

# **NFPA Educational Messages**

*2012 Edition*

## **DESK REFERENCE**



**NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471**  
**[www.nfpa.org](http://www.nfpa.org)**

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## **PURPOSE OF EDUCATIONAL MESSAGES ADVISORY COMMITTEE**

The Educational Messages Advisory Committee meets annually to review NFPA's fire safety education messages and to provide recommendations to NFPA public education staff for updating and revising the messages. The messages are used throughout NFPA's educational programs, curricula, and handouts and provide fire and life safety educators with accurate and consistent language for use when offering safety information to the public. Each topic area is self-contained, written so that all the information needed on a certain subject is provided within that category. As a result, some messaging may be repeated throughout topic areas.

## **Educational Messages Advisory Committee Members 2012**

Bev Gilbert, Chair  
*Gilbert and Associates*

Marty Ahrens, *NFPA*

Brett Brenner, *Electrical Safety Foundation International*

April Briggs, *NFPA*

Gary Carter, *Bessemer, AL Fire Department*

Lorraine Carli, *NFPA*

Judy Comoletti, *NFPA*

Kwame Cooper, *LA City Fire Department*

Steve Dornbusch, *NFPA*

Sharon Gamache, *NFPA*

Ernest Grant, *North Carolina Jaycee Burn Center*

Larry Gray, *Cleveland Fire Department*

Amy LeBeau, *NFPA*

Jorge Mederos, *Fort Lauderdale Fire/Rescue Department*

Angela Mickalide, *Safe Kids Worldwide*

Patricia Mieszala, *Burn Concerns*

Teresa Neal, *United States Fire Administration*

Gerri Penney, *Palm Beach County Fire/Rescue*

Nancy Trench, *Oklahoma State University*

Lisa Braxton, *Staff Liaison*

# Regulations Governing Educational Messages Document Project

## Purpose

The purpose of the Education Messages Advisory Committee is to produce NFPA's Educational Messages Document (EMD).

## Scope

The intent of the EMD is to provide NFPA, fire department public educators, and other fire safety advocates with a guide for the presenting of standardized fire and burn safety messages to the general public.

## Goals

- To prepare proposed fire and burn safety educational messages
- To prepare and/or process comments to amend existing or add new educational messages
- To recommend reconfirmation, withdrawal, or addition of messages
- To maintain NFPA philosophy of clear, simple, accurate, technically sound, and—whenever possible—positive messaging
- To use messages that support the most recent edition of the applicable NFPA code, standard, recommended practice, or guide
- To produce an Educational Messages Document to be made available on the NFPA website

## Membership

The NFPA division manager for public education shall be responsible for determining the size and membership of EMAC. NFPA voting staff members shall not exceed 30 percent of the Committee.

## Structure

EMAC shall have a Chair serving a 3-year term. An NFPA public education staff person shall be assigned as the liaison to EMAC. The liaison holds a non-voting position.

## Appointments of Members and Their

### Tenure

The Chair shall be appointed by the NFPA division manager for public education. All members of EMAC are subject to annual review and reappointment by the NFPA. Those Members who miss two meetings, or otherwise exhibit lack of interest, knowledge, or responsibility, shall not be reappointed and may be removed for the stated causes at any time.

### Change of Status

When the status of a Member changes, including employment, organization represented, or funding source, the individual's membership automatically terminates.

### Role of the Staff Liaison

- To serve in an advisory capacity and assist EMAC to achieve compliance with these regulations
- On instruction and guidance from EMAC, to process and edit text for the EMAC messages
- To be responsible for the editorial treatment of messages to ensure compliance with the *Manual of Style for NFPA Technical Committee Documents*

- To attend EMAC meetings
- To plan meetings, including meeting notification, agenda, and incidentals
- To prepare detailed minutes of EMAC meetings
- To prepare Comments received in a format suitable for EMAC consideration
- To prepare the final EMD and post it on NFPA's website

- Physical demonstrations, experiments or simulations shall not be allowed during EMAC meetings.

## Calling Meetings

The Chair shall call meetings at such times as may be necessary and convenient for the transaction of business.

## Quorum

There shall be no quorum requirement for EMAC meetings.

## Participation

- Participation shall be limited to Committee Members and NFPA staff, except that the request of a guest to address the committee on a subject relevant to a specific item under consideration shall be honored. Guests wishing to address EMAC shall notify the staff liaison in writing at least 7 days before the meeting. When a guest addresses the committee, equal opportunity shall be afforded those with opposing views. The Chair shall designate the time allotted for any such addresses.
- Videos, slides, overheads, and similar visual aids shall be allowed during the meeting of EMAC. The presenters of the information shall be responsible for all equipment arrangements and associated fees pertaining to their presentations.

## Minutes of Meetings

Minutes of each meeting shall be recorded and issued without undue delay to Members by the public education staff liaison. Minutes shall, at a minimum, include the time and place of the meeting, names and affiliations of all persons attending, and the actions taken.

## Voting Procedures and Privileges

Each voting Member, including the Chair, shall have one vote in the affairs of EMAC.

## Voting by Proxy

Voting by proxy shall not be permitted.

## Voting at Meetings

Actions decided during EMAC meetings shall be supported by at least a simple majority of the voting members at the meeting. In calculating the vote, those who abstain shall be omitted from the calculations.

## Who May Submit a Comment

Anyone may submit a Comment, and the submitter need not be a member of EMAC or NFPA. Except for Comments submitted by EMAC, all Comments must be submitted in the name of an individual with the individual's relevant organizational affiliation or representation noted separately. The individual shall be considered the submitter for purposes of these Regulations.

## **Content of Comments**

Each Comment shall be submitted to the assigned NFPA public education staff liaison and shall include the following:

- Identification of the submitter and his or her affiliation where appropriate
- Identification of the educational message to which the Comment is directed
- Proposed text of the Comment, including the wording to be added, revised (and how revised), or deleted
- Statement of the problem and substantiation for the Comment
- The signature of the submitter
- Two copies of any document(s) being proposed as a reference standard or publication.

include a statement, preferably technical in nature, on the reason for the EMAC action. Such statements shall be sufficiently detailed so as to convey the EMAC rationale for its action. A Comment that does not include all of the information listed in “Content of Comments” may be rejected by the Committee for that reason.

## **Time for Submission**

A Comment to revise or amend an existing or proposed message shall be submitted up to the published Comment closing date. A Comment received after that date shall be returned to the submitter.

## **EMAC Action on Comments**

EMAC shall act on all current Comments. EMAC shall act on each Comment by taking one of the following actions:

- Accept the Comment
- Reject the Comment
- Accept the Comment in principle but with changes in the proposed wording
- Accept the Comment in part

The EMAC action on a Comment “accept,” “accept in principle,” “accept in part,” and “reject” shall

# CHAPTER 1 Home Smoke Alarms

## 1.1 Fire Deaths — Smoke Alarms Save Lives

**1.1.1** Working smoke alarms save lives, cutting the risk of dying in a home fire in half. Smoke alarms should be installed and maintained in every home.

