enjoy fireworks is to attend a public display conducted by trained professionals.
- After the firework display, children should never pick up fireworks that may be left over, they may still be active.

#### Fireworks by the numbers

- From 2009-2013, U.S. fire departments responded to an average of 18,500 fires caused by fireworks. These fires included 1,300 structure fires, 300 vehicle fires and 16,900 outside and other fires. An estimated two people were killed in these fires.
- In 2014, U.S. hospital emergency rooms treated an estimated 10,500 people for fireworks related injuries; 51% of those injuries were to the extremities and 38% were to the head. These injury estimates were obtained or derived from the <u>Consumer Product Safety Commission's 2014 Fireworks Annual Report by Yongling Tu and Demar Granados.</u>
- The risk of fireworks injury is highest for young people ages 5-9, followed by children 10-19.
- More than one-quarter (28%) of fires started by fireworks in 2009-2013 were reported on July 4th. Almost half (47%) of the reported fires on the Fourth of July were started by fireworks.

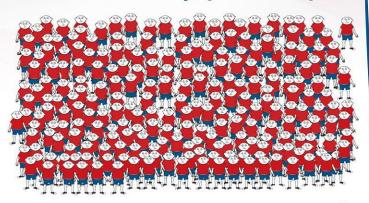






# HANCES -

**230** people on average go to the emergency room every day with fireworks-related injuries in the month around the July 4th holiday.



#### **Fireworks Safety Tips**

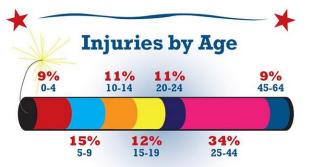
- Never allow **children** to play with or ignite fireworks.
- ★ Never try to re-light or pick up fireworks that have not ignited fully.
- ★ Keep a bucket of water or a garden hose handy in case of fire or other mishap.
- \* Make sure fireworks are **legal** in your area before buying or using them.
- ★ Light fireworks one at a time, then move back quickly.
- ★ More Fireworks Safety Tips www.cpsc.gov/fireworks

Injuries by Fireworks Type\*



\*These percents do not account for how many products are used.

**Public Display** 









Source: U.S. Consumer Product Safety Commission 2013 Fireworks Annual Report

#### July

Theme: Youth And Fireworks Safety

Week 1: Kids And Fireworks Safety

Week 2: Escape Planning

Week 3: Stop, Drop And Roll

Week 4: Matches And Lighters

**Events:** 

National Pet Fire Safety Day

Educator Tips: Reach out to the local media anytime you are having an event. Getting a reporter to cover your event only adds to the number of people you could potentially reach. Establish a relationship with reporters in your area could even lead to future speaking or educational opportunities.

#### National Fire Service History:

- July 12, 1919 Philadelphia Bldg Collapse (6 FF Deaths)
- July 6, 1944 CT Circus Tent Fire (168 Deaths)
- July 29, 1956 TX Refinery Fire (19 FF's Killed)
- July 5, 1973 Kingman, AZ Gas Fire (12 FF's Killed)
- July 23, 1984 IL Refinery Fire (10 FF's Killed)
- July 1, 1988 Hackensack, NJ Collapse (5 FF's Killed)
- July 6, 1994 Storm King Mt Wildfire (14 FF's Died)

#### WV Fire Service History:

• July 23, 2015: Fire destroys historic buildings in Harper's Ferry commercial district, causing millions of dollars in damages. Some of the buildings dated back to before the Civil War.

STATE FIRE MARSHAL EST. 1909



#### **Kids And Fireworks Safety**

How To Use Legal Fireworks Safely

- Children should never use fireworks without adult supervision.
- Make sure children keep sparklers away from hair, face, and clothing.
- Sparklers that have bamboo sticks are cooler:

Even sparklers can reach 1,800° F (982°C). They should only be used outside and with close adult supervision. Sparklers that have bamboo stems stay cooler than ones with metal stems.

- Always use fireworks outside and away from the house, on a hard flat level surface. This surface should be fireproof and free from leaves, grass, or other debris.
- Have a hose and bucket of water nearby when fireworks are being used.
- Light one firework at a time, and do not put the firework into any glass or metal container.
- Make sure all people in the area are aware that fireworks are being used.
- Keep spectators at a safe distance and point the fireworks away from people and homes. Fireworks can catch a roof on fire if they land on it.

- Never hold any consumer firework in your hand or have your body over the firework while you are lighting it.
- Wear eye protection, such as safety glasses, while you are setting off the fireworks.
- Light one firework at a time.
- Never pick up a dud or relight a dud. Leave it lying on the ground, wait 15 minutes, and then douse it in a bucket of water.
- Never pick up used fireworks. Used fireworks can be hot even if they are not smoldering.
- Douse all used fireworks and duds in a bucket of water before putting them in the trash.
- Have the fire department and emergency management system telephone number readily available before beginning to use fireworks.
- Have a first aid kit available should anyone get injured by using fireworks.

#### Pets And Animals Do Not Like Fireworks As Much As You Do

- Pets and other animals have sensitive ears and could be frightened by the loud explosions from fireworks.
- Keep pets away from fireworks and do not expose them to the loud noises of a fireworks display.
- Pets can panic at the noises and bright flashes of lights causing them to run out of doors, jump

- from windows, break tethers, and leap fences.
- Pets should be kept inside so they do not run away, get lost, or get injured. (courtesy American Pyrotechnics Safety & Education Foundation)



## Fireworks Safety Top Ten Tips

- Brace your fireworks with concrete blocks to prevent them from tipping over. (You're in Maine – everyone has concrete blocks.)
- 2. Shoot fireworks off in a wide open area with lots of room
- 3. Always place the fireworks on a flat level hard surface, like pavement or compacted gravel.
- 4. Fireworks placed on a grass lawn unsecured will most likely tip over.
- Have a responsible designated "Shooter" make sure everyone is at a safe distance before starting. A minimum of 200' is recommend. Keep children as far away as possible.
- 6. Many fireworks have effects that are best viewed from a distance. Stay back.
- 7. Shoot fireworks off one at a time.
- Keep the fireworks separated from each other when shooting.
- Never have any part of your body over the firework unit.
- Light fuse and get away Quickly.





#### **Escape Planning**

Your ability to get out depends on advance warning from smoke alarms and advance planning.

- Pull together everyone in your household and make a plan. Walk through your home and inspect all
  possible exits and escape routes. Households with children should consider drawing a floor plan of your
  home, marking two ways out of each room, including windows and doors. A closed door may slow the
  spread of smoke, heat and fire. Install smoke alarms in every sleeping room, outside each sleeping area and
  on every level of the home.
- Everyone in the household must understand the escape plan. When you walk through your plan, check to make sure the escape routes are clear and doors and windows can be opened easily.
- Choose an outside meeting place (i.e. neighbor's house, a light post, mailbox, or stop sign) a safe distance in front of your home where everyone can meet after they've escaped. Make sure to mark the location of the meeting place on your escape plan.
- Go outside to see if your street number is clearly visible from the road. If not, paint it on the curb or install house numbers to ensure that responding emergency personnel can find your home.
- Have everyone memorize the emergency phone number of the fire department. That way any member of the household can call from a neighbor's home or a cellular phone once safely outside.
- If there are infants, older adults, or family members with mobility limitations, make sure that someone is assigned to assist them in the fire drill and in the event of an emergency. Assign a backup person too, in case the designee is not home during the emergency.
- If windows or doors in your home have security bars, make sure that the bars have emergency release devices inside so that they can be opened immediately in an emergency. Emergency release devices won't compromise your security but they will increase your chances of safely escaping a home fire.
- Tell guests or visitors to your home about your family's fire escape plan. When staying overnight at other people's homes, ask about their escape plan. If they don't have a plan in place, offer to help them make one. This is especially important when children are permitted to attend "sleepovers" at friends' homes.
- Be fully prepared for a real fire: when a smoke alarm sounds, get out immediately. Residents of high-rise and apartment buildings may be safer "defending in place."
- Once you're out, stay out! Under no circumstances should you ever go back into a burning building. If someone is missing, inform the fire department dispatcher when you call. Firefighters have the skills and equipment to perform rescues.

#### Putting your plan to the test

- Practice your home fire escape plan twice a year, making the drill as realistic as possible.
- Make arrangements in your plan for anyone in your home who has a disability.

- Allow children to master fire escape planning and practice before holding a fire drill at night when they are sleeping. The objective is to practice, not to frighten, so telling children there will be a drill before they go to bed can be as effective as a surprise drill.
- It's important to determine during the drill whether children and others can readily waken to the sound of the smoke alarm. If they fail to awaken, make sure that someone is assigned to wake them up as part of the drill and in a real emergency situation.
- If your home has two floors, every family member (including children) must be able to escape from the second floor rooms. Escape ladders can be placed in or near windows to provide an additional escape route. Review the manufacturer's instructions carefully so you'll be able to use a safety ladder in an emergency. Practice setting up the ladder from a first floor window to make sure you can do it correctly and quickly. Children should only practice with a grown-up, and only from a first-story window. Store the ladder near the window, in an easily accessible location. You don't want to have to search for it during a fire.
- Always choose the escape route that is safest the one with the least amount of smoke and heat but be prepared to escape under toxic smoke if necessary. When you do your fire drill, everyone in the family should practice getting low and going under the smoke to your exit.
- Closing doors on your way out slows the spread of fire, giving you more time to safely escape.
- In some cases, smoke or fire may prevent you from exiting your home or apartment building. To prepare for an emergency like this, practice "sealing yourself in for safety" as part of your home fire escape plan. Close all doors between you and the fire. Use duct tape or towels to seal the door cracks and cover air vents to keep smoke from coming in. If possible, open your windows at the top and bottom so fresh air can get in. Call the fire department to report your exact location. Wave a flashlight or light-colored cloth at the window to let the fire department know where you are located.

To increase fire safety for **apartment dwellers**, the National Fire Protection Association offers the following guidelines:

# **Know the plan**

• Make sure that you're familiar with your building's evacuation plan, which should illustrate what residents are supposed to do in the event of an emergency. The evacuation plan should be posted in places where all residents can see and review it, and the building management should hold a fire drill with occupants at least once a year. Most states also require that buildings periodically test their fire safety systems as well. Be sure to participate when your building drills take place. When looking for an apartment or high-rise home, look for one with an automatic sprinkler system. Sprinklers can extinguish a home fire in less time that it takes for the fire department to arrive.

1863

#### Practice is key

• Whether your building has one floor or 50, it's essential that you and your family are prepared to respond to a fire alarm. Identify all of the exits in your building and if you are using an escape planning grid, mark them on your escape plan. Make sure to mark the various stairways too, in case one is blocked by fire.

### Never use the elevator

• In case of fire, always use the stairs to get out, never the elevator. Make sure to practice using the stairs as part of your escape plan. If someone in your family has difficulty climbing down steps, make sure to incorporate a contingency for this into your plan.

#### Stay low

• Smoke from a fire is toxic and deadly no matter what kind of structure you live in. When you hold your fire drill, everyone in the family should practice getting low and going under the smoke to the exit. In the event of a fire, if both stairwells are filled with smoke, stay in your apartment and wait for the firefighters.

### Seal yourself in for safety

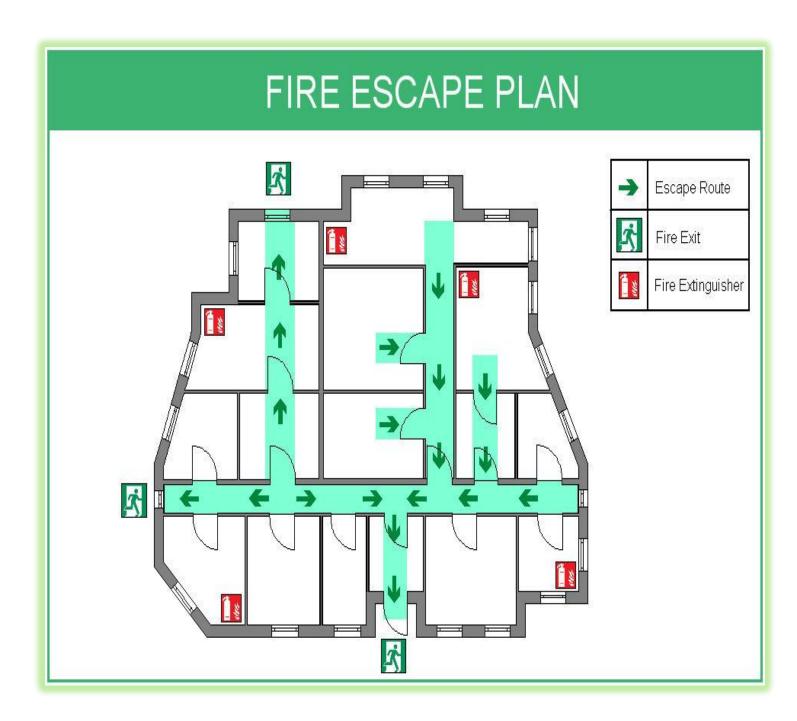
• If you can't exit an apartment building due to smoke or fire in the hallway, call the fire department to report your exact location and gather in a room with a window to await their arrival. Close all doors between you and the fire. Use duct tape or towels to create a seal around the door and over air vents in order to keep smoke from coming in.

