HOME FIRE AND BURN PREVENTION GUIDE

CARING
SHARING
EDUCATING

The safety information enclosed was compiled from the best sources available to us. The Illinois Fire Safety Alliance and authors cannot assume any liability for its effectiveness in every emergency situation.
KITCHEN / COOKING

1. The storage area above the stove is free of flammable and combustible items

   Never place or store pot holders, plastic utensils, towels and other non-cooking equipment on or near the stove because these items can be ignited.

2. Short or tight fitting sleeves, and tight fitting shirts, robes, gowns, etc. are worn while cooking.

   Roll up or fasten loose sleeves with pins or elastic bands while cooking. Do not reach across a stove while cooking. Long loose sleeves are more likely to catch fire than are short sleeves. Long loose sleeves are also more apt to catch on a pot handle, overturning pots and pans and cause scalds.

3. Items that should attract children such as cookies and candy, are not kept above the stove and are kept out of the area.

   Do not place cookies or candy over the top of stoves. This will reduce the attraction kids may have for climbing on cooking equipment, thus reducing the possibility of their clothing catching on fire.

4. The stove is not left unattended when cooking especially when the burner is turned to a high setting.

   Keep a watchful eye anytime the stove is in use. Never leave young children unattended, especially in an area where food is being prepared.

COMMON HAZARDS IN THE KITCHEN

- **Cooking hot foods on top of stove.** Turn pot handles inwards so children cannot pull them down.

- **Unattended hot liquids/foods.** Never leave hot liquids or food unattended or at the edge of a table or counter to be pulled down by a toddler or young child.

- **Handling hot liquids/food.** Youngsters should not be allowed to pour or handle hot liquids or food.

- **Holding infants while drinking/pouring hot liquids.** Keep children at a safe distance while pouring or dinking hot liquids - grabbing movements are likely at this age.

- **Child underfoot during meal preparation time.** Place child in crib or playpen while preparing food. Rushing and handling of hot liquid and food is a deadly combination with a toddler underfoot.

- **Serving hot foods from a pot or pan while the child is seated at the dining table.** Seat a child at the dining table only after all the food has been served and placed far from the child's reach.

- **Dangling cords on small appliances.** Replace long cords with short ones, keep long cord appliances toward the back of countertops. Unplug all appliances that are not in use.

- **Hot appliances.** To prevent contact burns, keep all hot appliances away from a young child's reach.

- **Microwave cooking.** Be certain that foods and liquids are sufficiently cooled (inside and out) before giving them to a young child. Position microwave ovens so they have room to “breathe” and all vents are free of obstructions.

TIPS

☑ Be sure the cooking area (stove top, broiler, oven, exhaust fan) is clean and free of grease.

☑ If grease catches fire, turn off the burner and carefully slide a lid over the pan to smother the flames.

☑ Have an ABC type fire extinguisher in the kitchen. Keep it 10 feet away from the stove near an exit from the kitchen. Be sure the extinguisher is in good working order and that you know how to use it correctly.

☑ Maintain good lighting in the kitchen.

☑ Use bright colors and/or large letters to mark hard-to-read controls on stove, oven, other appliances.

☑ Keep pot holders handy. Shield yourself from steam when uncovering food.

☑ If there is a fire in the oven, leave the door shut and turn the oven off so the fire will die out and call 911.

KITCHEN COOKING
HOME FIRES

The major causes of home fires include heating equipment, electrical appliances, matches, cooking, and smoking. A major goal of the Illinois Fire Safety Alliance is to reduce the number of fires in the home. The following information lists some activities that could reduce the possibility of your home becoming a fire statistic.

KITCHEN
1. All electrical appliances and tools should have a testing agency label such as UL (Underwriters Laboratories).
2. Have appliances repaired if they aren’t working properly.
3. Do not overload outlets.
4. Do not store things above the stove.

LIVING OR FAMILY ROOM
1. Use large ashtrays.
2. Before you go to bed, check cushions for burning cigarettes.
4. Put lighters and matches where children won’t find them.
5. Allow air space around the TV and stereo to prevent overheating. If the TV doesn’t work right, it can be a fire danger. Have it checked or repaired.
6. Keep portable heaters away from combustibles.
7. Have chimneys cleaned and inspected once a year.

GARAGE AND STORAGE
1. Store gasoline and other flammables in tight metal containers. Don’t use flammable liquids near heat, a pilot light, or while smoking.
2. Have heating equipment checked annually.
3. Clean up your work bench. Keep flammables away from sparks.
4. Sort and remove rubbish. Do not store things near the furnace or heater.