## 1.2 Installation

**1.2.1** Smoke alarms should be installed in every sleeping room, outside each separate sleeping area, and on every level of the home, including the basement. Larger homes may require additional smoke alarms to provide a minimum level of protection.

**1.2.2** For the best protection, interconnect all smoke alarms throughout the home. When one sounds, they all sound.

**NEW!** **1.2.3** If you sleep with the bedroom door closed, install smoke alarms inside and outside the bedroom. For the best protection, make sure all the smoke alarms are interconnected.

**1.2.4** Wireless battery-operated interconnected smoke alarms are now available.

**1.2.5** 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 or where extra time is needed to awaken or assist others, both types of alarms or combination ionization-photoelectric alarms, also known as dual sensor smoke alarms, are recommended.

**1.2.6** Choose a smoke alarm that has the label of a recognized testing laboratory.

**NEW!** **1.2.7** 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.

**NEW!** **1.2.8** A smoke alarm installed within

10 to 20 feet (3 to 6 meters) of a cooking appliance must be a photoelectric type or have a hush feature, which temporarily reduces the sensitivity of the alarm.

## 1.3 Testing and Maintenance

**1.3.1** Test smoke alarms at least once a month using the test button or other means such as the mute button on the television remote, if the alarm has that feature.

**1.3.2** Make sure everyone in the home understands the warning of the smoke alarm and knows how to respond.

**1.3.3** To keep smoke alarms working well, follow the manufacturer's instructions for cleaning. The instructions are included in the package or can be found on the internet.

## 1.4 People Who Are Deaf or Hard of Hearing

**NEW!** **1.4.1** Smoke alarms and alert devices, called accessories, are available for people who are deaf or hard of hearing. Strobe lights throughout the home are activated by smoke alarms and alert people who are deaf to fire conditions. When people who are deaf are asleep, a high-intensity strobe light is required along with a pillow or bed shaker to wake them up and alert them to fire conditions so they can escape. This equipment is activated by the sound of a standard smoke alarm.

**NEW!** **1.4.2** Smoke alarm alert devices, called accessories, are available for people who are hard of hearing. These accessories produce a loud, mixed low-pitched sound. This equipment is activated by the sound of the smoke alarm. People who are deaf may find that a pillow or bed shaker is also helpful to wake them up.

**1.4.3** Recent research has shown that a loud, mixed low-pitched sound is more effective for waking people of all ages than the loud high-pitched sound of a traditional smoke alarm. As people age, their ability to hear high-pitched sounds decreases.

**NEW!** 1.4.4 Choose smoke alarms and accessories for people who are deaf or hard of hearing that have the label of a recognized testing laboratory. Research the available products and select one that best meets your individual needs.

**NEW!** 1.4.5 Some alarms are now designed to assist those who cannot climb onto ladders or stools. The alarms can be tested using a television remote.

## 1.5 Battery Replacement

1.5.1 Smoke alarms with nonreplaceable (long-life) 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.

1.5.2 For smoke alarms with any other type of battery, replace batteries at least once a year. If that alarm chirps, replace only the battery.

## 1.6 Smoke Alarm Replacement

1.6.1 Replace all smoke alarms when they are 10 years old.

1.6.2 Immediately replace any smoke alarm that does not respond properly when tested.

**NEW!** 1.6.3 Combination smoke-carbon monoxide alarms should be replaced according to the manufacturer's recommendations.

## 1.7 Rental Units

1.7.1 All rental units need working smoke alarms.

1.7.2 Check with your local fire or building department for information about state and local ordinances on smoke alarm installation and maintenance in rental units.

**NEW!** 1.7.3 If you rent and do not have working smoke alarms, contact your landlord or property manager immediately about having alarms installed.

**NEW!** 1.7.3.1 If for some reason it is outside the responsibility of the landlord to install smoke alarms, consider installing them yourself or having someone install them for you. Some fire departments will install smoke alarms for you.

**NEW!** 1.7.4 If a smoke alarm is not working, the battery or the smoke alarm itself may need to be replaced. The responsibility for maintenance of the smoke alarms may be the responsibility of the landlord or the renter, depending on the rental agreement. Maintain the smoke alarm in accordance with the manufacturer's instructions.

**NEW!** 1.7.5 Test smoke alarms at least once a month using the test button or other means such as the mute button on the television remote, if the alarm has that feature.

1.7.6 Make sure everyone in the home knows the sound and understands the warning of the smoke alarm and knows how to respond.

1.7.7 Dust or vacuum smoke alarms annually and/or whenever the battery is changed. Follow the manufacturer's instructions for cleaning.

# 2. Home Fire Sprinklers

## 2.1 General Tips

2.1.1 Sprinklers protect lives and property by keeping fires small. Because the sprinkler system reacts so quickly, it can dramatically reduce the heat, flames, and smoke produced in a fire, allowing people more time to escape safely.

2.1.2 Sprinklers activate individually. Only the sprinkler closest to the fire will activate, spraying water directly on the fire and not the rest of the home.

2.1.3 A sprinkler will control or put out a fire with a tiny fraction of the water that would be used by fire department hoses.

**2.1.4** Accidental sprinkler discharges are extremely rare.

**2.1.5** Home fire sprinklers can be installed in new or existing homes. If you are remodeling or building your home, install a home fire sprinkler system.

**2.1.6** It is especially important to install a home fire sprinkler system in homes with persons who may not be able to get out without help, such as people with disabilities, young children, or older adults.

## 2.2 Installation

**2.2.1** Have a qualified contractor install your home fire sprinkler system according to NFPA codes and standards and local fire safety regulations.

**2.2.2** Home fire sprinklers work along with smoke alarms to save lives. NFPA data shows that home fire sprinklers reduce the risk of dying in a home fire by 80 percent.

## 2.3 Maintenance

**2.3.1** The fire sprinkler installer must provide instructions on inspecting, testing, and maintaining the system, a simple process that can be performed by the home occupant. A simple visual inspection should be done monthly to ensure that the water valve on the sprinkler is open.

**2.3.2** Periodic visual inspection of all sprinklers should be done monthly to make sure nothing is blocking them and nothing is hung from or attached to them.

**2.3.3** Do a water flow test on the sprinkler system every six months or have a fire sprinkler contractor do the test to ensure all water flow devices are working.

**2.3.4** Keep sprinklers clear and free of objects that can interfere with their proper use.

**NEW!** **2.3.5** Inspect tanks, if present, monthly to make sure that they are full.

**NEW!** **2.3.6.** Where a pump is used, start it every month to make sure that it works and that it does not trip any circuit breakers.

**2.3.7** Whenever painting, make sure sprinklers are not painted by covering them with a bag, which should be removed immediately after the work is done.