### Stay by the window

• If possible, you should open your windows at the top and the bottom so fresh air can get in. Don't break the window - if smoke enters the room from outside the building, you won't be able to protect yourself.

# Signal to firefighters

• Wave a flashlight or light colored cloth at the window to let the fire department know where you are located.





#### **SAFETY TIPS**

- MAKE a home escape plan. Draw a map of your home showing all doors and windows. Discuss the plan with everyone in your home.
- KNOW at least two ways out of every room, if possible. Make sure all doors and windows leading outside open easily.
- HAVE an outside meeting place (like a tree, light pole or mailbox) a safe distance from the home where everyone should meet.
- PRACTICE your home fire drill at night and during the day with everyone in your home, twice a year.
- PRACTICE using different ways out.
- TEACH children how to escape on their own in case you can't help them.
- CLOSE doors behind you as you leave.

#### IF THE ALARM SOUNDS...

- If the smoke alarm sounds, GET OUT AND STAY OUT. Never go back inside for people or pets.
- If you have to escape through smoke, GET LOW AND GO under the smoke to your way out.
- CALL the fire department from outside your home.

# FACTS

- (1) According to an NFPA survey, only one of every three American households have actually developed and practiced a home fire escape plan.
- (!) While 71% of Americans have an escape plan in case of a fire, only 47% of those have practiced it.
- (!) One-third of American households who made an estimate thought they would have at least 6 minutes before a fire in their home would become life-threatening. The time available is often less. And only 8% said their first thought on hearing a smoke alarm would be to get out!

Your Source for SAFETY Information www.nfpa.org/education NFPA Public Education Division • 1 Batterymarch Park; Quincy, MA 02169



# Stop, Drop And Roll

Each year more than 15,000 people are seriously burned when their clothes catch on fire. In more than half of the incidents, flammable liquids or vapors were present on, or around the person's clothing. But it can happen in many ways. A person's loose sleeve may catch fire on a hot stove. Someone may be working with gasoline or some other flammable liquid and then light a cigarette. They might spray lighter fluid on a smoldering barbecue fire and the resulting flames could catch their clothes on fire. When a person's clothing catches on fire, action must be instinctive and immediate. There is NO time to think.

The one thing you should never do is run.

To minimize a burn injury when your clothes catch fire, **STOP**, **DROP** and **ROLL**. Burns are among the most painful of injuries and the third leading cause of unintentional deaths in the United States. The hands, groin, face and lungs are at the greatest risk because they are delicate structures and easily injured. The healing process is slow and painful, resulting in enormous personal suffering.

Certain types of clothing are less flammable and resist flames more than other types of clothing. Heavier clothing, fabrics with a loose fit or fluffy pile will ignite more readily than tight-fitting, dense fabric clothing. Synthetic fibers, such as nylon, once ignited, melt and burn causing serve burns. Natural fibers, such as cotton and wool, tend to burn more slowly than synthetic fibers. However, fibers that combine both synthetic and natural fibers may be of greater hazard than either fabric alone. Curtains and draperies can be sprayed with flame retardants to reduced their rate of burning. However, these chemicals should not be applied to clothing.

The principles of STOP, DROP and ROLL are simple:

- Stop, do not run, if your clothes catch on fire.
- Drop to the floor in a prone position.
- Cover your face with your hands to protect it from the flames.
- Roll over and over to smother the fire. Don't stop until the flames have been extinguished.

If you are near someone whose clothing catches on fire, be sure to stop them from running and make them STOP, DROP and ROLL.

(courtesy Town Of Landis, NC FD)





# **Matches And Lighters**

Each year children are injured and some may even die because they play with matches or lighters. It is also likely that some of these children will have gained access to matches or such like because someone else was negligent.

Follow these common sense guidance to improve your childrens fire safety with matches and lighters Curiosity:

- Children are fascinated with flame and fire in general. It is often this natural curiosity that leads to tragedy. Never use a flame from matches, lighters or candles to pacify a child, or attract a child's attention. It may soothe a crying baby, but you are likely to be creating a problem for the future.
- Never use a candle as a nightlight for a baby or a small child. A small battery operated or plug-in, low output lamp is more soothing and more practical.

# Teaching:

- Teach your children from an early age that matches and lighters are not toys.
- Make them aware of what to do if they discover any matches, lighters either in the home or outside... do not touch, tell an adult about them, Ask the adult to put them away somewhere safe.

#### What you can do:

- Keep matches and lighters well above the level of reach of any small child. A curious child may well climb on a chair, remember this when finding a safe place.
- Smokers should not leave their smoking materials in full view. Children will pursue their curiosity and attempt to 'steal' matches and lighters.
- Select a secure place well out of the reach of children for keeping matches and lighters. Pre-school
  children can reach drawer height. Others will climb onto furniture and fixtures to reach
  cupboards.
- Avoid kitchen appliances that require naked flames to operate. Gas cookers should be lit with igniters.
- If you have matches or lighters in your home make regular checks of your children's bedrooms and play areas. These are likely places that children experiment with fire.

(courtesy Norfolk Fire And Rescue Service)







# **August**

# Theme: Fire Safety For Seniors And Those With Disabilities

Week 1: Fire Safety For Older Adults

Week 2: Portable Oxygen And Smoking Dangers

Week 3: Portable Fire Extinguishers

Week 4: Fire Safety For Those With Disabilities

**Events:** 

State Fire Marshal Annual Fire and Life Safety poster contest begins

Educator Tips: Connect with other organizations in your community to help cross promote your posts and information. Call and coordinate with social media managers of organizations that represent the target audiences you'd like to reach. This will increase the number of people you're able to contact with your messages.

# National Fire Service History:

- August 5, 1897 Chicago Grain Elevator Explosion (6 FF Deaths)
- August 1, 1932 NY Basement Explosion (8 FF's Killed)
- August 5, 1949 MT Wildland Fire (13 FF's Killed)
- August 17, 1975 PA Refinery Flashover Fire (8 FF deaths)
- August 2, 1978 NY Roof Collapse (6 FF's Killed)
- August 29, 2005 Hurricane Katrina (1,700+ deaths)

### WV Fire Service History:

August 8, 2014 – Motoaka downtown burns, causing an estimated \$4 million in damage, destroying four buildings that housed two businesses and several apartments. It started in a former hotel on Barger Street. At one point, emergency workers from 14 agencies were on scene battling the fire and redirecting traffic.

MARSHAL EST. 1909



# **Fire Safety For Older Adults**

Knowing what to do in the event of a fire is particularly important for older adults. At age 65, people are twice as likely to be killed or injured by fires compared to the population at large. And with our numbers growing every year - in the United States and Canada, adults age 65 and older make up about 12 percent of the population - it's essential to take the necessary steps to stay safe.

#### Safety tips

To increase fire safety for older adults, NFPA offers the following guidelines:

### Keep it low

• If you don't live in an apartment building, consider sleeping in a room on the ground floor in order to make emergency escape easier. Make sure that smoke alarms are installed in every sleeping room and outside any sleeping areas. Have a telephone installed where you sleep in case of emergency. When looking for an apartment or high-rise home, look for one with an automatic sprinkler system. Sprinklers can extinguish a home fire in less time that it takes for the fire department to arrive.

### Sound the alarm

• The majority of fatal fires occur when people are sleeping, and because smoke can put you into a deeper sleep rather than waking you, it's important to have a mechanical early warning of a fire to ensure that you wake up. If anyone in your household is deaf or if your own hearing is diminished, consider installing a smoke alarm that uses a flashing light or vibration to alert you to a fire emergency. View a list of product manufacturers.

### Do the drill

• Conduct your own, or participate in, regular fire drills to make sure you know what to do in the event of a home fire. If you or someone you live with cannot escape alone, designate a member of the household to assist, and decide on backups in case the designee isn't home. Fire drills are also a good opportunity to make sure that everyone is able to hear and respond to smoke alarms.

# Open up

Make sure that you are able to open all doors and windows in your home. Locks and pins should
open easily from inside. (Some apartment and high-rise buildings have windows designed not to
open.) If you have security bars on doors or windows, they should have emergency release devices

inside so that they can be opened easily. These devices won't compromise your safety, but they will enable you to open the window from inside in the event of a fire. Check to be sure that windows haven't been sealed shut with paint or nailed shut; if they have, arrange for someone to break the seals all around your home or remove the nails.

# Stay connected

• Keep a telephone nearby, along with emergency phone numbers so that you can communicate with emergency personnel if you're trapped in your room by fire or smoke.



# IN THE KITCHEN

- Never leave the stove unattended when cooking.
- Keep a pot lid close by. In case of a cooking fire use the lid to smother the fire.

# IN THE BEDROOM

- Never smoke in bed.
- · Keep your bedroom door closed while sleeping.

# **HEATING**

- Keep everything at least 3 feet from a heating source.
- · Turn space heaters off when sleeping.

# **PREPAREDNESS**

- Plan your escape routes—and practice them!
- If you use a walker or wheelchair, make sure it fits through all exits.
- Install smoke detectors on every level of your home and check on them monthly.
- Keep a phone by the bed with emergency numbers on speed dial.

# Fire Safety Checklist for Caregivers of Older Adults

Older adults are more likely to die in home fires because they may move slower or have trouble hearing the smoke alarm. Make sure the people you know are prepared and safe.



Put a check in front of each statement that is true for your home.

#### **Smoke Alarms**

- Smoke alarms are on every level of the home.
- Smoke alarms are inside and outside sleeping areas.
- Smoke alarms are tested each month.
- Smoke alarm batteries are changed as needed.
- Smoke alarms are less than 10 years old.
- People can hear smoke alarms from any room.



#### Can everyone hear the alarm?

If not, consider another type of smoke alarm – like one that has a different sound or one that comes with a bed shaker or strobe light.

# **Cooking Safety**

- The cooking area has no items that can burn.
- People stay in the kitchen when they are frying, grilling, boiling, or broiling food.

### Smoking Safety

If they smoke, make sure they are a fire-safe smoker:

- People only smoke outside and never in bed.
- People put cigarettes out safely in an ashtray with a wide base that will not tip over.
- People never smoke around medical oxygen.

#### **Heating Safety**

- Space heaters are least 3 feet away from anything that can burn.
- People blow out candles before leaving the room.

### **Escape Plan**

- There is a fire escape plan that shows 2 ways out of every room.
- Exits are always clear and not blocked with furniture or other items.
- Everyone knows where the safe meeting place is outside the home.
- The escape plan works for everyone, including people who use a wheelchair, a hearing aid, or glasses.
- There is a phone near the bed to call a local emergency number in case of a fire.



# Can everyone get out?

Make sure people who use a wheelchair or a cane can get to them and get out quickly. Tell them to keep glasses or hearing aids next to the bed.

#### Carbon Monoxide Alarms

- Carbon monoxide alarms are located on each level of the home.
- Carbon monoxide alarms are less than 7 years old.

#### Electrical and Appliance Safety

- No electrical cords run under rugs.
- All electrical cords are in good condition and not broken or cut.
- People clean the dryer of lint after every use.
- All plug outlets are safe and do not feel warm when you touch them. (If they are warm, call the landlord or an electricion.)

Learn more about fire prevention: www.usfa.fema.gov U.S. Fire
Administration







# **Portable Oxygen and Smoking Dangers**

(Courtesy Massachusetts General Hospital)

As the baby boomer generation ages, the prevalence of patients using portable medical oxygen to treat pulmonary diseases is on the rise. While this treatment helps patients live richer lives with increased independence, it's critical that those who use home oxygen understand the associated risks.

Normally, the air we breathe every day contains around **20 percent** oxygen. The air delivered to patients using this therapy contains nearly **100 percent**, making it extremely flammable.

- Individuals using home oxygen need to be particularly vigilant in keeping the system away from candle flames and other heat sources in the home. Additionally, there is an extremely elevated risk to smokers who use home oxygen.
- Smokers who use home oxygen may understand the need to turn the tank off before lighting up, but may not realize that the danger persists, even when the oxygen isn't flowing. Oxygen can build up not only in the home, but on the hair, clothes, and body of the patient and ignite when a heat source—like a cigarette—comes close to the face, causing severe burns. Oxygen is not flammable, but fire needs it to burn. When more oxygen is present, any fire that starts will burn hotter and faster than usual. More oxygen in the air means that things such as hair, plastic, skin oils, clothing, and furniture can catch fire at lower temperatures.

### Safety tips

- There is no safe way to smoke in the home when oxygen is in use. A patient on oxygen should not smoke.
- Candles, matches, wood stoves and even sparking toys, can be ignition sources and should not be used in the home.
- Keep oxygen cylinders at least five feet from a heat source, open flames or electrical devices

### *Facts and figures*

During the four-year period of 2003-2006:

- Hospital emergency rooms saw an estimated average of 1,190 thermal burns per year caused by ignitions associated with home medical oxygen.
- Eighty-nine percent of the victims suffered facial burns.
- In most cases, the fire department was not involved.