OUTDOORS
1. Never use gasoline on a grill fire. Once the fire has started, never use lighter fluid.
2. Move your lawnmower away from gasoline fumes before starting. Let the motor cool before refueling it.
3. If your roof needs replacing, give serious consideration to using non-combustible roofing materials.

BEDROOM
1. Do not smoke in bed or on a chair.
2. Do not overload electrical outlets.

A message to the parent/guardian/caregiver:

A MATCH IS A TOOL

Children MUST be taught the proper function and SAFE use of matches and fire.

A TOOL has a specific purpose and should be used only for that purpose. The match should be presented as a TOOL having a specific purpose, such as lighting candles, starting a campfire, or lighting a fire in a fireplace.

Many fireplay (matchplay) problems are solved by having the child promise to use fire and matches ONLY IN THE PRESENCE OF THE PARENT OR RESPONSIBLE ADULT, and by the adult agreeing to allow the child to use matches when it is appropriate.

Fire serves a very important and necessary role in our lives. The earlier a person learns the proper and safe use of fire, the less likely there will be a desire to “play” with matches and fire.

Most children, at one time or another, express an interest in fire. Some children simply watch, but others may try to experiment. This interest is normal and healthy. However, this activity and interest must be carefully guided in order to prevent a tragedy.

The statement, “Don’t play with matches,” gives the child no positive information and does not explain the safe use of matches. A child’s curiosity is generally what causes him/her to play with matches. Parents demonstrating the proper and safe use of matches should guide this curiosity.

In general, the average age to begin the “Match is a Tool” education is about five years old. However, parents/guardians/caregivers will need to determine when the individual child is ready. For young children, KEEP MATCHES OUT OF THEIR REACH. This includes cigarette lighters and related items. The wooden (strike anywhere) kitchen match should not be used or kept in homes where young children are present.

You, as a parent/guardian/caregiver, must set a good example in your use of fire. If you follow safe practices, your children will do the same.

This information is supplied by the Shriners Burn Institute.
SMOKE ALARMS

WHY YOU SHOULD BE CONCERNED ABOUT RESIDENTIAL FIRES

Nationally, over 5000 people are killed each year in their own home. In fires where multiple deaths occur, 80% are between the hours of 9:00 PM and 6:00 AM.

In order to increase the total life safety in the State of Illinois, it is a goal to have a minimum of one properly installed and operating smoke alarm in every home. Ideally you should have a smoke alarm on every level of your home to include: tops of stairways, outside bedrooms and in the basement.

Installing, Maintaining and Testing Smoke Alarms: To insure that your smoke alarm will work properly, consult your owner's manual to determine the proper procedures suggested for your model.

SOME SUGGESTIONS:
1. Test Your Smoke Alarm Weekly - Review your owner's manual and determine the proper method suggested for your model. If uncertain, contact your local fire department for proper instructions.
2. Replace Batteries Twice A Year - Establish dates for battery replacement (spring and fall time change). Also, a chirping sound indicates that the battery needs replacing.
3. Clean Your Smoke Alarm Annually - Use a vacuum cleaner to remove collected dust particles accumulating over the year's period.
4. All Members of the Household Should Be Aware of the Alarm Source - Review with all members of the household the location and use of the alarm. It is suggested that a different member test the alarm weekly.
5. Contact The Fire Department For ALL Fires.

IS YOUR NUMBER UP?

Firefighters and ambulance personnel waste no time answering an alarm. Everything they do is calculated and rehearsed to save every possible second.

The trouble is, they can't always find your home in a hurry.

Why? Because the house numbers can't be seen!! . . . or . . . can't be read instantly from the street.

Take a look at your house number from the street AT NIGHT to see if it is completely visible and readable, and whether the lighting is adequate for someone to read who is not familiar with it.

House numbers that are too small, painted over, so old that some digits are missing, covered or partly covered by plantings, written in fancy script, attached to a garage door (therefore, only visible if the door is closed), or not adequately lit at night - all these are threats to life in case the fire truck or ambulance is trying to help someone at that address.

You're REALLY in trouble if you have no house numbers at all???

Firefighters, ambulance, and police personnel are ready to help you 365 days a year, 24 hours a day - but you have to take a little time yourself to display your house number clearly, so they can find where you are.
ELECTRICITY

DO
Only use plugs that fit outlet (a three prong plug should only go into a three prong outlet).
Check that wire insulation is in good condition.
Keep motors and tools properly lubricated.
Use extension cords only when necessary and only if they are rated high enough for the job.
Use waterproof cords outdoors.
Follow manufacturer’s instructions for all electrical equipment.
Leave electrical repairs to skilled maintenance personnel and licensed electricians.