# 3. Carbon Monoxide

## 3.1 Dangers of Carbon Monoxide

**NEW!** **3.1.1** Carbon monoxide (CO), often called “the silent killer,” is a gas you cannot see, taste, or smell. It can be created when fossil fuels, such as kerosene, gasoline, coal, natural gas, propane, methane, or wood do not burn properly. CO gas can be deadly.

**3.1.2** Carbon monoxide poisoning can result from faulty furnaces or other heating appliances, portable generators, water heaters, clothes dryers, or cars left running in garages.

**3.1.3** Symptoms of carbon monoxide poisoning include headache, nausea, and drowsiness.

**NEW!** **3.1.4** Exposure to undetected high levels of carbon monoxide can be fatal.

## 3.2 Installation

**NEW!** **3.2.1** Choose a CO alarm that has the label of a recognized testing laboratory. Install and maintain CO alarms inside your home to provide early warning of carbon monoxide.

**NEW!** **3.2.2** CO alarms should be installed in a central location outside each separate sleeping area, on every level of the home, and in other locations where required by applicable laws, codes, or standards. For the best protection, have CO alarms that are interconnected throughout the home. When one sounds, they all sound.

**3.2.3** Follow the manufacturer's instructions for placement and mounting height.

**NEW!** **3.2.4** Combination smoke-CO alarms must be installed in accordance with requirements for smoke alarms.

**NEW!** **3.2.5** CO alarms are not substitutes for smoke alarms and vice versa. Know the difference between the sound of smoke alarms and the sound of CO alarms.

### **3.3 Testing and Replacement**

**3.3.1** Test CO alarms at least once a month and replace them if they fail to respond correctly when tested. The sensors in CO alarms have a limited life. Replace the CO alarm according to manufacturer's instructions or when the end-of-life signal sounds.

**3.3.2** Know the difference between the sound of the CO alarm and the smoke alarm, and their low-battery signals. If the audible low-battery signal sounds, replace the batteries or replace the device. If the CO alarm still sounds, get to a fresh air location and call 9-1-1 or the fire department.

**3.3.3** To keep CO alarms working well, follow manufacturer's instructions for cleaning. The instructions are included in the package or can be found on the internet.

### **3.4 Carbon Monoxide Precautions — Inside the Home**

**3.4.1** Have fuel-burning heating equipment (fireplaces, furnaces, water heaters, wood stoves, coal stoves, space heaters, and portable heaters) and chimneys inspected by a professional every year.

**3.4.2** Open the damper for proper ventilation before using a fireplace.

**3.4.3** Never use your oven or stovetop to heat your home. The carbon monoxide (CO) gas might kill people and pets.

**3.4.4** When purchasing new heating and cooking equipment, select products

tested and labeled by a recognized testing laboratory.

**NEW!** **3.4.5** Make sure all fuel-burning vented equipment is vented to the outside to avoid carbon monoxide (CO) poisoning. Keep the venting for exhaust clear and unblocked.

### **3.5 Carbon Monoxide Precautions — Outside the Home**

**3.5.1** If you need to warm a vehicle, remove it from the garage immediately after starting it. Never 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 blocked with snow, ice, or other materials. The carbon monoxide (CO) gas might kill people and pets.

**NEW!** **3.5.2** Make sure vents for the dryer, furnace, stove, and fireplace are clear of snow and other debris.

**3.5.3** Only use barbecue grills outside, away from all doors, windows, vents, and other building openings. Some grills can produce carbon monoxide gas (CO). Never use grills inside the home or the garage, even if the doors are open.

### **3.6 Portable Generators**

**3.6.1** Use portable generators outdoors in well-ventilated areas away from all doors, windows, vents, and other building openings to prevent exhaust fumes from entering the home.

**3.6.2** When using portable generators, install battery-operated CO alarms or plug-in CO alarms with a battery backup in the home according to the manufacturer's installation instructions.

### **3.7 If Your CO Alarm Sounds**

**3.7.1** Immediately move to a fresh air location (outdoors or by an open window or door). Make sure everyone inside the home is accounted for.

**3.7.2** Call 9-1-1 or the fire department from a fresh air location (outdoors or by an open window). Remain at a fresh air location until emergency personnel arrive to assist you.

## 4. Home Fire Escape

### 4.1 Planning

**4.1.1** Make a home escape plan. Draw a map of each level of the home. Show all doors and windows. Discuss the plan with everyone in your household, including visitors.

**4.1.2** Children, older adults, and people with disabilities may need assistance to wake up and get out. Make sure that someone will help them.

**4.1.3** Teach your children how to escape on their own in case you cannot help them.

**4.1.4** Practice your home fire drill with overnight guests.

**4.1.5** Know at least two ways out of every room, if possible. Make sure all doors and windows that lead outside open easily.

**NEW!** **4.1.6** If a room has a window air conditioner, make sure there is still a second way out of the room.

**NEW!** **4.1.7** If you sleep with the bedroom door closed, install smoke alarms inside and outside the bedroom. For the best protection, make sure all smoke alarms are interconnected.

**4.1.8** Windows with security bars, grills, and window guards should have emergency release devices.

**4.1.9** Make sure everyone in your home knows how to call 9-1-1 or your local emergency number from a cell phone or from a neighbor's phone.

**4.1.10** Make sure everyone in your home knows the sound and understands the warning of the smoke alarm and knows how to respond.

**4.1.11** Have an outside meeting place (something permanent, like a tree, light pole, or mailbox) a safe distance in front of the home.

**4.1.12** Make sure your house number can be seen from the street both day and night.

**NEW!** **4.1.13** If you have escape ladders for escaping from the second and third floors, make sure they are listed by a recognized testing laboratory and meet ASTM F2175 *Standard Specification for Portable and Permanent Emergency Escape Ladders for Residential Use*.

**4.1.14** Have a plan for everyone in your home who has a disability.

### 4.2 If There Is a Fire

**4.2.1** When the smoke alarm sounds, get out fast. You may have only seconds to escape safely.

**4.2.2** If there is smoke blocking the door or first way out, use your second way out.

**4.2.3** Smoke is toxic. If you must escape through smoke, get low and go under the smoke to your way out.

**4.2.4** Before opening a door, feel the doorknob and the door. If either is hot, leave the door closed and use your second way out.

**4.2.5** If there is smoke coming around the door, leave the door closed and use your second way out.

**4.2.6** If you open a door, open it slowly. Be ready to shut it quickly if heavy smoke or fire is present.

**4.2.7** If you cannot get to someone needing assistance, leave the home and call 9-1-1 or the fire department. Tell the emergency operator where the person is located.

**NEW!** **4.2.8** If pets are trapped inside your home, tell fire fighters right away. Never re-enter a burning building.

**4.2.9** If you cannot get out, close the door and cover vents and cracks around the door with cloth or tape to keep smoke out. Call 9-1-1 or your fire department. Say where you are and then signal for help at the window with a light-colored cloth or a flashlight.