Portable medical oxygen in the home has grown over the past decade. Medical oxygen adds a higher percentage of oxygen to the air a patient uses to breath. Fire needs oxygen to burn. If a fire should start in an oxygen-enriched area, the material burning will burn more quickly.

Homes where medical oxygen is used need specific fire safety rules to keep people safe from fire and burns.

# **SAFETY TIPS**

- There is no safe way to smoke in the home when oxygen is in use. If a patient is on oxygen, they should not smoke.
- Standles, matches, wood stoves and even sparking toys, can be ignition sources and should not be used in the home.
- Weep oxygen cylinders at least five feet from a heat source, open flames or electrical devices.
- Body oil, hand lotion and items containing oil and grease can easily ignite. Keep oil and grease away where oxygen is in use.
- Never use aerosol sprays containing combustible materials near the oxygen.

# **FACTS**

- Oxygen saturates fabric covered furniture, clothing, hair and bedding, making it easier for a fire to start and spread.
- Smoking materials is the leading heat source resulting in medical oxygen related fires, injuries and deaths.



Post "No Smoking" and "No Open Flames" signs in and outside the home to remind people not to smoke.





# **Portable Fire Extinguishers**

A portable fire extinguisher can save lives and property by putting out a small fire or containing it until the fire department arrives; but portable extinguishers have limitations. Because fire grows and spreads so rapidly, the #1 priority for residents is to get out safely.

Fire extinguishers are one element of a fire response plan, but the primary element is **safe escape**. Every household should have a home fire escape plan and working smoke alarms.

# Safety tips

• Use a portable fire extinguisher when the fire is confined to a small area, such as a wastebasket, and is not growing; everyone has exited the building; the fire department has been called or is being called; and the room is not filled with smoke.

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• To operate a fire extinguisher, remember the word **PASS**:

**P**ull the pin. Hold the ext<mark>ing</mark>uisher with the nozzle pointing away from you, and re<mark>lea</mark>se the locking mechanism. Aim low. Point the extinguisher at the base of the fire.

**S**queeze the lever slowly and evenly.

**S**weep the nozzle from side-to-side.



- For the home, select a multi-purpose extinguisher (can be used on all types of home fires) that is large enough to put out a small fire, but not so heavy as to be difficult to handle.
- Choose a fire extinguisher that carries the label of an independent testing laboratory.
- Read the instructions that come with the fire extinguisher and become familiar with its parts and operation before a fire breaks out. Local fire departments or fire equipment distributors often offer hands-on fire extinguisher trainings.
- Install fire extinguishers close to an exit and keep your back to a clear exit when you use the device so you can make an easy escape if the fire cannot be controlled. If the room fills with smoke, leave immediately.
- Know when to go. Fire extinguishers are one element of a fire response plan, but the primary element is safe escape. Every household should have a home fire escape plan and working smoke alarms.

# How Fire Extinguishers Work?

Portable fire extinguishers apply an extinguishing agent that will either cool burning fuel, displace or remove oxygen, or stop the chemical reaction so a fire cannot continue to burn. When the handle of an extinguisher is compressed, it opens an inner canister of high-pressure gas that forces the extinguishing agent from the main cylinder through a siphon tube and out the nozzle. A fire extinguisher works much like a can of hair spray.

Northern





# **HOME FIRE SAFETY TIPS**

# Safety Made Simple

 Have at least a 2-A:10-B:C rated fire extinguisher on every level & supplementary units for specific locations, such as the kitchen (NFPA recommendation).

 Make sure everyone in your home knows how to call 911 in case of a fire or emergency.

 Test your smoke alarms monthly, change batteries as needed, and replace alarms every 10 years.

 Practice a home fire escape plan regularly with the entire family during the day and night.

 Check the gauge on your fire extinguisher monthly to be sure it is pressurized.

 Keep a fire extinguisher within reach to help create a path to safety or put out a small, contained fire. Always call the fire department before you try to extinguish a fire yourself!





# Fire Safety For Those With Disabilities

(courtesy improvenet.com)

There are dangers associated with fire for everyone, but people with disabilities face unique challenges in these emergencies. People with disabilities may have more difficulty escaping during a fire. In addition, some disabilities may prevent them from taking actions ahead of time without the help of a caregiver, friend, or relative.

## Visually Impaired:

- Many of the techniques people use to prepare for a fire emergency work for the visually impaired as well.
   For example, the visually impaired should have an escape plan in place and should practice the route, being sure to stay low to the ground. The visually impaired should have smoke alarms and regularly check them.
- However, because of their unique challenges, there are some additional steps that should be taken. For example, if a visually impaired person has a service animal, they should be sure to practice their escape plan with the animal. Also, when possible, the visually impaired should live on a ground floor and near an exit
- It's also important for the visually impaired to know that special smoke alarms exist for their needs. Normal high decibel alarms can overload a visually impaired person's senses, causing them to become disoriented during a fire. There are smoke alarms available that pause between alarm cycles so the visually impaired can hear instructions or listen for orders from a firefighter.
- During a fire, the visually impaired should follow their escape plan, crawling to stay low and checking doors with the back of their hand for heat before opening them (If a door is hot, use your second exit). Once the visually impaired person is out, they should stay out and call 911 if no one has done so.

### *Deaf and Hard-Of-Hearing:*

- The deaf and hard-of-hearing should follow the same fire preparedness steps, e.g. have an escape plan, practice it regularly, know how to test doors and so on. But the deaf and hard-of-hearing must go through with a few extra steps. The first and most essential step is installing a specially designed smoke alarm.
- The deaf and hard-of-hearing can buy alarms with flashing strobe lights and vibrating pillow pads and bed shakers do exist. They should have flashing smoke alarms installed so the light can be seen from anywhere in the house. Once these special alarms are in place, test them monthly and change the batteries at least once a year.

• The deaf and hard-of-hearing should also keep TTY/TDD within arm's reach of their bed along with their hearing aids. They should make sure their fire department knows of their special needs and should reach out to the fire department for help in getting prepared.

## Physically Disabled:

There are several steps the physically disabled can take to ensure their safety during a fire. According to the National Park Service, those who are physically disabled should:

- Live (or have a bedroom) on the ground floor, as close to an exit as possible. Make sure walkers and wheelchairs fit through all exits. If necessary, have a ramp available for emergency exits. Make sure they're able to open locked or barred doors, windows and other exits. Inform local emergency services of your special needs and ask your local dispatch to keep your special needs status on file.
- Of course, the physically disabled should also follow all other essential preparedness steps, such as having and regularly practicing an escape plan, regularly testing and changing the batteries of all smoke alarms and so on.

#### Cognitive Impairments:

• Depending on a person's level of cognitive impairment, it may be necessary to take additional steps to prepare them for what to do during a fire. It's still important to follow basic fire preparation steps, such as installing and regularly checking smoke alarms, having and practicing an escape plan and practicing getting and staying low during a fire, but additional steps may be required.

According to the National Fire Protection Association, caregivers should:

- Make sure the person with a cognitive impairment understands what the smoke alarm sound/signal means and teach them what to do when they hear it.
- If the person cannot understand what the alarm means, a plan for alerting/helping them escape during a fire needs to be part of the family's evacuation plan. Assess whether the person will be able to follow the escape plan and find their way out of the home.
- Determine ahead of time whether the person will know how to use the exits. Decide ahead of time who will give the person assistance (if needed). It's best to designate at least two people.
- Mark escape routes and/or post signs that the person has indicated they understand.
- Make sure local emergency responders are aware that someone with special needs lives in the home.



# September

# Campus Fire Safety

Week 1: Fire Safety For College Students

Week 2: Smoking

Week 3: Carbon Monoxide Safety For RVs And Tents

Week 4: Call 911

# **Educator Tips:**

If possible, use scene artifacts as teaching opportunities. Use things like sooty smoke alarms with no batteries, old ones that have discolored long past the 10 year mark, a burned door with charring and heavy soot at the top and less damage at the bottom. There are safety messages you can develop based on each of these items.

### National Fire Service History:

- September 2, 1888 Baltimore Bldg Collapse (7 FF Deaths)
- September 6, 1896 MI Opera House Collapse (5 FF Deaths)
- September 20, 1902 Birmingham Church Fire (115 Deaths)
- September 11, 2001 Terrorist Attacks (3000+ killed including 343 FF's)

### WV Fire Service History:

• September 12, 1907 the Beckley Fire Department was formed by Mayor Dunn and the Common Council.

STATE FIRE MARSHAL EST. 1909



# Fire Safety For College Students

Going to college is an exciting time for students and their parents. Living in your new "home away from home" not only gives young adults more freedom to make their own choices, but it also puts upon them an increased level of personal responsibility while at school. When it comes to on- and off-campus housing, it's important for students and parents to keep fire safety top of mind.

# Campus fire safety by the numbers

- In 2009-2013, U.S. fire departments responded to an estimated annual average of 3,870 structure fires in dormitories, fraternities, sororities, and barracks\*
- In 2009 2013 86% of the reported structure fires involved cooking equipment. 83% of fires were specifically reported as contained or confined to cooking equipment\*
- From 2000 2015, 89 fires that killed 126 people have occurred on a college campus, in Greek housing or in off-campus housing within three miles of the campus.

  Of these:
- 76 off-campus fires caused 107 deaths
- 7 on-campus building or residence hall fires claimed 9 victims
- fires in Greek housing took the lives of 10 people

### Campus Fire Safety Tips:

- Look for fully sprinklered housing when choosing a dorm or off-campus housing.
- Make sure your dormitory or apartment has smoke alarms inside each bedroom, outside every sleeping
  area and on each level. For the best protection, all smoke alarms should be interconnected so that when
  one sounds they all sound.
- Test all smoke alarms at least monthly.
- Never remove batteries or disable the alarm.
- Learn your building's evacuation plan and practice all drills as if they were the real thing.
- If you live off campus, have a fire escape plan with two ways out of every room.
- When the smoke alarm or fire alarm sounds, get out of the building quickly and stay out.
- During a power outage, use a flashlight.
- Cook only where it is permitted.
- Stay in the kitchen when cooking.
- Cook only when you are alert, not sleepy or drowsy from medicine or alcohol.
- Check with your local fire department for any restrictions before using a barbeque grill, fire pit, or chimney.

- Check your school's rules before using electrical appliances in your room.
- Use a surge protector for your computer and plug the protector directly into an outlet.



#### SAFETY TIPS

- 1)) Look for fully sprinklered housing when choosing a dorm or off-campus housing.
- If you live in a dormitory, make sure your sleeping room has a smoke alarm, or your dormitory suite has a smoke alarm in each living area as well as the sleeping room. For the best protection, all smoke alarms in the dormitory suite should be interconnected so that when one sounds, they all sound.
- If you live in an apartment or house, make sure smoke alarms are installed in each sleeping room, outside every sleeping area, and on each level of the apartment unit or house. For the best protection, all smoke alarms in the apartment unit or house should be interconnected so that when one sounds, they all sound.
- ))) Test all smoke alarms at least monthly.
- ))) Never remove batteries or disable the alarm.
- ))) Learn your building's evacuation plan and practice all drills as if they were the real thing.
- If you live off campus, have a fire escape plan with two ways out of every room.
- When the smoke alarm or fire alarm sounds, get out of the building quickly and stay out.
- ))) During a power outage, use a flashlight.
- ))) Stay in the kitchen when cooking.
- December 2018 Cook only when you are alert, not sleepy or drowsy from medicine or alcohol.
- Check with your local fire department for any restrictions before using a barbeque grill, fire pit, or chimenea.
- Check your school's rules before using electrical appliances in your room.

# **Smoking Sense**

If you smoke, smoke outside and only where it is permitted, Use sturdy, deep, non-tip ashtrays. Don't smoke in bed or when you've been drinking or are drowsy.

# Candle Care

Burn candles only if the school permits their use. A candle is an open flame and should be placed away from anything that can burn. Never leave a candle unattended. Blow it out when you leave the room or go to sleep.

# FACTS

- Pires in dormitories, fraternities, sororities, and barracks are more common during the evening hours, between 5–10 pm, as well as on Saturdays and Sundays.
- In 2004–2008 U.S. fire departments responded to an estimated annual average of 3,800 structure fires in dormitories, fraternities, sororities, and barracks.



www.nfpa.org/education

NFPA Public Education Division I 1 Batterymarch Park, Quincy, MA 02169



# **Smoking**

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 out, 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.

### *Facts & figures*

- In 2011, there were an estimated 90,000 smoking-material fires in the United States. These fires caused 540 civilian deaths, 1,640 civilian injuries and \$621 million in direct property damage.
- One out of four fatal victims of smoking-material fires is not the smoker whose cigarette started the fire.
- Most deaths result from fires that started in bedrooms (40%), or in living rooms, family rooms or dens (35%).
- Nearly half (46%) fatal home smoking-material fire victims were age 65 or older.





# Carbon Monoxide Safety For RVs And Tents

(courtesy http://www.carbon-monoxide-poisoning.com)

Fuel-powered camping equipment can be potentially dangerous to your health. Carbon monoxide poisoning can occur and may even be fatal. Camping usually involves a tent, camper or RV. When combustibles are used within these enclosed quarters without proper ventilation people in close proximity are at high risk of carbon monoxide poisoning. Lanterns, space heaters, portable grills, gas burning appliances, and other fuel-powered equipment should only be lit and burnt outside.