DON’T
Don’t overload outlets or motors.
Don’t let grease, dust, or dirt build up on machinery.
Don’t place cords near heat or water.
Don’t run cords along the floor, under rugs and carpets or through doors where they can be damaged.
Don’t touch anything electric with wet hands.
Don’t put anything but an electrical plug into an electrical outlet.
Don’t use temporary wiring in place of permanent wiring.

KNOW WHAT TO DO
SHOCK – Don’t touch the victim. Turn off power immediately if possible and call the fire department for medical help. Use a stick or other nonconducting aid to move the victim away from the shock source. If not breathing, give artificial respiration. If the heart has stopped, give CPR. Try not to move the victim. Keep the person lying down and lightly covered.

ELECTRICAL FIRE – Don’t use water or touch the burning object. If possible to do it safely, unplug or turn off the current. If the fire’s small, put it out with a CO₂ or multipurpose ABC extinguisher. Always notify the fire department immediately.

BURNS – For minor burns, rinse with cool water and cover with clean dry cloth. Cover a major burn with a clean dry cloth and seek immediate medical attention.
The Illinois Fire Safety Alliance’s goal is to keep fireworks out of the hands of children and to reduce the number of fireworks related injuries and fires.

In Illinois, the term fireworks is defined to mean and include any explosive compound or any substance or combination of substances, or article prepared for the purpose of producing a visible or audible effect of temporary nature by explosion, combustion, or detonation.

The term “fireworks” does not include snake or glow worm pellets, smoke devices, sparklers, trick noisemakers (known as party poppers, snappers, cigarette loads), toy guns (cap pistols), or other devices in which paper or plastic caps are used. These devices are often referred to as novelty fireworks (novelties).

CHILDREN HAVE A LOT TO LOSE
Young people suffer the great majority of fireworks injuries, which typically harm the eyes, head, or hands. These injuries can result in blindness, permanent scarring, and amputation.

Teach children at an early age that fireworks are explosive devices, they are not toys. Be sure children understand it is too risky to touch or pick up fireworks and teach them to tell an adult if they find fireworks.

Sparklers cause hundreds of injuries to children every year. They are designed to burn hot, and can reach temperatures as high as 1800°F. Sparklers stay hot long after they’ve burned out. You wouldn’t hand a matchbook or lighter to a child to wave around and play with, so why would you give a child a sparkler to hold?

Data from the United States Eye Injury Registry shows that bystanders are more often injured by fireworks than users themselves.

COMMON SENSE FIREWORKS (NOVELTIES) SAFETY TIPS
- Fireworks/novelties should always be used with adult supervision.
- Read and follow all directions before using fireworks.
- Always keep water and sand nearby when using fireworks/novelties.
- Only use fireworks outdoors.
- Never try to make your own fireworks/novelties.
- Never relight fireworks/novelties that appear to have gone out.
- Only light one firework/novety at a time.
- Never allow small children to go near fireworks.
- Store fireworks in a cool dry place.
- Sparklers should be immersed in sand or water once they appear to be out – they are still very hot and can burn you.
- Never point or throw fireworks/novelties at others.
- Never use items such as M-80s, M-100s, and blockbusters. They are illegal explosives and they are unpredictable.
- Leave the use of fireworks to trained professionals at public displays. Sit back and enjoy the show.

THE ILLINOIS FIRE SAFETY ALLIANCE RECOMMENDS THAT THE USE OF ALL 4TH OF JULY FIREWORKS BE LEFT TO THE PROFESSIONALS.
HOME FIRE ESCAPE PLAN

An escape plan is a strategy for a safe exit from your home during a fire.

Hopefully, you'll never have a fire in your home. But if a fire does occur, your safety will depend on calm, rational action. An escape plan can be your key to a safe way out.

DESIGNING A HOME ESCAPE PLAN

Draw the floor plan of your home on a piece of paper. Post your plan where it can easily be seen (such as on your refrigerator). Be sure to include:

- **ALL DOORS AND WINDOWS**
- **PRIMARY AND ALTERNATE EXITS**
- **EMERGENCY PHONE NUMBERS**
- **OUTDOOR MEETING PLACE**
- **SPECIAL ASSIGNMENTS** (who will call fire department, sound the alarm, check that everyone got out, etc.)
- **LOCATION OF SMOKE DETECTORS**

HOLD FIRE DRILLS REGULARLY

Your plan may look good on paper, but will it really work? Regular drills allow you to test your plan and adjust it as needed. Practice using alternate escape routes. Children should practice getting out of windows (only while under a parent's/guardian's supervision).