### **4.3 Practicing the Home Fire Drill**

**4.3.1** Push the smoke alarm button to start the drill.

**4.3.2** Practice what to do in case there is smoke. Get low and go. Get out fast.

**4.3.3** Practice using different ways out.

**4.3.4** Close doors behind you as you leave.

**4.3.5** Get out and stay out. Never go back inside for people, pets, or things.

**4.3.6** Go to your outside meeting place.

**4.3.7** Practice your home fire escape drill twice a year with everyone in your home. Practice at night and during the daytime.

**NEW** **4.3.8** After you have practiced your home fire escape drill, evaluate it and discuss what worked and what needs to be improved. Improve it and practice again.

## **5. Hotels/Motels**

**5.1.1** Choose a hotel that is protected by both smoke alarms and fire sprinklers.

**5.1.2** When you check in, ask the desk clerk what the fire alarm sounds like. If you are deaf or hard of hearing, ask for a room equipped with a smoke alarm and accessories that will awaken you or a portable smoke alarm made specifically for people who are deaf or hard of hearing. You may want to consider bringing one with you.

**5.1.3** Read the escape plan posted in your room.

**5.1.4** Count the number of doors between your room and the nearest two fire exits.

Open the exit doors to be sure they are unlocked.

**5.1.5** Keep your room key by your bed and take it with you if there's a fire. If you cannot escape, you may have to return to your room.

**5.1.6** If you hear an alarm, leave immediately, closing all doors behind you.

**5.1.7** Use the stairs—never use elevators during a fire.

**5.1.8** If you must escape through smoke, get low and go under the smoke to your exit.

**5.1.9** If all escape routes are blocked, return to your room. Shut off fans and air conditioners. Stuff wet towels or bedding in the cracks around the doors and vents. Call the fire department to let them know your location. Wait at a window and signal for help with a flashlight or light-colored cloth.

**5.1.10** Bring a flashlight; keep it near your bed.

## **6. If You Are on Fire**

**6.1.1** If your clothes catch fire, stop, drop, and roll. Stop immediately, drop to the ground and cover your face with your hands. Roll over and over or back and forth until the fire is out.

**6.1.2** If you cannot stop, drop, and roll, keep a blanket or towel nearby to help you or others smother flames. Cover the person with a blanket to smother the fire. If you use a wheelchair, scooter, or other device and are able to get to the floor, lock the device first to stay in place before getting on the floor to roll until the flames are out.

**6.1.3** Immediately remove loose clothing or clothing with elastic bands, belts, and jewelry.

**NEW** **6.1.4** Treat a burn right away by putting it in cool water for 3 to 5 minutes. Cover

with a clean, dry cloth. Do not apply creams, ointments, sprays, or other home remedies. Get medical help right away by calling 9-1-1 or the fire department.

## 7. Cooking

### 7.1 Stay Alert

**7.1.1** To prevent cooking fires, you must be alert. You will not be alert if you are sleepy, have consumed alcohol, or have taken medicine or drugs that make you drowsy.

### 7.2 Watch What You Heat!

7.2.1 The leading cause of fires in the kitchen is unattended cooking.

7.2.2 Stay in the kitchen when you are frying, grilling, or broiling food. If you leave the kitchen for even a short period of time, turn off the stove.

7.2.3 If you are simmering, baking, roasting, or boiling food, check it regularly, remain in the home while food is cooking, and use a timer to remind you that you're cooking.

### 7.3 Keeping Things That Can Catch Fire Away from Heat Sources

**7.3.1** Keep anything that can catch fire—oven mitts, wooden utensils, food packaging, towels, curtains—away from your stovetop.

**7.3.2** Keep the stovetop, burners, and oven clean.

**7.3.3** Wear short, close-fitting, or tightly rolled sleeves when cooking. Loose clothing can dangle onto stove burners and can catch fire if it comes in contact with a gas flame or an electric burner.

### 7.4 What to Do If You Have a Cooking Fire

**7.4.1** Always keep a lid nearby when you are cooking. If a small grease fire starts in a pan, smother the flames by carefully sliding

the lid over the pan. Turn off the burner. Do not move the pan. To keep the fire from restarting, leave the lid on until the pan is completely cool.

**NEW!** **7.4.1.1** Never pour water on a cooking pan grease fire.

**NEW!** **7.4.1.2** Never discharge a portable fire extinguisher directly into a cooking pan grease fire because it will spread the fire.

**7.4.2** In case of an oven fire, turn off the heat and keep the door closed until it is cool. After a fire, the oven should be checked and/or serviced before being used again.

**7.4.3** When in doubt, just get out! When you leave, close the door behind you to help contain the fire. After you leave, call 9-1-1 or the fire department from a cell phone or a neighbor's telephone.

**NEW!** **7.4.4** If you know how to use a portable fire extinguisher and decide to fight the fire, be sure others are already getting out and that you have a clear path to the way out. Call 9-1-1 or the fire department from outside the home.

### 7.5 Keeping Children and Pets Away from the Cooking Area

**7.5.1** Have a “kid-free zone” of at least 3 feet (1 meter) around the stove and areas where hot food or drink is prepared or carried.

**7.5.2** Never hold a child while you are cooking, drinking a hot liquid, or carrying hot foods or liquids.

**7.5.3** Keep pets off cooking surfaces and nearby countertops to prevent them from knocking things onto the burner.

### 7.6 Safe Cooking Equipment

**7.6.1** Always use cooking equipment that has the label of a recognized testing laboratory.

**7.6.2** Follow the manufacturer's instructions and code requirements when

installing cooking equipment. Follow the manufacturer's instructions when cleaning and operating cooking equipment.

**NEW** 7.6.3 Plug microwave ovens or other cooking appliances directly into a wall outlet. Never use an extension cord for a cooking appliance—it can overload the circuit and cause a fire.

7.6.4 Check electrical cords for cracks, breaks, damage, or overheating. Have a professional repair the appliance or cord as needed, or replace the appliance.

## 7.7 Microwave Ovens

**NEW** 7.7.1 Place or install the microwave oven at a safe height within easy reach of all users. If possible, the face of the person using the microwave oven should be higher than the front of the microwave oven door to reduce the risk of a scald.

7.7.2 Always supervise children when they are using the microwave oven.

7.7.3 Use only microwave-safe cookware (containers or dishes). Never use aluminum foil or metal objects in a microwave oven.

7.7.4 Open microwaved food slowly and away from the face. Hot steam escaping from a container of microwaved food or the food itself can cause burns.

7.7.5 Never heat a baby bottle in a microwave oven because it heats liquids unevenly. Heat baby bottles in warm water from the faucet.

7.7.6 If your microwave is mounted over your stove, use extra caution.

## 7.8 Barbecue Grills

7.8.1 Propane, charcoal, and wood pellet barbecue grills must only be used outdoors. Indoor use can kill occupants by causing either a fire or carbon monoxide poisoning.