### Symptoms of Carbon Monoxide Poisoning

- Because the symptoms of carbon monoxide poisoning resemble those of the common cold or flu, they are
  often initially ignored. Immediate attention should be paid to someone who has been exposed to CO
  emission and displays the following signs and/or complaints:
- headaches
- dizziness
- weakness or excessive sleepiness
- nausea and/or vomiting
- general confusion

#### **Treatment**

The key is to respond quickly. Turn off the appliance and open doors and windows in order to ventilate the area thoroughly. Transport the victim immediately to a clinic, hospital, or medical doctor if you suspect that any of the above mentioned symptoms might be due to an exposure to carbon monoxide. Certain individuals are at a higher risk than others.

EST. 1909

#### Who Is at Risk?

Carbon monoxide does not affect all people in the same way. Some age groups are more vulnerable, and individuals with certain conditions can be at higher risk than others.

Children and the elderly, as well as pregnant women, smokers and those with lung problems, and individuals suffering from anemia and other circulatory system problems are at high risk when exposed to CO. In such cases a faster response to CO inhalation is likely to occur and a smaller amount of CO will be sufficient to induce poisoning.

There are other important factors to keep in mind. When you are camping at high altitudes, the effects of carbon monoxide are heightened and consequently, more care is required. Also, when alcohol or drugs are ingested the negative effects of CO inhalation are intensified.

Anyone in a high risk category should be made aware of the symptoms of carbon monoxide poisoning, and also be well-informed on the ways of handling the situation if it occurs.

#### How to Avoid or Reduce the Risk

Adequate ventilation in your tent, camper, RV, and any other enclosed areas is important. When using gas burning units such as the portable stove in your RV, or gas lanterns in your tent, a conscious effort should be made to keep the door or windows open.

Camping in cold weather is especially dangerous for carbon monoxide poisoning because there is a frequent need for heating units and a strong tendency to stay inside due to the weather. Choosing other alternatives like electrical or battery-operated models is highly recommended.

There is pressure for manufacturers of fuel-powered camping equipment to be more proactive with regard to the potential health hazards of their products. Some are working with the Consumer Product Safety Commission to design models that produce less carbon monoxide. There is also a push for all units to distinctly display warning labels and consumer information.

However the best defense against the risk of carbon monoxide poisoning is to educate the public on responsible use. Helping individuals to recognize the symptoms and know how to react can save many lives.

Enjoy your camping trip by being aware of the dangers of carbon monoxide poisoning. Limit the risk in order to ensure that your family and friends are safe.

# STAY SAFE WHILE CAMPING

- Don't ever take a barbecue into a tent. Even when they cool down, they can give off enough carbon monoxide to kill.
- Don't use any fuelburning appliances to heat your tent or awning. Stoves and barbecues are not designed for heating badly ventilated spaces.
- Don't cook inside a tent.

- Even supposedly fireresistant tents can burn.
- Don't use naked flames such as candles and lighters inside a tent. Use a torch instead.
- Don't rely on a carbon monoxide detector to keep you safe. They may be useful at home, but they are not designed for the conditions found in a tent or awning.



# Call 911 In Emergencies

(courtesy www.911.gov)

An emergency is any situation that requires immediate assistance from the police, fire department or ambulance. Examples include:

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- A fire
- A crime, especially if in progress
- A car crash, especially if someone is injured
- A medical emergency, especially symptoms that require immediate medical attention

Important: If you're not sur<mark>e w</mark>hether the situation is a true emergency, officials recommend calling 911 and letting the call-taker determine wh<mark>eth</mark>er you need emergency help.

When you call 911, be prepared to answer the call-taker's questions, which may include:

- The location of the emergency, including the street address
- The phone number you are calling from
- The nature of the emergency
- Details about the emergency, such as a physical description of a person who may have committed a crime, a description of any fire that may be burning, or a description of injuries or symptoms being experienced by a person having a medical emergency

Remember, the call-taker's questions are important to get the right kind of help to you quickly. Be prepared to follow any instructions the call-taker gives you. Many 911 centers can tell you exactly what to do until help arrives, such as providing step-by-step instructions to aid someone who is choking or needs first aid or CPR. Do not hang up until the call-taker instructs you to.

If you dial 911 by mistake, or if a child in your home dials 911 when no emergency exists, do not hang up—that could make 911 officials think that an emergency exists, and possibly send responders to your location. Instead, simply explain to the call-taker what happened.

#### Calling 911 Tips:

IS A PERSON HURT OR IN DANGER? - DO YOU NEED THE POLICE, FIRE OR AMBULANCE?

Have you ever wondered whether to call 9-1-1? Since 9-1-1 is for emergencies only, it helps to understand when to call and when not to call. An emergency is any serious situation where a law enforcement officer, fire fighter, or emergency medical help is needed right away. If you are unsure of whether your situation is an emergency, go

ahead and call 9-1-1. The 9-1-1 call taker can determine if you need emergency assistance and can route you to the correct location.

#### IF YOU DO CALL 9-1-1, EVEN BY MISTAKE, DO NOT HANG UP THE PHONE.

9-1-1 call takers are trained to get the most important information as quickly as possible to get help on the way to an emergency situation. In an emergency situation, allow the call taker to ask you all the questions they need in order to get help there in the timeliest manner before you hang up or leave the phone. If you happen to call by accident, stay on the line until you can tell the call taker that you called by accident and there is no emergency. This saves the call taker from having to call you back and confirm there is no emergency or possibly sending police with lights and sirens to check your address for an emergency.

# WHEN CALLING 9-1-1 DO YOUR BEST TO STAY CALM AND ANSWER ALL QUESTIONS.

Staying calm can be one of the most difficult, yet most important, things you do when calling 9-1-1. It is very important that you stay as calm as possible and answer all the questions the 9-1-1 call taker asks. The questions 9-1-1 call takers ask, no matter how relevant they seem, are important in helping get the first responders to you as fast as possible.

# HELP THE 9-1-1 CALL TAKER HELP YOU.

Listen and answer the questions asked. By doing this, it helps the call taker understand your situation and will assist you with your emergency until the appropriate police, fire or medical units arrive.

#### KNOW THE LOCATION OF THE EMERGENCY.

The wireless 9-1-1 caller must be aware that the 9-1-1 center that answers the call may not be the 9-1-1 center that services the area that the wireless caller is calling from. Look for landmarks, cross street signs and buildings. Know the name of the city or county you are in. Knowing the location is vital to getting the appropriate police, fire or EMS units to respond. Providing an accurate address is critically important when making a wireless 9-1-1 call.

### TEACH YOUR CHILDREN HOW TO CALL 9-1-1.

Be sure they know what 9-1-1 is, how to dial from your home and cell phone, and to trust the 9-1-1 call taker. Make sure your child is physically able to reach at least one phone in your home. When calling 9-1-1 your child needs to know their name, parent's name, telephone number, and most importantly their address. Tell them to answer all the call takers questions and to stay on the phone until instructed to hang up.

## PRANK CALLS TO 9-1-1 WASTE TIME AND ARE ILLEGAL IN MOST STATES.

Be sure all members of your household are aware that prank or harassing calls to 9-1-1will be dealt with by local law enforcement agencies.

### POST YOUR ADDRESS CLEARLY AND PROMINENTLY AT YOUR ENTRANCE AND ON YOUR HOME.

Posting your 9-1-1 address at the driveway entrance and on your home will alleviate any confusion as to whether emergency responders have the correct location. Try using something reflective or illuminated so that it can be seen in the evening as well as during the day.

DO NOT ASSUME SINCE YOUR MAILBOX IS MARKED YOU HAVE POSTED YOUR ADDRESS - mailboxes are not always at the entrance of a driveway and usually are not marked clearly on both sides. Several cities and counties have ordinances for posting 9-1-1 addresses - check with your local ones. And always report missing street signs when noted - these not only help others find your home but are essential to emergency response personnel.

#### KNOW THE PHONES YOU OWN.

Educate everyone about the phone system in your home as well as your cell phone. Children may need to use the devices in an emergency and will need to know how to operate them.

# **October**

# Fire Prevention Month

Week 1: Fire Safety Importance

Week 2: National Fire Prevention Week

Week 3: "Get Low, Get Out"

Week 4: Halloween Safety

**Events:** 

Fire Prevention Week

# **Educator Tips:**

Fire Prevention Week is an important and historic week in the fire service, we use this week to give safety talks and provide information about the dangers of fire. Try to continue these programs throughout the entire year. Ask schools or community groups if they'd be interested in a spring or summer time fire safety reminder!

# National Fire Service History:

- October 19, 1857 Chicago Building Collapse (10 firefighters killed)
- October 8-9, 1871 Great Chicago Fire (300 deaths)
- October 8, 1871 Great Peshtigo Fire (1152 deaths)
- October 28, 1954 PA Chemical Tank Explosion (12 firefighters killed)
- October 26, 1962 New York Building Collapse (6 firefighters killed)
- October 17, 1966 New York Mercantile Building Fire (12 firefighters killed)

### WV Fire Service History:

• Oct. 3, 1935: A patient at Weston State Hospital started a fire in the main building that destroyed six men's wards and caused a cupola to fall through the roof. The building was repaired, and the hospital remained in service for nearly 60 more years

MARSHAL EST. 1909



# Fire Safety Importance

(from Fire Disasters: What Have We Learned? By Francis L. Brannigan, SPFE and Harry R. Carter, Ph.D.)

The earliest recorded fire prevention efforts come from ancient Rome. It was surely noted after a major fire that something should have been done to prevent the disaster or at least, have somebody to protect the citizens. This may also be the earliest recorded uttering of the phrase, "How long has this thing been going on?"

Rome continued to tinker with its fire forces. When the slaves who were serving as the firefighting force became unruly, the response was to form the equivalent of what we now term a fire department. Once again, this was a reaction to a problem.

The pages of history are strewn with stories of great cities that were destroyed by fire:

London - 798, 982, 1212, 1666

Venice - 1106, 1577

Boston - 1631, 1653, 1679

Moscow - 1752 Rome - 1764 Chicago - 1871 Baltimore - 1904 San Francisco - 1906 STATE FIRE MARSHAL EST. 1909

Something important happened after each of the fires listed laid waste to a city: **improvements ensued**. The purpose of this article is to show that progress in the American Fire Service has been based upon a series of historic catastrophes. In the wake of each succeeding disaster, improvements were made.

Chicago has been the scene of many historic fires. The city was rebuilt following the 1871 conflagration. Improvements were made in construction styles and methods. By 1903, the Great Fire had become a fading memory to all, as the city was swept by succeeding waves of immigrants from the Old World.

The Iroquois Theater was one of the great entertainment venues in this thriving industrial center. It was one of the big stops on the vaudeville circuit, drawing the great performers of its day. So it was on Dec. 30, 1903, that the stage was set for another epic lesson in fire safety, one which would come at a great human cost.



The comedian Eddie Foy was starring in a matinee performance of the musical comedy, "Mr. Bluebeard." A standing-room-only audience estimated at 2,000 people crowded the theater. At some point during the performance, a spotlight overheated and burst into fire way up in the stagehand's overhead. The fire that ensued spread quickly through the flammable backstage rigging. Workers attempted to beat the fire out with sticks in a vain attempt to extinguish the blaze. A piece of flaming cloth fell to the stage.

In a vain attempt to calm the crowd, Foy had the band continue playing. Suddenly, a woman cried out and the audience made a mad dash for the exits. As the firemen moved in to extinguish the flame, they were met with a tangle of human bodies, all entwined and badly burned. The cause of death for many came from the terrible smoke and flames. Most, however, had been trampled and crushed in the rush to leave the hall. Authorities considered it a miracle that only 602 people succumbed to the fire.

The Iroquois Theater was built of fire-resistive materials. Experts agree that it was well-built, but they also point out that many important fire protection features were missing or inoperable at the time of the fire. These include:

- Blocked asbestos curtains.
- Installed ventilators that were not in operation.
- Exits not properly marked.
- Exits blocked with draperies, wood and glass doors.
- No installed alarm system.
- No fire protection devices such as extinguishers and standpipes.
- No automatic sprinklers in the stage area, even though it was a municipal requirement.

The investigation that followed led to a variety of fire safety improvements, all of which addressed the problems listed above. In fact, many cities still provide a uniformed firefighter or group of firefighters for major entertainment events. The fire service has long viewed old-style factory buildings as a serious fire hazard. Many of the worst fires during the late 1800s and early 1900s happened in factory buildings. Some are more famous than others.

A 1910 fire in a Newark, NJ, clothing factory killed 24 workers, and there were countless others. All had coderelated problems at their heart. It is the 1911 fire at the Triangle Shirtwaist Company in New York City, however, that marked a turning point in how fire codes addressed this type of occupancy.

Chief Edward Croker of the New York Fire Department had long sought improvements in the building codes and factory laws, because of such early fires as the Parker Building. Three firemen were killed in a massive collapse within this 20-story fireproof building. His pleas fell on deaf ears and the resulting catastrophe, which killed scores of innocent young immigrants, will long live in the annals of firefighting lore.