SOME SURVIVAL TIPS – If you hear the smoke detector, smell smoke or someone is shouting fire:

- **Crawl to the door** on your hands and knees, not on stomach. Smoke and gases rise to the ceiling and the air is safer close to the floor.
- **Feel the door** before opening it. If it's cool, brace yourself against it and open it carefully. If you notice smoke or heat, close it immediately.
- **Use an alternate exit** (second way out – window if possible) if the door is hot or smoke comes through it.
- **Signal for help** by waving a sheet or any light colored clothing if you cannot escape through the window.
- **Go to your family meeting place** in front and away from your home to check that everyone got out and to meet the fire department.
- **Never go back into a burning building.** Tell firefighters immediately if someone is left in the building.
- **Seek medical help** for burns and other injuries.

PLAN FOR ANY SPECIAL NEEDS

Certain people face greater risks during a fire. You may need to make special arrangements for:

- Infants/Children
- Older Adults
- Hearing Impaired
- Visually Impaired
- Mentally/Physically Impaired

PROTECT YOURSELF AND YOUR FAMILY FROM FIRE

---

**FIREWORKS**

**HOME FIRE ESCAPE PLAN**
“TOO HOT FOR TOTS THERMOMETERS”

The Illinois Fire Safety Alliance has made the “Too Hot For Tots” bath thermometer available to hospital maternity units, fire departments or groups who would like to purchase them for public awareness or burn prevention programs such as babysitting classes, health fairs, village Welcome Wagon packets, etc. The Alliance hopes the distribution of these cards will raise the burn awareness level to help decrease the number of scald burns that continue to occur in Illinois. We have calculated our cost to be $1.00 per card. We can make them available to you at our cost in packages of 50 for a donation of $50. For more information, contact the Alliance office at (847) 390-0911 or (800) 634-0911.

HOT LIQUIDS BURN LIKE FIRE!
HOT LIQUIDS BURN LIKE FIRE!

Thousands of scald burns occur annually in the U.S., and the two highest risk populations are children under the age of 4 and adults over 65.

Did you know?
- Hot liquids can cause life-threatening burn injuries.
- Scalds are the number one cause of burn injury to children under age 4.
- Coffee, tea, soup and hot tap water can be hot enough to cause a serious burn injury.
- Scald and steam burns are often associated with microwave oven use.
- When hot tap water reaches 147°F, it can cause a third degree burn in just 1 second.
- Hot tap water accounts for 17% of all childhood scald hospitalizations.

Scalds in the Kitchen
- Keep children out of the “traffic path” and check their location before moving any hot liquids in the kitchen.
- Keep pot handles turned toward the back of the stove. Cook on the rear burners when possible.
- Test all heated liquid and food before giving it to a child or placing it within their reach.
- Remove tablecloths when toddlers are present in the home. They tug and pull on everything within reach. Hot liquids can easily be pulled down on them.
- Never hold a child while drinking a hot liquid.
- Use caution when moving heavy pots of hot liquids from the stove.
- Avoid using area rugs in the kitchen, especially near the stove. They can cause falls and scalds.

Scalds and Microwave Ovens
- Read and follow the directions for the operation of the microwave oven.
- Be careful when removing covering or lids from microwaved foods. Puncture plastic wrap before heating foods in the microwave.
- Stir foods to distribute the heat. Many microwaves have a tendency to heat from the inside out toward the edge.
- Extreme caution should be exercised when heating baby bottles or baby food. The amount of food/liquid to be heated, the starting temperature of the food/liquid (refrigerator or room temperature), and the specific microwave setting you select will influence the final temperature.
- Follow microwave guidelines on baby formula, baby food jars, plastic bottles and plastic bottle liners.

Hot Tap Water and Scald Burns
- Never leave a young child unattended in the bathroom or tub.
- Use extreme caution if bathing small children in the sink. Many sinks have single lever faucets which are easy for small children to turn on.
- Adjust the thermostat settings on your water heater to produce a temperature of 120°F to 125°F or less.
- Before placing a child into the bath, test the temperature of the water by moving your hand rapidly through the water for several seconds. The temperature should not exceed 100°F. A child’s delicate skin will burn more quickly than an adult’s skin.
- Consider installing “anti-scald” devices on tub faucets and shower heads to prevent accidental scalds.

Continuous and adequate supervision of young children is the single most important factor in preventing tap water scald burns.

Acknowledgements:
Burn Institute, San Diego, CA
Shriners Burn Institute, Cincinnati, OH
FIRE EXTINGUISHERS IN THE HOME

Used properly, a portable fire extinguisher can save lives and property by putting out a small fire or containing it until the fire department arrives.