**NEW** 7.8.2 Place the grill well away from siding and deck railings and out from under eaves and overhanging branches according to the manufacturer's instructions. Do not store or use a grill on a porch or balcony, including any porch or balcony on an upper level of the building.

7.8.3 Place the grill a safe distance from lawn games, play areas, and foot traffic.

7.8.4 Keep children and pets away from the grill area. Have a 3-foot (1 meter) "kid-free zone" around the grill.

7.8.5 Use long-handled grilling tools to give the chef plenty of clearance from heat and flames.

7.8.6 Periodically remove grease or fat buildup in the tray(s) below the grill so it cannot be ignited by a hot grill.

7.8.7 Never leave a barbecue grill unattended.

## 7.9 Charcoal Grills

7.9.1 Use one of the following methods to start charcoal for cooking:

- (A) If you use a charcoal chimney to start charcoal for cooking, use a long match to avoid burning your fingers when lighting the paper.
- (B) If you use an electrical charcoal starter, be sure to use a grounded extension cord.
- (C) If you choose to use lighter fluid, use only fluid intended for charcoal grills.

7.9.2 Never add charcoal starter fluid to coals or kindling that has already been ignited.

7.9.3 Never use gasoline or any other flammable liquid except charcoal starter or lighter fluid to start a charcoal fire.

7.9.4 Store the charcoal starter fluid out of reach of children and away from heat sources.

**7.9.5** Dispose of charcoal coals only after they are cool. Empty the coals into a metal container with a tight-fitting lid that is used only to collect coals. Place the container away from anything that can burn. Never empty coals directly into a trash can.

## 7.10 Propane Grills

**NEW** **7.10.1** Check the gas tank hose for leaks before using it for the first time each year and after each time the gas tank is reconnected. A soap-and-water solution (1/3 liquid dish soap and 2/3 water) applied to the hose and connection will quickly reveal escaping propane by causing bubbles to form. If you determine by smell or by the soap bubble test that your gas tank hose and connection has a gas leak, do the following:

- (1) Turn off the gas tank and grill.
- (2) If the leak stops, get the grill serviced by a professional before using it again.
- (3) If the leak does not stop, call the fire department.

**7.10.2** Use only equipment that has the label of a recognized testing laboratory. Follow the manufacturer's instructions on how to set up the grill and maintain it.

**7.10.3** Always store propane gas tanks outside of buildings or garages. Vapors leaked indoors can be easily ignited by pilot lights or electrical equipment, causing an explosion. If you store a gas grill inside during the winter, disconnect the tank or cylinder and leave it outside.

**7.10.4** Light a propane grill only with the cover open.

## 7.11 Turkey Fryers

**NEW** **7.11.1** NFPA discourages the use of outdoor gas-fueled turkey fryers that immerse the turkey in hot oil. These turkey fryers use a substantial quantity of cooking oil at high temperatures, and units currently

available for home use pose a significant danger that hot oil will be released at some point during the cooking process. The use of turkey fryers by consumers can lead to devastating burns or other injuries and the destruction of property.

## 8. Burns

### 8.1 Preventing Scalds and Burns in the Kitchen

**8.1.1** Teach children that hot things burn.

**8.1.2** Place objects so they cannot be pulled down or knocked over.

**8.1.3** Turn pot handles away from the stove's edge.

**8.1.4** Keep appliance cords coiled and away from counter edges.

**8.1.5** Keep hot foods and liquids away from table and counter edges.

**8.1.6** Use dry oven mitts or potholders. Hot cookware or tableware can heat moisture in a pot holder or hot pad, resulting in a scald burn.

**8.1.7** If you have young children in the home, cook on the stove's back burners.

**8.1.8** When children are old enough, teach them to cook safely.

### 8.2 Hot Tap Water and Scald Burns

**8.2.1** Set your water heater to 120 degrees Fahrenheit (49 degrees Celsius).

**8.2.2** For bathing and showering, the temperature of the water should not exceed 100 degrees Fahrenheit (38 degrees Celsius).

**NEW** **8.2.3** If you do not install anti-scald devices on tub faucets and shower heads, adjust the thermostat setting on your water heater to 120 degrees Fahrenheit (49 degrees Celsius). The lower temperature lowers the risk of scalds and burns.

**8.2.4** If you lower the temperature setting on your water heater, you will need to test the temperature at the faucet. Allow water to run 3 to 5 minutes. Test the water with a meat, candy, or cooking thermometer. If the water is hotter than 120 degrees Fahrenheit (49 degrees Celsius), adjust the temperature of the water heater and wait a full day to allow the temperature in the tank to adjust. Retest and readjust as needed.

**8.2.5** If children are in the home, do not leave the bathroom while the tub is filling.

**8.2.6** Before placing a child in the bath or getting into the tub yourself, test the water.

**8.2.7** Fill the tub or sink by running cool water first and then adding hot water. Turn the hot water off first. Mix the water thoroughly and check the temperature by moving your hand, wrist, and forearm through the water. The water should feel warm, not hot, to the touch.

**8.2.8** When bathing a young child, seat the child facing away from the faucets so the child cannot reach the faucet. Turn the faucet to the “COLD” position.

**8.2.9** Consider installing anti-scald devices on tub faucets and shower heads to prevent scalds. These devices reduce the water flow to a trickle as the water temperature nears 120 degrees Fahrenheit (49). Anti-scald devices are available online and in some hardware stores.

### **8.3 Treatment of Burns**

**8.3.1** Treat a burn right away by putting it in cool water. Cool the burn for 3 to 5 minutes. Cover with a clean, dry cloth. Do not apply creams, ointments, sprays, or other home remedies.

**8.3.2** Remove all clothing, diapers, jewelry, and metal from the burned area. These can hide underlying burns and retain heat, thereby increasing skin damage.

**8.3.3** Call 9-1-1 right away or see your doctor if the burn is:

- (A) on the face, hands, feet, major joints, or genital area and/or bigger than the injured person’s palm
- (B) white, tight, dry (leathery), or painless
- (C) caused by chemicals or electricity
- (D) causing difficulty breathing

**8.3.4** See your doctor as soon as possible if the burn:

- (A) does not heal in 2 to 3 days
- (B) becomes foul smelling
- (C) develops thick drainage, redness, or swelling
- (D) causes a fever

## **9. Heating**

### **9.1 General Heating**

**9.1.1** Have a 3-foot (1 meter) “kid-free zone” around open fires and space heaters.

**9.1.2** Supervise children whenever a wood or oil stove or other space heater is being used. Use a sturdy metal screen to prevent contact burns, which are more common than flame burns.

**9.1.3** All heaters need space. Keep anything that can burn at least 3 feet (1 meter) away from heating equipment.

**9.1.4** Use heating equipment that has the label of a recognized testing laboratory.

**9.1.5** Never use your oven or stove for heating. Ovens and stoves are not designed to heat your home.

**9.1.6** Install stationary space heating equipment, water heaters, or central heating equipment according to local codes and the manufacturer’s instructions.