The Triangle Shirtwaist Company was located at 23 Washington Place in lower Manhattan. The work force was primarily made up of young, female immigrants, who labored under classic "sweatshop" conditions. More than 500 workers were jammed into the eighth and ninth floors of the 10-story building, which was supposedly built from fire-resistive materials.

It was about 4:45 P.M. on Saturday, March 25, 1911. A fire started in a rag bin on the eighth floor. It spread rapidly through the mix of combustible cloth, and soon cutting tables and other fixtures were ablaze. One group of workers grabbed the standpipe hoseline and attempted to extinguish the fire. They quickly found that the hose was rotted and the valves frozen shut. Word of the fire soon began to pass through the workers jammed into the loft building. Workers surged toward the exits with which they were familiar. They were met with a wall of fire racing up the stairs. Others moved toward another exit, but were blocked by a locked door. When they were finally able to force it, they found that it opened inward.



By this time, there were so many people pushing toward the door that the door was jammed shut; people began piling up at this point. Very few workers knew that the freight elevator was still working. A number of young girls faced with the prospect of a horrible death by fire chose to leap to their deaths from windows on the eight and ninth floors. Others managed to make it to the roof, and a small number were able to make their way over ladders to the New York University Law School next door.

Bells in New York fire stations began to toll the alarm. But the problems were many. The streets were littered with bodies, making apparatus placement difficult. Ladders could not reach the fire or the roof.

Once lines were in position, the fire was quickly extinguished. The horrible toll was 146 people who leaped to their deaths or were burned or crushed to death in the panic. The public was outraged. This fire had proved Croker correct. More was needed than just fire suppression.

After an intense investigation, a number of changes were instituted. A new bureau of fire prevention was created in the fire department. Labor laws were passed outlawing many of the practices which led to the fire. And in the wake of this tragedy, work began on the codes which eventually led to what we know today as the National Fire

Protection Association's Life Safety Code. The ironic part of this story is that the building remained in use for decades after this tragedy.

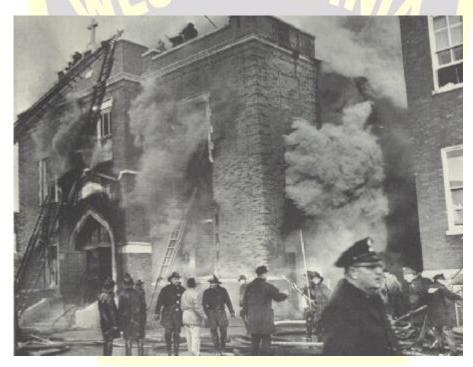
Schools have never been immune to fire tragedy. Three of great historical interest are:

Lakeview Grammar School in Collinwood, OH (176 dead). The New London Consolidated School in Texas (294 dead). Our Lady of the Angels School in Chicago (95 dead).

These fires occurred for different reasons. In Ohio, it was a cellar fire of unknown origin that roared up the main stairway of the school, trapping the existing students and killing them. They only knew one way out. The fire department was not trained or equipped to fight a fire in the school.

The victims of the Texas fire were killed in a massive gas explosion. Later investigation indicated that questionable construction, installation and maintenance processes involving the building's heating system appeared to be the culprit in this disaster.

The fatal fire in the Our Lady of the Angels School began as a small trash fire in the basement. This fire then raced up the main stairway and trapped students in the corridor and in their rooms on the third floor. As a sad footnote, many students were found seated at their desks, heads down, as if praying.



Each of these fires led to improvements which benefit schoolchildren all over North America:

- Exit drills are mandatory;
- Construction practices are according to code;
- More school inspections in most places;
- *Greater emphasis on installed fire protection, alarms, and first-aid firefighting equipment.*

There are also a number of classic fires in places of public assembly that have led to upgrades in fire and life safety. Some of them are:

- 1919 Dance Hall, Via Platt, LA (25 dead).
- 1929 The Glen Motion Picture Theater in Paisley, Scotland (70 dead).
- 1940 Rhythm Club, Natchez, MS (198 dead).

- 1942 The Cocoanut Grove, Boston (491 dead).
- 1977 Beverly Hills Supper Club, Southgate, KY (164 dead).
- 1990 Happy Land Social Club, Bronx, NY (87 dead).

In each one of these cases, people died in great numbers because fire safety issues were either ignored or never fully addressed.

The Cocoanut Grove was a one-story nightclub that had been built during the Prohibition era. It was a popular site and was constantly jammed with customers. The night of Nov. 28, 1942, was no different. The official occupancy was supposed to be 600, but estimates from that fateful night ranged as high as 1,000. A small fire started in the basement lounge and quickly raced through the area. Most people knew only the main entrance which they always used. As the crowd surged toward the exit, it quickly became jammed. Fire department sources listed nearly 200 people as being found in this area alone. All told, 491 people were killed by fire, smoke, heat or the effects of being trampled.



Members of the Boston Fire Department were on the scene quickly, as a full alarm response had been made to a nearby area for a box alarm that turned out to be a car fire. The fire quickly escalated to five alarms, but the damage had been done. What was learned from this fire?

- Combustible materials must not be used for decorations or in building components.
- Occupancy limit requirements should be strictly enforced.
- Exits need to be kept clear of obstructions and plainly marked.
- Public assembly buildings must have two separate means of egress, remote from each other.
- Exit doors should swing in the direction of egress traffic flow.

The Beverly Hills Supper Club fire more than three decades later exposed us to a fire the likes of which was thought to be a thing of the past. This club was a major regional entertainment center, with many of the country's top entertainers appearing in its lounges. The building was originally erected in 1937. A 1970 fire occurred prior to the building being remodeled. Further expansion occurred in 1974, when the large Cabaret Room was created. It should be pointed out that automatic sprinkler, alarm and kitchen hood fire protection was not installed during any of the construction phases.

Fire struck the club on May 28, 1977. The facility was crowded with patrons who hoped to attend one of the John Davidson shows, which were scheduled for 8:30 and 11:30 P.M. At about 8:45 P.M., employees discovered a fire in the Zebra Room. There appears to have been about a 15-minute delay in notifying the fire department. During this time, employees attempted to extinguish the fire themselves.

Many people stated that the first time they noted a problem was when they noticed a large number of people suddenly leaving the building. There was no building fire safety plan, so word of the fire was spread from person to person. The evacuation appeared to be calm until thick, dark clouds of choking smoke engulfed the exit access areas. One hundred sixty-four people were killed in a tragedy that never should have occurred. The lessons learned in 1942 were not remembered.



The list of causes included:

- No installed fire protection.
- No fire safety plan.
- Blocked exits.
- Crowd in excess of the occupancy load.
- Inadequate exit capacity.
- Combustible wall coverings.
- Toxic smoke generated by burning electrical wiring.

The Happy Land Social Club fire in 1990 had all of the same issues of crowding, inadequate exit capacity and a lack of installed fire protection. What that situation also had was a human being bent on revenge who killed scores of people.

A hot, humid July day greeted the 7,000 people who had chosen to attend the special matinee program of the Ringling Brothers-Barnum & Bailey Circus in Hartford, CT on July 6, 1944. The extra session had been scheduled owing to the late arrival of the circus a day earlier.

The circus owned a large number of portable extinguishers and water buckets, but they had not been placed around the area. There was one strong negative that went undetected by local fire authorities. While the large main tent had been well cared for, it had been waterproofed in a very dangerous manner. It had been coated with a covering of paraffin that had been thinned by using gasoline. Thus the whole circus was held under a highly flammable covering. As the second act was about to begin, a small spot of flame was observed by an on-duty Hartford policeman. Slowly the fire spread up the tent, gaining speed as it heated the fuel which lay just ahead. At about the same time, the circus band leader saw the fire and quickly had the band switch to playing the famous Sousa march, The Stars and Stripes Forever. This is the traditional circus alarm call. As the fire grew in intensity,

the tent area became a scene of sheer terror and pandemonium. People were pushing toward the main exit, animals were running loose, and burning tent was falling all around.



When the flames were finally extinguished, 168 people lay dead; more than half of these children. In the wake of this tragic fire, a number of changes were made to improve circus and outdoor event fire safety:

The National Fire Protection Association (NFPA) formed a technical committee to deal with problems of this nature. The result of this effort led to the development of NFPA Standard 102, Grandstands, Folding and Telescopic Seating, Tents and Membrane Structures.

1863

- Tent tops and tarps must be made from fire-resistive materials.
- Tents are relegated to a temporary role.
- Tents must be properly spaced so that they are not too close to one another.
- Life Safety Code compliance is mandated.

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#### **Fire Prevention Week**

Fire Prevention Week was established to commemorate the Great Chicago Fire, the tragic 1871 conflagration that killed more than 250 people, left 100,000 homeless, destroyed more than 17,400 structures and burned more than 2,000 acres. The fire began on October 8, but continued into and did most of its damage on October 9, 1871.

According to popular legend, the fire broke out after a cow - belonging to Mrs. Catherine O'Leary - kicked over a lamp, setting first the barn, then the whole city on fire. Chances are you've heard some version of this story yourself; people have been blaming the Great Chicago Fire on the cow and Mrs. O'Leary, for more than 130 years. But recent research by Chicago historian Robert Cromie has helped to debunk this version of events.

Like any good story, the 'case of the cow' has some truth to it. The great fire almost certainly started near the barn where Mrs. O'Leary kept her five milking cows. But there is no proof that O'Leary was in the barn when the fire broke out - or that a jumpy cow sparked the blaze. Mrs. O'Leary herself swore that she'd been in bed early that night, and that the cows were also tucked in for the evening.

But if a cow wasn't to blame for the huge fire, what was? Over the years, journalists and historians have offered plenty of theories. Some blamed the blaze on a couple of neighborhood boys who were near the barn sneaking cigarettes. Others believed that a neighbor of the O'Leary's may have started the fire. Some people have speculated that a fiery meteorite may have fallen to earth on October 8, starting several fires that day - in Michigan and Wisconsin, as well as in Chicago.



While the Great Chicago Fire was the best-known blaze to start during this fiery two-day stretch, it wasn't the biggest. That distinction goes to the Peshtigo Fire, the most devastating forest fire in American history. The fire, which also occurred on October 8th, 1871, and roared through Northeast Wisconsin, burning down 16 towns, killing 1,152 people, and scorching 1,2 million acres before it ended.

Historical accounts of the fire say that the blaze began when several railroad workers clearing land for tracks unintentionally started a brush fire. Before long, the fast-moving flames were whipping through the area 'like a tornado,' some survivors said. It was the small town of Peshtigo, Wisconsin that suffered the worst damage. Within an hour, the entire town had been destroyed.

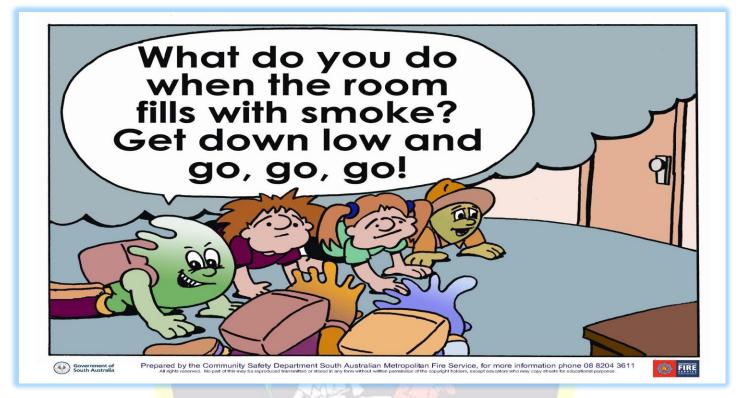
Those who survived the Chicago and Peshtigo fires never forgot what they'd been through; both blazes produced countless tales of bravery and heroism. But the fires also changed the way that firefighters and public officials thought about fire safety.

On the 40th anniversary of the Great Chicago Fire, the Fire Marshals Association of North America (today known as the International Fire Marshals Association), decided that the anniversary of the Great Chicago Fire should henceforth be observed not with festivities, but in a way that would keep the public informed about the importance of fire prevention. The commemoration grew incrementally official over the years.

In 1920, President Woodrow Wilson issued the first National Fire Prevention Day proclamation, and since 1922, Fire Prevention Week has been observed on the Sunday through Saturday period in which October 9 falls. According to the National Archives and Records Administration's Library Information Center, Fire Prevention Week is the longest running public health and safety observance on record. The President of the United States has signed a proclamation proclaiming a national observance during that week every year since 1925.







## "Get Low, Get Out"

#### (from Gizmodo.com)

To know how to best escape a fire, you need to think like a fire. You need to know what a fire needs to survive, grow and spread throughout a structure in order to maximize your chances of successful escape.

For a fire to start, three elements must be present: a heat source to provide the initial catalytic energy, such as spark or cinder; plenty of oxygen; and any sort of combustible as a fuel source. In the US, cooking remains the primary source of home fires, and the primary source of fire-related injury. Dropped cigarettes, on the other hand, have been the number one source of fire-related deaths since 2005. Fun Fact: Men started 64 percent of the fires in 2010 and caused nearly double the property damage (\$4.8 billion vs \$2.7 billion caused by women).