**9.1.7** Have a qualified professional install the equipment.

**9.1.8** Make sure all fuel-burning vented equipment is vented to the outside to avoid carbon monoxide (CO) poisoning. Carbon monoxide is created when fuels burn incompletely. Carbon monoxide poisoning can cause illness and even death. Make sure the venting for exhaust is kept clear and unobstructed. This includes removal of snow and ice and other debris around the outlet to the outside.

**NEW!** **9.1.9** Choose a CO alarm that has the label of a recognized testing laboratory. Install and maintain CO alarms inside your home to provide early warning of carbon monoxide.

**9.1.10** Maintain heating equipment and chimneys by having them cleaned and inspected annually by a qualified professional.

## 9.2 Portable Electric Space Heaters

**9.2.1** Turn heaters off when you go to bed or leave the room.

**NEW!** **9.2.2** Purchase and use only portable space heaters that have the label of a recognized testing laboratory and that have an automatic shut-off—if they tip over, they shut off.

**NEW!** **9.2.3** Place space heaters on a solid, flat surface and keep them and their electrical cords away from things that can burn, high traffic areas, and doorways.

**NEW!** **9.2.4** Plug space heaters directly into wall outlets and never into an extension cord or power strip.

**NEW!** **9.2.4.1** Do not plug anything else into the same circuit as the one you are using for your space heater. Doing so could result in overheating.

**NEW!** **9.2.4.2** Check often for a secure plug/outlet fit. If the plug does not fit snugly into

the wall outlet or if the plug becomes very hot, the outlet may need to be replaced. Have a qualified electrician replace the wall outlet.

**9.2.5** Inspect for cracked or damaged cords, broken plugs, or loose connections. Replace them before using the space heater.

## 9.3 Fuel-Burning Space Heaters

**9.3.1** Always use the proper fuel as specified by the manufacturer.

**9.3.2** When refueling, allow the appliance to cool first and then refuel outside.

**9.3.3** When using the space heater, open a window to ensure proper ventilation.

**NEW!** **9.3.4** In portable kerosene or other liquid-fueled space heaters, always use the proper grade of fuel the unit is designed to use.

**9.3.5** All new unvented gas-fired space heaters have an oxygen depletion sensor that detects a reduced level of oxygen in the area where the heater is operating and shuts off the heater before a hazardous level of carbon monoxide accumulates. If you have an older heater without this feature, replace it with one that does.

**9.3.6** If the pilot light of your gas heater goes out, allow 5 minutes or more for the gas to go away before trying to relight the pilot. Follow manufacturer's instructions when relighting the pilot. Do not allow gas to accumulate, and light the match before you turn on the gas to the pilot to avoid risk of flashback.

**9.3.7** If you smell gas in your gas heater, do not light the appliance. Leave the building immediately and call 9-1-1, the fire department, or the gas company.

## 9.4 Wood-Burning Stoves

**9.4.1** Have a qualified professional install stoves, chimney connectors, and chimneys following the manufacturer's instructions.

**9.4.2** Wood stoves should bear the label of a recognized testing laboratory.

**9.4.3** In wood stoves, burn only dry, seasoned wood. In pellet stoves, burn only dry, seasoned wood pellets.

**9.4.4** Start the fire with newspaper, kindling, or fire starters. Never use a flammable liquid, such as lighter fluid, kerosene, or gasoline, to start a fire. They produce invisible vapors that can easily catch fire.

**9.4.5** Keep the doors of your wood stove closed unless loading or stoking the live fire.

**9.4.6** Allow ashes to cool before disposing of them. Place ashes in a tightly covered metal container and keep the ash container at least 10 feet (3 meters) away from the home and any other nearby buildings. Never empty the ash directly into a trash can. Douse and saturate the ashes with water.

**9.4.7** Chimneys and vents need to be cleaned and inspected by a qualified professional at least once a year.

## 9.5 Fireplaces

**9.5.1** Always use a metal or heat-tempered glass screen on a fireplace and keep it in place.

**9.5.2** Burn only dry, seasoned wood. Never burn trash in the fireplace. Not only is it cleaner for the environment, it also creates less buildup in the chimney.

**9.5.3** Use artificial fire logs according to manufacturer's recommendations. Never burn more than one log at a time.

**9.5.4** Use only newspaper and kindling wood or fire starters to start a fire. Never use flammable liquids, such as lighter fluid, kerosene, or gasoline, to start a fire. They produce invisible vapors that can easily catch fire.

**9.5.5** Chimneys and vents need to be cleaned and inspected by a qualified professional at least once a year.

**9.5.6** Keep children and pets away from the outside vents. Have a "kid-free zone" of at least 3 feet (1 meter) away from the fireplace. Glass doors and screens can remain dangerously hot for several hours after the fire goes out.

**9.5.7** Use chimineas, outdoor fireplaces, and fire pits outdoors only and at least 10 feet (3 meters) away from the home or anything that can burn.

## 9.6 Fire Pots, Personal Fireplaces, and Patio Torches

**NEW!** **9.6.1** Fire pots, personal fireplaces, and patio torches are considered open flames and use gel fuel. Gel fuel is highly flammable. Extreme caution should be taken when using or adding fuel.

**NEW!** **9.6.2** Never leave a lit fire pot, personal fireplace, or torch unattended.

**NEW!** **9.6.3** Keep these devices at least one foot (1/3 meter) from anything that can burn.

**NEW!** **9.6.4** Place the fire pot or personal fireplace on a sturdy surface.

**NEW!** **9.6.5** Make sure patio torches are secure and not in the path of people or pets.

**NEW!** **9.6.6** Have a "kid-free zone" of at least 3 feet (1 meter) away from fire pots, personal fireplaces, and torches.

**NEW!** **9.6.7** Be careful reaching over the devices—clothing or hair could catch fire.

**NEW!** **9.6.8** Use only gel fuel to refuel.

**NEW!** **9.6.9** Citronella fuel is intended for outdoor use only.

**NEW!** **9.6.10** Allow the device to cool for 30 to 45 minutes before refueling. Pouring gel fuel in a device that is not completely cool may result in a fire or injury.

**NEW!** **9.6.11** If gel fuel is spilled on clothing, remove the clothing and launder immediately.

**NEW!** 9.6.12 Store the gel fuel in its tightly sealed container away from heat sources and out of reach of children and pets.

**NEW!** 9.6.13 Stop, drop, and roll may not put out clothing that catches fire from splattered or spilled gel fuel. A dry chemical portable fire extinguisher can be used to extinguish the fire.

## 9.7 Central Heating

9.7.1 Furnaces need to be inspected and serviced at least once a year by a qualified professional.

9.7.2 Keep things that can burn at least 3 feet (1 meter) away from the furnace. Keep the furnace area clean and uncluttered.

9.7.3 If you smell gas, do not light the appliance. Leave the building immediately and call 9-1-1, the fire department, or the gas company.

## 10. Smoking

10.1.1 If you smoke, use only fire-safe cigarettes.

10.1.2 To prevent a deadly cigarette fire, you must be alert. You will not be alert if you are sleepy, have taken medicine or drugs that make you drowsy, or have consumed alcohol.

10.1.3 If you smoke, smoke outside.

10.1.4 Never smoke in bed.

10.1.5 Never smoke where medical oxygen is used. Medical oxygen can cause materials to ignite more easily and make fires burn at a faster rate than normal. It can make an existing fire burn faster and hotter.

10.1.6 Wherever you smoke, use deep, sturdy ashtrays. If ashtrays are not available, use a metal can or pail. Never empty smoking material directly into a trash can.

Place the ashtrays or metal cans away from anything that can burn.

**NEW!** 10.1.7 Do not throw out cigarettes into vegetation, potted plants or landscaping, peat moss, dried grasses, mulch, leaves, and other similar items—they can easily catch fire.

10.1.8 Before you throw out butts and ashes, make sure they are out. Put them out in water or sand.

10.1.9 Before going to bed, check under furniture cushions and around places where people smoke for cigarette butts that may have fallen out of sight.

10.1.10 Keep cigarettes, lighters, matches, and other smoking materials up high out of the reach of children, in a locked cabinet

## 11. Electrical

### 11.1 Inside the Home

11.1.1 Electrical work should be done only by a qualified electrician. Some communities require that a person doing electrical work have a license. Find out about the laws in your area.

11.1.2 Have your home electrical system inspected by a qualified professional when buying, selling, or renovating a home.

11.1.3 Keep lamps, light fixtures, and light bulbs away from anything that can burn, including furniture, bedding, curtains, clothing, and flammable or combustible gases and liquids.

11.1.4 Use light bulbs that match the recommended wattage on the lamp or fixture.

**NEW!** 11.1.5 If a fuse blows or a circuit breaker trips often, find out why and get the problem corrected before turning the breaker back on or replacing the fuse. Have a qualified electrician inspect and fix it.

**11.1.6** Always replace blown fuses with ones of the proper rating. If the problem continues, call an electrician.

**NEW!** **11.1.7** Major appliances (refrigerators, stoves, washers, dryers, etc.) should be plugged directly into a wall outlet. Never use an extension cord with a major appliance—it can be easily overloaded.

**11.1.7.1** Small appliances should be plugged directly into a wall outlet. Unplug small appliances when not in use.

**11.1.8** Window air conditioners should be plugged directly into a wall outlet. Many manufacturers of room air conditioners prohibit the use of extension cords. If the manufacturer's instructions allow extension cords, follow the instructions for the proper type.

**11.1.9** Buy only appliances that have the label of a recognized testing laboratory.

**11.1.10** Check electrical cords often. Replace cracked, damaged, and loose electrical or extension cords. Do not try to repair them.

**11.1.11** Avoid putting cords where they can be damaged or pinched by furniture, under rugs and carpets, or across doorways.

**11.1.12** Use only surge protectors or power strips that have internal overload protection. Use surge protectors or power strips that have the label of a recognized testing laboratory.

**NEW!** **11.1.13** Extension cords are for temporary use only. Have a qualified electrician determine if additional circuits or wall outlets are needed.

**NEW!** **11.1.14** Replace wall outlets if plugs do not fit snugly or the wall outlet does not accept plugs with one blade larger than the other.

**NEW!** **11.1.15** All wall outlets and switches should be covered with wall plates to prevent shocks.

**NEW!** **11.1.16** Install tamper-resistant electrical outlets if you have young children. Where replacement is not possible, install new protective outlet covers, which do not allow a child to insert an object into the wall outlet.

**NEW!** **11.1.17** Call a qualified electrician if you have any of the following:

- (A) recurring problems with blowing fuses or tripping circuit breakers
- (B) a tingling feeling when you touch an electrical appliance
- (C) discolored or warm wall outlets or switches
- (D) a burning smell or rubbery odor coming from an appliance
- (E) flickering lights
- (F) sparks from a wall outlet
- (G) cracked or broken wall outlets

**11.1.18** Arc fault circuit interrupters (AFCIs) shut off electricity when a dangerous condition occurs. Have a qualified electrician install AFCIs in your home.

**11.1.19** Ground fault circuit interrupters (GFCIs) reduce the risk of shock. GFCIs shut off electricity when it becomes a shock hazard. Make sure GFCIs are installed in bathrooms, basements, garages, outdoors, at kitchen counters, and in other locations in the home where electricity is near water.

**11.1.20** Test AFCIs and GFCIs once a month by pushing the test button to make sure they are working properly.

## **11.2 Outside the Home**

**11.2.1** Electrical work should be done by a qualified electrician.

**11.2.2** Keep ladders at least 10 feet (3 meters) away from overhead power lines. Use wooden or fiberglass ladders outdoors.

**11.2.3** Never touch a power line. You could be injured or electrocuted. Assume that all power lines are live. Stay at a safe distance.

**11.2.4** Never touch anyone or anything in contact with a downed wire. You could be injured or electrocuted.

**11.2.5** Report downed power lines to authorities.

**11.2.6** Some power lines are underground. Call your local authority to have lines identified and marked before digging. You can also call the national 8-1-1 “Call before you dig” number.

## 12. Lightning

### 12.1 Indoor Safety

**NEW!** **12.1.1** Follow these guidelines during a lightning storm:

- (A) Stay off corded phones, computers, and other electronic equipment that put you in direct contact with electricity or plumbing.
- (B) Avoid washing your hands, showering, bathing, doing laundry, or washing dishes.
- (C) Stay away from windows and doors.

### 12.2 Outdoor safety

**NEW!** **12.2.1** Follow these guidelines during a lightning storm:

- (A) Seek shelter immediately in a building or a hard-topped vehicle.
- (B) If you are in or on open water, go to land and seek shelter immediately.
- (C) If you cannot get to shelter and you feel your hair stand on end, indicating that lightning is about to strike, squat low to the ground on the balls of your feet. Place your hands over your ears and put your head between your

knees. Make yourself the smallest target possible and minimize your contact with the ground. This is a last resort when a building or hard-topped vehicle is not available.

**12.2.2** If a person is struck by lightning, call 9-1-1 and get medical care immediately. Victims of lightning strikes carry no electrical charge, so attend to them immediately. Administer CPR if needed.

## 13. Candles

### 13.1 General Candle Safety

**13.1.1** Consider using battery-operated flameless candles, which can look, smell, and feel like real candles.

**13.1.2** When using candles, place them in sturdy, safe candleholders that will not burn.

**13.1.3** Protect candle flames with glass chimneys or containers.

**13.1.4** Keep candles at least 12 inches (30 centimeters) from anything that can burn.

**13.1.5** Never leave a burning candle unattended. Burning candles can start a fire.

**13.1.6** Avoid using candles in bedrooms and sleeping areas. Extinguish candles when you leave a room or the home or go to bed. Keep children and pets away from burning candles.