Once ignition occurs, a fire will continue to burn and spread as long as it has a continuous supply of fuel and oxygen. It will always spread into cooler areas following the flow of heat, and it doesn't take long for heat to spread. On average, a house fire can raise the interior temperature to over 1100-degrees F in just 3.5 minutes—note that your goose is cooked, quite literally, at 350 F. And in five minutes, the air in a room can get so hot that everything in it spontaneously combusts, a phenomenon known as flashover, even if actual flames are not present. That means you and yours are working with roughly a 210 second window of opportunity.

When it comes to home fire response, live by the Boy Scouts of America motto. Taking the proper preventative measures and knowing what to do if a fire does break out can help minimize damage and maximize your chances of survival.

Prevention is as easy as being aware of your surroundings.

However, if a fire starts when your family is asleep, it may burn out of control before you become aware of it. In case this occurs, every family member should learn and memorize at least two potential exits from every room in the house—the normal route for entering and exiting (typically through the front door) as the primary route as well as an alternative door or window. Study each escape route for potential hazards such as sticky window, security bars that require tools to open, or heavy furniture, and adjust these routes accordingly. And remember,

even with every light in the house on, a structure fire can create blackout conditions within the home in just four minutes. So make the outside routes as direct as possible.

Also be sure to assign which able bodies will be in charge of helping the very young, the elderly, and pets to escape. In addition, stick a pet rescue alert on any clean glass surface near the front door to alert first responders to your pets' existence. If you have children, you must impress upon them the importance of using an alternate escape route if the primary is blocked and not hiding in a closet or under the bed. Explain that this will make it much harder for firefighters to find them. And once you've created a plan, practice it with your kids.

Another helpful habit is for everyone to shut their bedroom doors at night. This not only gives you more privacy, but can also delay the spread of fire and smoke into the room by as much as twenty minutes. What's more, fire alarms will still detect smoke with the door closed.

Fires and people compete for the same vital resource: oxygen. But people are at a disadvantage because a lack of oxygen makes us dumb and sleepy—two qualities you really don't need when escaping the flames. The official FEMA fire safety manual explains the effects of a low oxygen environment:

21% Oxygen Level— Normal atmospheric level.

19.5% Oxygen Level — Minimum healthful level.

15-19% Oxygen Level — Decreased stamina and coordination.

12-14% Oxygen Level — Breathing rate increases with exertion, increase in heart rate, impaired coordination, perception, and judgment.

10-12% Oxygen Level — Breathing further increases in rate and depth, lips turn blue. Poor judgment.

8-10% Oxygen Level — Mental failure, fainting, unconsciousness, nausea, and vomiting.

6-8% Oxygen Level — Fatal after 6 to 8 minutes.

4-6% Oxygen Level — Coma in 40 seconds, convulsions, respiration ceases, and death occurs.



The lack of oxygen isn't the only gaseous danger you'll face. As fires expand, they generate thick plumes of acrid, toxic black smoke that obscures your vision and wreaks havoc on your lungs. Carbon monoxide, for example, is an odorless and highly-stupefying gas, causing mental impairment on par with alcohol intoxication when inhaled in even modest amounts. If you're already asleep when a fire breaks out, spreading CO gas can drop you into such a deep slumber that not even the intense heat of approaching flames will be enough to rouse you (a fire alarm, however, will). In fact, more people die each year from smoke inhalation than do from the actual flames.

There's a silver lining to these clouds of noxious gasses—the heat of the fire forces them all to rise, which clears a low area of relatively clean air to breathe near the floor. So, as Arnold Schwarzenegger put it, "GET DOWN." If you're in bed when the fire alarm sounds, roll out of bed and onto the floor before crawling quickly to your primary exit option. If that option is your bedroom door (which should be closed), check it before you open it by placing the back of your hand against the door itself, the knob, and the crack on the hinged side next to the frame. If any of those points feel warm, bail on that exit strategy and immediately move on to your secondary option. And even if they're cool, brace your shoulder against the door before you twist the handle to prevent the door from blowing open due to air pressure differences on either side.

If you need to travel through a smoke-filled room to reach safety, you can further protect yourself from damaging gasses by wrapping a piece of cloth around your mouth and nose to help filter larger smoke and soot particulates. Wetting the wrap will add further protection.

If you find both your primary and secondary routes cut off, look for a window. If you have to break the pane to open it, smash out the lower corners with a blunt, heavy object, then cover the exposed edges with clothing, bedding or cushions before going through. If you're on the ground floor, toss a few cushions out to help break your landing. If you need to get your family out of a second story window, lower your kids as far as possible before dropping them to a waiting adult below.

All your hard work and planning will be for naught if someone is left behind and no one realizes that they are still in danger. That's why you need a designated meeting spot outside the house. It should be safely away from danger but close enough for everyone to reach quickly.

If you do realize that someone is missing, do not reenter the home to look for them. You are not a firefighter. Do not try to do a firefighter's job, if you do, the real firefighters will more than likely be pulling two bodies from the ashes.

Once everyone is accounted for, get medical attention for anyone that needs it. Look for signs of oxygen deprivation—ie, your eight-year-old is stumbling around like a wee drunkard. Once the fire is under control, ask the fire firefighters or a neighbor for help notifying your insurance company, emergency contacts, or the Red Cross for emergency lodging





## **Halloween Safety**

Children dressed in costumes excitedly running door to door to trick-or-treat, festive decorations like glowing jack-o-lanterns, paper ghosts and dried cornstalks adorning front porches – these are some of the classic hallmarks of Halloween that make the holiday special for kids and adults alike.

Unfortunately, these Halloween symbols and activities can also present lurking fire risks that have the potential to become truly scary. But by planning ahead, you can help make this Halloween a fire-safe one. Taking simple fire safety precautions like keeping decorations far away from open flames and using battery-operated candles or glow-sticks in jack-o-lanterns can help ensure your holiday remains festive and fun.

#### Halloween by the numbers

- From 2009-2013, decorations were the item first ignited in an estimated average of 860 reported home structure fires per year.
- Nearly half of decoration fires in homes occurred because the decorations were too close to a heat source.
- These fires caused an estimated average of one civilian death, 41 civilian injuries and \$13 million in direct property damage per year.
- Forty-one percent of these incidents were started by candles; one-fifth began in the living room, family room, or den.

#### Safety Tips:

- When choosing a costume, stay away from long trailing fabric. If your child is wearing a mask, make sure the eye holes are large enough so he or she can see out.
- Provide children with flashlights to carry for lighting or glow sticks as part of their costume.
- Dried flowers, cornstalks and crepe paper catch fire easily. Keep all decorations away from open flames and other heat sources like light bulbs and heaters.
- Use a battery-operated candle or glow stick in jack-o-lanterns. If you use a real candle, use extreme caution. Make sure children are watched at all times when candles are lit. When lighting candles inside jack-o-lanterns, use long, fireplace-style matches or a utility lighter. Be sure to place lit pumpkins well away from anything that can burn and far enough out of the way of trick-or-treaters, doorsteps, walkways and yards.
- Remember to keep exits clear of decorations, so nothing blocks escape routes.
- Tell children to stay away from open flames including jack-o-lanterns with candles in them. Be sure they know how to stop, drop and roll if their clothing catches fire. (Have them practice, stopping immediately,

- dropping to the ground, covering their face with the hands, and rolling over and over to put the flames out.)
- Use flashlights as alternatives to candles or torch lights when decorating walkways and yards. They are much safer for trick-or-treaters, whose costumes may brush against the lighting.
- If your children are going to Halloween parties at others' homes, have them look for ways out of the home and plan how they would get out in an emergency.



## **November**

## **Cooking Fire Safety**

Week 1: Carbon Monoxide Hazards

Week 2: Electrical Hazards

Week 3: Cooking Safety: Turkey Fryers

Week 4: Home Heating

Educator Tips: Provide information on your community's most common types of fire calls and ways to avoid those situations. If you don't have your own data, you can use the statewide or national data. Make flyers available with tips on how to avoid these calls.

#### National Fire Service History:

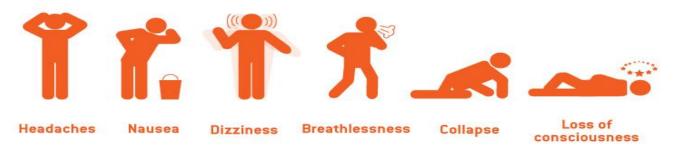
- November 9, 1872 Great Boston Fire (9 FF's Killed)
- November 15, 1942 Boston Wall Collapse (6 FF's Killed)
- November 28, 1942 Coconut Grove Nightclub Fire (492 deaths) Boston
- November 21, 1980 MGM Grand Hotel Fire (85 deaths)
- November 29, 1988 Kansas City Trailer Explosion (6 FF's Killed)

#### WV Fire Service History:

- On November 19, 1909, the Lincoln County Courthouse in Hamlin burned to the ground. While devastating fires were fairly commonplace in the early 20th century, it has been widely speculated that the Lincoln County Courthouse was an act of arson.
- On November 20, 1907, fire destroyed much of the business section of Oceana.
- On Nov. 26, 1952, a ward building at Huntington State Hospital, now Mildred Mitchell-Bateman Hospital, caught fire, killing 17 people.

STATE FIRE MARSHAL EST. 1909

## Signs of carbon monoxide poisoning



## **Carbon Monoxide Hazards**

Although the popularity of carbon monoxide (CO) alarms has been growing in recent years, it cannot be assumed that everyone is familiar with the hazards of carbon monoxide poisoning in the home.

Often called the invisible killer, carbon monoxide is an odorless, colorless gas created when fuels (such as gasoline, wood, coal, natural gas, propane, oil, and methane) burn incompletely. In the home, heating and cooking equipment that burn fuel are potential sources of carbon monoxide. Vehicles or generators running in an attached garage can also produce dangerous levels of carbon monoxide.

The dangers of CO exposure depend on a number of variables, including the victim's health and activity level. Infants, pregnant women, and people with physical conditions that limit their body's ability to use oxygen (i.e. emphysema, asthma, heart disease) can be more severely affected by lower concentrations of CO than healthy adults would be.

A person can be poisoned by a small amount of CO over a longer period of time or by a large amount of CO over a shorter amount of time.

In 2010, U.S. fire departments responded to an estimated 80,100 non-fire CO incidents in which carbon monoxide was found, or an average of nine such calls per hour. The number of incidents increased 96 % from 40,900 incidents reported in 2003. This increase is most likely due to the increased use of CO detectors, which alert people to the presence of CO. During 2006-2010, municipal fire departments responded to an annual average of 72,000 carbon monoxide incidents, excluding incidents where nothing was found or fire was present. These incidents were more common during the winter months, and in residential properties. Carbon monoxide calls to fire departments are more common during the early evening hours.

Installing and maintaining CO alarms can also help reduce the risk of carbon monoxide poisoning. If you smell gas in your gas heater or other appliance, do not light it. Leave the home immediately and call your local fire department or gas company.





Often called the invisible killer, carbon monoxide is an invisible, odorless, colorless gas created when fuels (such as gasoline, wood, coal, natural gas, propane, oil, and methane) burn incompletely. In the home, heating and cooking equipment that burn fuel can be sources of carbon monoxide.

- O alarms should be installed in a central location outside each sleeping area and on every level of the home and in other locations where required by applicable laws, codes or standards. For the best protection, interconnect all CO alarms throughout the home. When one sounds, they all sound.
- Follow the manufacturer's instructions for placement and mounting height.
- Choose a CO alarm that has the label of a recognized testing laboratory.
- Call your local fire department's non-emergency number to find out what number to call if the CO alarm sounds.
- Test CO alarms at least once a month; replace them according to the manufacturer's instructions.
- If the audible trouble signal sounds, check for low batteries. If the battery is low, replace it. If it still sounds, call the fire department.
- If the CO alarm sounds, immediately move to a fresh air location outdoors or by an open window or door. Make sure everyone inside the home is accounted for. Call for help from a fresh air location and stay there until emergency personnel.
- If you need to warm a vehicle, remove it from the garage immediately after starting it. Do not run a vehicle or other fueled engine or motor indoors, even if garage doors are open. Make sure the exhaust pipe of a running vehicle is not covered with snow.
- During and after a snowstorm, make sure vents for the dryer, furnace, stove, and fireplace are clear of snow build-up.
- A generator should be used in a well-ventilated location outdoors away from windows, doors and vent openings.
- Gas or charcoal grills can produce CO only use outside.



#### Your Source for SAFETY Information

NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169

## HOME HEATING EQUIPMENT



Have fuel-burning heating equipment and chimneys inspected by a professional every year before cold weather sets in. When using a fireplace, open the flue for adequate ventilation. Never use your oven to heat your home.

## **FACTS**

- ! A person can be poisoned by a small amount of CO over a longer period of time or by a large amount of CO over a shorter amount of time.
- In 2010, U.S. fire departments responded to an estimated 80,100 non-fire CO incidents in which carbon monoxide was found, or an average of nine calls per hour.

#### Penguin Air & Plumbing

penguinair.com - (480) 747-6803



## **Electrical Hazards**

Flipping a light switch. Plugging in a coffeemaker. Charging a laptop computer. These are second nature for most of us. Electricity makes our lives easier. However, we need to be cautious and keep safety in mind.

Electrical failures or malfunctions were factors in an estimated 47,000 home structure fires reported to U.S. fire departments in 2014. These fires caused 520 deaths, 1,250 injuries and \$1.4 billion in direct property damage.

#### Facts & figures:

- Roughly half (48%) of home electrical failure fires involved electrical distribution or lighting equipment.
- From 2007-2011, 46% of electrical failure home fires involved other known type of equipment. The leading other known type of equipment involved in home electrical failure fires are washer or dryer, fans, and portable or stationary space heater.
- Some type of electrical failure or malfunction was cited as factor contributing to ignition for 74% of electrical distribution or lighting equipment home structure fires.

#### Safety Tips:

- Call a qualified electrician or your landlord if you have:
- Frequent problems with blowing fuses or tripping circuit breakers
- A tingling feeling when you touch an electrical appliance
- Discolored or warm wall outlets
- A burning or rubbery smell coming from an appliance
- Flickering or dimming lights
- When you are buying or remodeling a home, have it inspected by a qualified inspector.
- Only use one heat-producing appliance (such as a coffee maker, toaster, space heater, etc.) plugged into a
  receptacle outlet at a time.
- Major appliances (refrigerators, dryers, washers, stoves, air conditioners, etc.) should be plugged directly into a wall receptacle outlet. Extension cords and plug strips should not be used.
- Arc fault circuit interrupters (AFCIs) shut off electricity when a dangerous condition occurs. Consider having them installed in your home. Use a qualified electrician.
- Use ground fault circuit interrupters (GFCIs) to reduce the risk of shock. GFCIs shut off an electrical circuit when it becomes a shock hazard. They should be installed inside the home in bathrooms, kitchens, garages and basements. All outdoor receptacles should be GFCI protected.
- Test AFCIs and GFCIs once a month to make sure they are working properly.
- Check electrical cords to make sure they are not running across doorways or under carpets. Extension cords are intended for temporary use. Have a qualified electrician add more receptacle outlets so you don't have to use extension cords.
- Use light bulbs that match the recommended wattage on the lamp or fixture. There should be a sticker that indicates the maximum wattage light bulb to use.



## **Cooking Safety: Turkey Fryers**

The U.S. Consumer Product Safety Commission is issuing safety tips for preventing fires and burns when using turkey fryers. Since 1998, CPSC has reports of 75 incidents that involved fires, flames, or burns associated with turkey fryers.

The majority of reported incidents occurred while the oil was being heated, prior to adding the turkey. For this reason, it is very important consumers monitor the temperature of the oil closely. If any smoke at all is noticed coming from a heating pot of oil, the burner should be turned off immediately because the oil is overheated.

There is a risk of injury resulting from splashing due to the cooking of partially frozen meats. Thoroughly thaw and dry ALL meats before cooking in hot oil. One reported burn incident occurred when partially frozen chicken wings were added to hot oil in a turkey fryer.

CPSC staff recommends consumers who choose to fry turkeys follow the following safety guidelines:

- Keep fryer in FULL VIEW while burner is on.
- Place fryer in an open area AWAY from all walls, fences, or other structures.
- Never use IN, ON, or UNDER a garage, breezeway, carport, porch, or any structure that can catch fire.
- Raise and lower food SLOWLY to reduce splatter and avoid burns.
- COVER bare skin when adding or removing food.
- Check the oil temperature frequently.
- If oil begins to smoke, immediately turn gas supply OFF.
- If a fire occurs, immediately call 911. DO NOT attempt to extinguish fire with water.

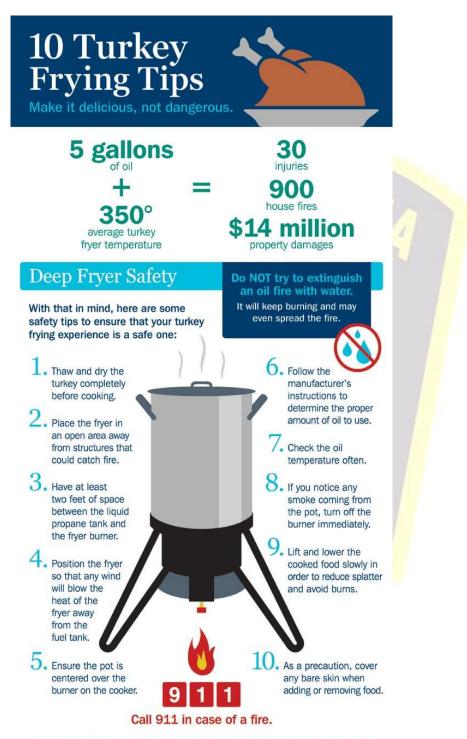
For safest operation, CPSC staff recommends that consumers follow these guidelines as they prepare to use a turkey fryer:

- Make sure there is at least 2 feet of space between the liquid propane tank and fryer burner.
- Place the liquid propane gas tank and fryer so that any wind blows the heat of the fryer away from the gas tank.
- Center the pot over the burner on the cooker.

• Completely thaw (USDA says 24 hours for every 4 to 5 pounds) and dry turkey before cooking. Partially frozen and/or wet turkeys can produce excessive hot oil splatter when added to the oil.

Follow the manufacturer's instructions to determine the proper amount of oil to add. If those are not available:

- Place turkey in pot
- Fill with water until the turkey is covered by about 1/2 inch of water
- Remove and dry turkey
- Mark water level. Dump water, dry the pot, and fill with oil to the marked level.



Fry safely. Then, enjoy your turkey with family and friends!

Sources:
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Fire Anal, Nov. 2011. Web. 27 Sept. 2012. http://www.nfpa.org/assets/files/PDF/OS.Cooking.pdf.
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## **Home Heating Safety**

n 2009-2013, heating equipment was involved in an estimated 56,000 reported U.S. home structure fires, with associated losses of 470 civilian deaths, 1,490 civilian injuries, and \$1.0 billion in direct property damage. These fires accounted for 16% of all reported home fires.

#### Facts & figures:

- Space heaters, whether portable or stationary, accounted for two of every five (40%) of home heating fires and four out of five (84%) of home heating fire deaths.
- The leading factor contributing to home heating fires (30%) was failure to clean, principally creosote from solid-fueled heating equipment, primarily chimneys.
- Placing things that can burn too close to heating equipment or placing heating equipment too close to things that can burn, such as upholstered furniture, clothing, mattress, or bedding, was the leading factor contributing to ignition in fatal home heating fires and accounted for more than half (56%) of home heating fire deaths.
- Nearly half (49%) of all home heating fires occurred in December, January and February.

#### Some simple steps can prevent most heating-related fires from happening.

- Keep anything that can burn at least three feet away from heating equipment, like the furnace, fireplace, wood stove, or portable space heater.
- Have a three-foot "kid-free zone" around open fires and space heaters.
- Never use your oven to heat your home.
- Have a qualified professional install stationary space heating equipment, water heaters or central heating equipment according to the local codes and manufacturer's instructions.
- Have heating equipment and chimneys cleaned and inspected every year by a qualified professional.
- Remember to turn portable heaters off when leaving the room or going to bed.
- Always use the right kind of fuel, specified by the manufacturer, for fuel burning space heaters.
- Make sure the fireplace has a sturdy screen to stop sparks from flying into the room. Ashes should be cool before putting them in a metal container. Keep the container a safe distance away from your home.

## Heating Fire Safety help maintain a fire-safe home

## Follow these heating tips to this winter.













#### **Space Heater**

- · Keep anything that can burn, such as bedding, clothing and curtains, at least 3 feet away from the heater.
- · Make sure the heater has an automatic shutoff, so if it tips over, it shuts off.
- · Turn heaters off when you go to bed or leave the room.
- · Plug portable heaters directly into outlets and never into an extension cord or power strip.
- Only use portable heaters from a recognized testing laboratory.

#### **Fireplace**

- · Keep a glass or metal screen in front of the fireplace to prevent embers or sparks jumping out.
- · Do not burn paper in your fireplace.
- · Put the fire out before you go to sleep or leave your home.
- Put ashes in a metal container with a lid, outside, at least 3 feet from your home.

#### **Wood Stove**

- · Make sure your wood stove is 3 feet from anything that can burn.
- · Do not burn paper in your wood stove.
- Put the fire out before you go to sleep or leave your home.
- Have your chimney inspected and cleaned each year by a professional.

#### **Furnace**

- · Have your furnace inspected each year.
- Keep anything that can burn away from the furnace.

#### **Kerosene Heater**

- · Only use kerosene heaters from a recognized testing laboratory.
- · Make sure the heater has an automatic shutoff, so if it tips over, it shuts off.
- · Refuel your cooled heater outside.

U.S. Fire Administration





For more information and free resources, visit www.usfa.fema.gov/prevention/outreach.

## **Heating Your Home Safely**





- the safest, most efficient and economical unit for your home.
- · Don't try to install your own heating system. Leave it to a qualified technician.
- When buying a new home ask a specialist to inspect the heating system. Purchasing a new furnace and installing

#### Solid Fuel

solid fuel heating A solid fuel heating system uses wood, coal or fuel pellets.

· Don't choose a unit that is too large for your needs. Select a heating unit that is appropriate to the size of the



- The unit should be properly positioned, according to the manufacturer's specifications for correct clearance.
- · Install your unit close to a chimney

lectric heating includes baseboard, portable and forced-air systems.

- Curtains should not hang over an electric baseboard heater
- Electric portable heaters are designed to be used to supplement your main heating source. They are intended for smaller floor spaces.
- Units must be properly maintained.
   Frayed cords and loose plugs can cause
- Never remove the third prong on a three-prong plug or bend it back to use a two-prong outlet. The third prong is a necessary ground for the appliance or
- Never use extension cords to run electric heaters or any major appliance

#### Liquid Fuel

iquid fuels include oil, waste oil and kerosene. Oil fuel heaters such as oil furnaces and oil-fired space heaters pose certain hazards which can be avoided.

Fuel must be stored in an approved container/tank.

- Regular servicing by a qualified technician is necessary for the efficient and safe operation of your furnace.
- Ventilation systems for oil-fuelled units must be inspected frequently.
- · Waste oil heaters are designed for use in rcial buildings and should not be installed in a residence. · Kerosene heaters must be supervised at
- all times. They are dangerous to children
- Kerosene heaters should only use fuel which is specified by the manufacturer.
- · Never refuel a kerosene unit indoors, or when the unit is hot.

#### Gas Fuelled

- · Vents must be checked frequently to prevent blockage.
- Portable gas heaters should never be installed in poorly ventilated areas Deadly carbon monoxide gases may build up in such areas.
- A supply of fresh air is essential when operating a gas-fired unit.

#### Safety Tins

- · Keep all heaters a safe distance from combustibles.
- Never hang clothing on, or near the heater to dry.

- · Never use your stove or clothes dryer to
- · Don't use a hair dryer under the cove to warm your bed, it could set it on fire!
- Keep bed clothes and toys away from baseboard heaters · Never place wet wood on top of a wood
- stove to dry. Keep your wood stored under cover in a dry, vented area. Frequently check your wood stove for
- defects such as cracks and swelling
- Second-hand appliances should be checked by a qualified person before



- · Have your local fire department check your home for safety hazards.
- · Develop an emergency escape plan for your family, and practise it regularly
- · In case of fire, get out and stay out! Use a neighbour's phone to call the emergency response number in your

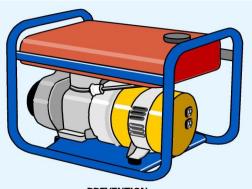






# Portable generator safety

When the power goes out a portable generator can be a lifesaver, but used improperly it also can become life-threatening.



DANGER	REASON	PREVENTION
Carbon monoxide poisoning	Gasoline-powered generators exhaust carbon monoxide, a colorless, odorless gas that displaces oxygen in the hemoglobin of the red blood cells.	Operate generators away from the house, in a well ventilated area. If it's in the garage, make sure the garage is open.
Backfeed shock	The generator is connected to the home's wiring system, posing a hazard to anyone working on powerlines.	Plug appliances you want powered directly into the generator. If powering a hard-wire item, such as the furnace fan, you will need a transfer switch. The switch should only be installed by a licensed electrician and requires an electrical permit and an electrical inspection.
Fire	Overloaded cords can overheat and cause fires. Small gasoline engines can sometimes backfire, causing sparks.	Be sure extension cords are properly sized to carry the electric load. Install a spark arrest muffler and keep the generator away from combustible material.

## Symptoms of carbon monoxide exposure

These are possible complications average adults may expect from different percentages of carbon monoxide in their blood:



10 percent: Headaches may develop, or there may be no apparent symptoms. A carbon monoxide detector will activate.



15 to 25 percent: Headache and nausea.



**30 to 35 percent:** Drowsiness, weakness, dizziness, dimmed vision, severe headache, nausea and vomiting.



40 percent: Confusion, increased heart rate and blackout spells.