**13.1.7** Be careful not to splatter wax when extinguishing a candle.

**13.1.8** Never use a candle where medical oxygen is being used. The two can combine to create a large, unexpected fire. Medical oxygen can cause materials to ignite more easily and burn at a faster rate than normal. It can make an existing fire burn faster and hotter.

**13.1.9** Always use a flashlight—not a candle—for emergency lighting.

**13.1.10** Use only battery-powered lights in tents, trailers, motor homes, and boats.

## **13.2 Candle Use in Home Worship**

**13.2.1** Lit candles are used in some religious rites and ceremonies in the home. Candles should be used with care.

**13.2.2** Lit candles should not be placed in windows, where blinds and curtains can close over them, causing a fire.

**13.2.3** Handheld candles should not be passed from one person to another at any time.

**13.2.4** To lower the risk of fire, candles should be used by only a few designated adults.

**13.2.5** Candles placed on or near tables, altars, or shrines must be maintained under the supervision of an adult.

**13.2.6** Place candles in sturdy, noncombustible candle holders that do not allow dripping wax to escape through the bottom of the holder.

**13.2.7** If a sturdy, noncombustible candle holder is not available, place the candle on a noncombustible plate.

**13.2.8** A handheld candle should be put out before the person holding it moves from the place of initial lighting. Once it is put out, the candle should be placed in an approved, noncombustible container.

**13.2.9** The best way to avoid getting burned from splashed wax is to use a candle snuffer instead of blowing on the flame.

## **14. Matches and Lighters**

**14.1.1** Keep matches and lighters high out of the reach of children, in a locked cabinet.

**14.1.2** Purchase and use only child-resistant lighters.

**14.1.3** Lighters that look like toys can confuse children and cause fires, injuries, and death. Do not buy or use them.

**14.1.4** Teach young children to tell a grownup when they find matches or lighters and to never touch matches or lighters.

## **15. Outdoor Burning**

**15.1.1** Check with your local fire department or municipality for any restrictions before starting an open-air, recreational, or outdoor cooking fire. Obtain proper permits, if required. You might not be permitted to do outdoor burning in some municipalities and during some seasons.

**15.1.2** Closely supervise all outdoor fires. Make sure the fire is out before leaving.

**15.1.3** Supervise children around any fire outdoors, including campfires, fire pits, chimineas, and outdoor fireplaces.

**15.1.4** Permitted open fires (such as bonfires or trash fires) need to be at least 50 feet (15 meters) from anything that can burn.

**15.1.5** Permitted recreational fires (such as campfires or fire pits) need to be at least 25 feet (8 meters) away from anything that can burn.

**15.1.6** Avoid burning on windy, dry days. When conditions are windy or dry, it is easy for open burning to spread out of control.

**15.1.7** Where outdoor burning is allowed, never use gasoline or other flammable or combustible liquids.

**15.1.8** When burning, have a hose, bucket of water, or shovel and dirt or sand nearby to extinguish the fire.

## **16. Medical Oxygen**

**NEW** **16.1.1** A patient on oxygen should not smoke.

**16.1.2** Never smoke in a home where medical oxygen is used. Medical oxygen can cause material to ignite more easily and make fires burn at a faster rate than normal. It can make an existing fire burn faster and hotter.

**16.1.3** Post “No Smoking” and “No Open Flames” signs inside and outside the home to remind residents and guests not to smoke.

**NEW!** **16.1.4** Keep oxygen cylinders at least 5 feet (1.5 meters) from a heat source, open flames, or electrical devices.

**NEW!** **16.1.5** Body oil, hand lotion, and items containing oil and grease can easily ignite. Keep oil and grease away from where oxygen is in use.

**NEW!** **16.1.6** Never use aerosol sprays containing combustible materials near the oxygen.

**16.1.7** If medical oxygen or an oxygen tank is used in the home, the amount of oxygen in the air, furniture, clothing, hair, and bedding can increase, making it easier for a fire to start and spread. This means that there is a higher risk of fires and burns.

**16.1.8** Never use a candle, match, lighter, or other open flame; a fireplace, stove, or other device fueled by gas, kerosene, wood, or coal; or a sparking toy when medical oxygen is in use. Medical oxygen can cause material to ignite more easily and make fires burn at a faster rate than normal. It can make an existing fire burn faster and hotter.

## 17. Portable Fire Extinguishers and Fire Fighting

**NEW!** **17.1.1** As a general rule, fire fighting should be left to the fire department.

**NEW!** **17.1.2** Only adults who know how to use portable fire extinguishers should use them.

**NEW!** **17.1.3** Before trying to fight a fire, make sure that everyone is leaving the house, someone is calling 9-1-1, the extinguisher is mounted on the wall close to your way out, the fire is not bigger than a small wastepaper can, and you can get out. You must have the proper extinguisher and know how to use it. If the fire does not go out after using one extinguisher, get out.

**NEW!** **17.1.4** If you have portable fire extinguishers, inspect them monthly and have them serviced annually.

**NEW!** **17.1.5** Where portable fire extinguishers are installed in the home, follow the manufacturer’s instructions for placement and mounting height.

**NEW!** **17.1.6** As a general rule, where portable fire extinguishers are installed, a person should not have to travel far [more than 40 feet (12 meters)] to reach one and never have to travel up or down stairs to reach it.

**NEW!** **17.1.7** As a general rule, portable fire extinguishers for the home should have a rating of at least 2-A:10-B:C

## 18. Clothes Dryers

**NEW!** **18.1.1** Have your dryer installed and serviced by a professional.

**NEW!** **18.1.2** Do not use the dryer without a lint filter.

**NEW!** **18.1.3** Clean out the dryer’s lint filter before and after each load of laundry. Remove the lint that has collected around the drum.

**NEW!** **18.1.4** Clean lint out of the vent pipe quarterly or more often if you notice that it is taking longer than usual for your clothes to dry, or have a dryer lint removal service do it for you.

**NEW!** 18.1.5 Rigid or flexible metal venting material should be used to sustain proper air flow and drying time to reduce the risk of fire or fire spread.

**NEW!** 18.1.6 Make sure the air exhaust vent pipe is not restricted and the outdoor vent flap will open when the dryer is operating.

**NEW!** 18.1.7 Make sure the right plug and wall outlet are used and that the machine is connected properly.

**NEW!** 18.1.8 Keep dryers in good working order. Gas dryers should be inspected by a professional to make sure that the gas line and connection are intact and free of leaks.

**NEW!** 18.1.9 Follow the manufacturer's operating instructions. Do not overload the dryer.

**NEW!** 18.1.10 Turn off the dryer when you leave home or go to bed.



**NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471**  
**[www.nfpa.org](http://www.nfpa.org)**