**45 percent:** Convulsions, permanent brain damage.



**50 percent:** Convulsions, coma and death.

SOURCES: VIRGINIA COOPERATIVE EXTENSION, UNDERWRITERS LABORATORIES INC.

GNS AND THE NEWS-PRESS

## Heating safety tips

Heating equipment is the leading cause of home fire deaths, so it's a good idea to keep these tips in mind when heating your home.

BURN at least three feet away from heating

equipment like the furnace, fireplace or portable space heaters.

MAVE A THREE-FOOT

"KID-FREE ZONE" around open fires and space heaters.

REMEMBER TO TURN

PORTABLE HEATERS OFF when

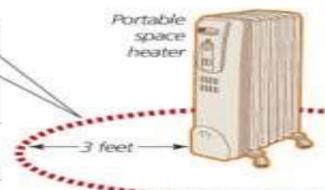
leaving the room or going to bed.

NEVER USE AN OVEN to heat a home.

HAVE QUALIFIED PROFESSIONALS install and regularly inspect heating equipment.

TEST SMOKE ALARMS monthly.

Source: National Fire Frotection Association



## **December**

## **Holiday Safety**

Week 1: Christmas Tree Safety

Week 2: Holiday Decoration Hazards

Week 3: Holiday Cooking Safety

Week 4: New Year's Eve And Fireworks

#### **Educator Tips:**

Use your NFIRS data and provide information on your community's most common types of fire calls and ways to avoid those situations. If you don't have your own data, you can use the statewide or national data. Make flyers available with tips on how to avoid these calls.

#### National Fire Service History:

- December 5, 1876 NY Theater Fire (300 deaths)
- December 30, 1903 Iroquois Theatre Fire (602 deaths)
- December 22, 1910 Chicago Stockyard Fire (21 FF's killed)
- December 22, 1910 PA Leather Factory Fire (13 FF's killed)
- December 7, 1946 Atlanta Winecoff Hotel Disaster (119 deaths)
- December 1, 1958 Our Lady of Angels School Fire (95 deaths)
- December 29, 1963 Roosevelt Hotel Fire (21 guests and 1 FF's killed)
- December 3, 1999 Cold Storage Warehouse Fire (6 FF's killed)

#### WV Fire Service History:

• On December 27, 1934, a boiler in a locomotive hauling mine workers at McDunn in Fayette County exploded, resulting in the death of eighteen miners.

STATE FIRE MARSHAL EST. 1909



## **Christmas Tree Safety**

Although Christmas tree fires are not common, when they do occur, they are more likely to be serious.

#### *Picking the tree:*

• Choose a tree with fresh, green needles that do not fall off when touched.

#### Placing the tree

- Before placing the tree in the stand, cut 2" from the base of the trunk.
- Make sure the tree is at least three feet away from any heat source, like fireplaces, radiators, candles, heat vents or lights.
- Make sure the tree is not blocking an exit.
- Add water to the tree stand. Be sure to add water daily.

#### *Lighting the tree:*

- Use lights that have the label of an independent testing laboratory. Some lights are only for indoor or outdoor use
- Replace any string of lights with worn or broken cords or loose bulb connections. Read manufacturer's instructions for number of light strands to connect.
- Never use lit candles to decorate the tree.
- Always turn off Christmas tree lights before leaving home or going to bed.

#### After Christmas:

• Get rid of the tree afte<mark>r Christmas. Dried-out trees are a fire danger and sh</mark>ould not be left in the home or garage, or placed outside against the home. Check with your local community to find a recycling program. Bring outdoor electrical lights inside after the holidays to prevent hazards and make them last longer.

National estimates of reported home structure fires during the five-year period from 2009 to 2013, Christmas trees were the item first ignited in an average of 210 reported home structure fires per year, resulting in an annual average of seven civilian fire deaths, 19 civilian fire injuries, and \$17.5 million in direct property damage.

On average, one of every 31 reported home Christmas tree fires resulted in a death, compared to an average of one death per 144 total reported home fires.



As you deck the halls this holiday season, be fire smart. A small fire that spreads to a Christmas tree can grow large very quickly.



#### PICKING THE TREE

Choose a tree with fresh, green needles that do not fall off when touched.



#### PLACING THE TREE

- Before placing the tree in the stand, cut 2" from the base of the trunk.
- Make sure the tree is at least three feet away from any heat source, like fireplaces, radiators, candles, heat vents or lights.
- Make sure the tree is not blocking an exit.
- Add water to the tree stand. Be sure to add water daily.



#### LIGHTING THE TREE

- Use lights that have the label of an independent testing laboratory. Some lights are only for indoor or outdoor use.
- 333 Replace any string of lights with worn or broken cords or loose bulb connections. Connect no more than three strands of mini string sets and a maximum of 50 bulbs for screw-in bulbs. Read manufacturer's instructions for number of LED strands to connect.
- Never use lit candles to decorate the tree.
- Always turn off Christmas tree lights before leaving home or going to bed.



Your Source for SAFETY Information

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## **After Christmas**

Get rid of the tree after
Christmas or when it is dry.
Dried-out trees are a fire
danger and should not be
left in the home or garage,
or placed outside against
the home. Check with your
local community to find a
recycling program.
Bring outdoor electrical
lights inside after
the holidays to
prevent hazards
and make them
last longer.

## FACTS

- One of every three home Christmas tree fires are caused by electrical problems.
- Although Christmas tree fires are not common, when they do occur, they are more likely to be serious.
- A heat source too close to the tree causes roughly one in every six of the fires.

www.nfpa.org/education



## **Holiday Decoration Hazards**

#### Decorative Lights:

- Inspect light strings, and throw out any with frayed or cracked wires or broken sockets. When decorating, don't run more than three strings of lights end to end. Extension cords should be in good condition and UL-rated for indoor or outdoor use. Check outdoor receptacles to make sure the ground fault interrupters don't trip. If they trip repeatedly that's a sign that they need to be replaced.
- When hanging lights outside, avoid using nails or staples, which can damage the wiring and increase the risk of a fire. Instead, use UL-rated clips or hangers. And take lights down within 90 days
- Do not attempt to repair a worn light set! Throw it away and purchase a new replacement.
- Do not overload electrical outlets. Do not link more than three light strands, unless the
  directions indicate it is safe.
- Do not leave lights turned on for prolonged periods or unattended.
- In addition to being shatterproof and shock resistant, LED lights produce almost no heat, making them safe to touch and greatly reducing the risk of fire.

#### **Decorations:**

- Choose decorations that are flame resistant or flame retardant.
- Keep decorations away from heat sources, windows and doors.
- Decorative lighted villages, Nativity scenes, electric trains, and other electrically powered scenery and figures should be monitored like other decorative lights.
- Keep all the wrapping paper in one place and throw it away immediately after you're done unwrapping gifts. Never burn gift wrapping paper because it burns quickly and could start a flash fire.
- In homes with small children, take special care to avoid sharp, weighted or breakable decorations, keep trimmings with small removable parts out of the reach of children who could swallow or inhale small pieces, and avoid trimmings that resemble candy or food that may tempt a child to eat them.

#### Storing Decorations After The Holidays:

Storing Christmas decorations also requires safety measures to be taken. The following are some safety tips that the National Fire Protection Association (NFPA) and the Underwriters Laboratories urge consumers to use when using and storing their holiday decorations:

- Unplug electric decorations by using the gripping area provided on the plugs. Never pull the cord to unplug a device from electrical outlets. Pulling on the cord can damage the cord's wire and insulation and even lead to an electrical shock or fire.
- Take the time to inspect your light string for flaws. Throw out light sets if they have loose connections, broken or cracked sockets, frayed or bare wires. Do not place a faulty set of lights back into the storage

- box for next year's use. Take the initiative now and throw out worn light strings. Shop for replacements during after-Christmas sales or add lights to your Christmas decoration list for next year.
- Be sure to pack lights appropriately to prevent the need to untangle a web of lights next year. When preparing your holiday lights for storage, consider purchasing a holiday light storage reel, or create your own system.
- Store electrical decorations in a dry place, such as a suitcase, where they cannot be damaged by water or dampness. Also, keep them away from children and pets to ensure that cords and wires are not damaged in storage.
- Wrap each set of lights and put them in individual plastic bags, or wrap the lights around an empty wrapping paper tube or cardboard square. If you wrap the lights around a piece of cardboard, cut a slit in one side of the square. Thread the end of a set of lights through the slit. Wrap the lights around the cardboard, threading the other end back through the slit.
- Although the box your artificial tree came in may seem like the perfect one to repack it in for storing, this isn't the wisest idea for preservation. The cardboard boxes begin to deteriorate making them more prone to insect infestation. Consider purchasing a tree storage bag instead.
- Special ornaments benefit from being stored in their original packaging. If you throw out the original box, store smaller ornaments in an egg carton or ornament specific storage bag.
- Save yourself time next year by thoroughly labeling decorations before storing. Make a detailed inventory on the outside of each container. Number each to keep track of how many you have (for example, Box 1 of 12) and consider taping a piece of wrapping paper on the outside of each container for easy holiday storage identification.





## **Holiday Cooking Safety**

The holiday season means holiday parties, holiday shopping, and plenty of holiday cooking. With so much time being spent in the kitchen, homes are at a higher risk for cooking fires. Here are some tips on how to avoid a holiday cooking fire in your kitchen.

- Keep children out of the kitchen when holiday cooking is taking place. Children can easily cause spills, which could lead to a holiday cooking fire.
- When working around an open flame or heated surface, remove any paper or plastic materials from the
- When grilling, frying, or boiling food, never leave the stove unattended. You are working with flammable grease and oil at high temperatures, making the situation vulnerable to a holiday cooking fire. Should you need to leave the kitchen, turn off the stove or ask a family member to watch the stove.
- Be aware of foods left to boil or simmer on your stovetop. While these items are a tad safer to leave unattended, it's important to monitor your food while setting a timer to avoid burns.
- Never wear long sleeves while cooking over an open flame. Clothing can easily catch flame, causing an unwanted and dangerous holiday cooking fire.
- Should a fire occur on your stovetop, turn off the heat source if you can do so safely. Then slide a lid over your pan or pot to smother the flames. Never try to remove the pot or pan from the stove while flames or smoke are visible.
- Should an oven fire occur, keep the door to the oven closed and turn off the heat source if you can do so safely.
- Should a holiday cooking fire occur, call your local fire department immediately. Ensure that all family members and friends know safe ways to leave your home should a fire occur.
- When a holiday cooking fire is possible, your home should have a portable fire extinguisher on hand at all times. A Class K extinguisher is best used in scenarios involving flammable cooking materials such as grease or oil.
- Never use water on a grease fire, because it can spread the burning grease around the kitchen.
- If there is a microwave fire, keep the door closed and unplug the microwave.
- Use extreme caution with outdoor deep fryers typically used for turkey. Make sure it's not located too
  close to the house and follow manufacture instructions. Never leave a deep fryer unattended, even for a
  minute.







2 Use Safe Knife Skills



3 Monitor the Walkway



Wear Proper Cooking Attire



Practice Table Safety





### New Year's Eve Fireworks

(from www/fireworkssafety.org)

New Year's Eve is a wonderful time to celebrate the start of a new year. And fireworks are a wonderful way of celebrating. However, all too often, New Year's Eve festivities involve excess alcohol. Just like driving and drinking do not mix, shooting consumer fireworks and drinking absolutely do not mix, says the National Council on Fireworks Safety.

Any person attending a party for New Year's Eve where consumer fireworks are being shot, should make sure that there is a designated shooter who has not been drinking any alcohol. Even a small quantity of alcohol (one beer, a glass of wine) can impair one's judgment and ability to properly set up and use consumer fireworks safely.

Nancy Blogin, President of the National Council on Fireworks Safety notes: "Each New Year's Eve, consumers are injured because their judgment has been impaired by beer, wine, or other alcoholic drink. In the past several years, there have been reports of accidents where the person that was injured had been under the influence of alcohol and did not handle the fireworks in a responsible way. The lesson is simple: alcohol and fireworks don't mix."

In addition, the National Council reminds shooters of consumer fireworks of these other important safety tips:

- Only use fireworks outdoors.
- Use fireworks as directed on the product label.
- Obey all local laws regarding the use of fireworks.
- Never give fireworks to young children.
- Wear safety glasses when shooting fireworks.
- Always have a bucket of water, or water hose, nearby.

And remember, ALCOHOL AND FIREWORKS DON'T MIX!

## Fireworks Safety

Light up the night. And, stay safe.

Whether you like to light a sparkler or two or plan the most eye-catching display in your neighborhood, here are a few quick tips to keep in mind before you start the show.



The majority of injuries sustained from fireworks result from illegal fireworks. Buy only legal fireworks. Looking for a quick way to tell what's legal? Avoid fireworks packaged in brown paper. (That's usually an indication that those particular fireworks were made for professional displays and not intended for consumers.)

## Keep water close.

Always have a bucket of water nearby in case of an emergency. As an extra precaution, douse burned fireworks with water before discarding them in the trash.

## Keep away.

Once you've lit the fuse, back up immediately and maintain a safe distance. What if one of your fireworks doesn't do what it's supposed to do? Douse it with water. Do not attempt to retrieve or reignite a fireworks device that did not light properly.