IN CASE OF FIRE – STAY CALM
• Alert everyone and get out of the building.
• Call the fire department.
• Then, if the fire is small, use the appropriate extinguisher.
• Only fight the fire if:
  – Everyone is out
  – The fire is small and confined
  – You can fight the fire with your back to a safe escape route
  – You effectively know how to use it
  – The extinguisher is rated for the type of fire

WHERE TO LOCATE EXTINGUISHER
• A home portable extinguisher is recommended for each level of your home.
• A fire extinguisher should also be located in your garage, shop/work area, and each personal vehicle.
• The extinguisher should be placed near an exit and in full view so that they can be reached quickly and easily.
  If you make the decision to use it, you will be near an exit to escape if necessary.
• For maximum protection in kitchen and garage fires, a portable fire extinguisher that will extinguish a Class A, B, and C fire is recommended.

THE THREE CLASSES OF FIRE
• Class A - ordinary combustibles, such as wood, cloth, paper, rubbish, rubber and plastics.
• Class B - flammable liquids, such as gasoline, oil, grease, oil-based paint, lacquer and flammable gas.
• Class C - energized electrical equipment, including wiring, fuse boxes, circuit breakers, machinery and appliances.

HOW TO USE EXTINGUISHER
Read the instructions, but in case of emergency, always remember this – PASS
• Pull the pin to unlock the handle
• Aim low at the base of the fire
• Squeeze the handle
• Sweep the unit from side to side

PROPER MAINTENANCE
• Read owners manual for proper instructions and maintenance
• Check gauge monthly for pressure drops
• Check for dents, punctures and corrosion along the body
• Check for chipping or cracking on the head and nozzle

Always be sure to notify the fire department of a fire (no matter how small) so that they can inspect the site and be sure the fire is extinguished.
BABYSITTING

Keep these safety tips in mind; they will make your babysitting experience both safe and fun for you and the children.

1. Know what to do in emergencies by being prepared for one, knowing what could happen and how to react to it.
2. Always know where the emergency exits are located.
3. Keep doors and windows locked for the safety of both you and the children.
4. Know where "dangerous" items are located such as medicines, bleaches, household cleaners and electrical appliances. Keep them out of children's reach if parents have not locked them away in a secure place.
5. In case of accident or illness, don't try to be a doctor or nurse except for minor cuts and bruises.
7. Depend on parent/guardian or a neighbor in any emergency situation that you are not sure how to handle yourself.
8. Prevent play accidents by keeping yourself safe. Supervise where they play, what they play with and teach them safe play.

CHECK LIST
Cut Out and Put By The Phone

BABYSITTER'S FIRE SAFETY CHECKLIST

1. Emergency Phone Numbers:
   Fire: ____________________________
   Police: __________________________
   Ambulance: _______________________
   Poison Control Center: ____________
2. Babysitting Address:
   ____________________________
   (cross street if available)
3. Telephone Number Where Parents Are: ________
4. Time Parents Are Expected To Return: ________
5. Location of:
   Exits: ___________________________
   Smoke Detectors: __________________
   Fire Extinguisher: ________________
6. Are Home Escape Plans Posted? __________
7. Neighbor's Name and Phone Number: ________
8. Relative's Name and Phone Number: ________
10. Expected Visitors: ________________
11. Other Instructions: ________________
HOW TO CALL FOR HELP

HOW TO MAKE A 9-1-1 OR AN EMERGENCY CALL

Call from a safe place: Get away from sources of danger (fire, gas leak, etc.). Call from a neighbor's house.

Stay calm: Speak clearly and slowly, to make sure you get the help you need.

Answer all questions: Give any information that the emergency dispatcher asks for. If you have a cellular phone be certain to give your exact location and call-back number.

Listen for instructions: Do exactly as the dispatcher says.

Stay on the line: Do not hang up until you are told to do so.

TEACH YOUR CHILDREN HOW TO CALL 9-1-1 OR AN EMERGENCY NUMBER FOR HELP

MAKE SURE THEY:

Never make prank calls: Tell children that making fake emergency calls puts people's lives at risk. It is also against the law.

Understand when to call: Explain which kinds of situations are emergencies and which are not.

How to dial 9-1-1: Don't program 9-1-1 on a speed-dialing device. Instead have children memorize the number. Then, have them practice dialing it with a disconnected phone.

Know their full name, address and phone number: Being able to give this information quickly can make all the difference in an emergency.

Follow all instructions: Teach children to stay on the line until they are told to hang up.

SPECIAL NOTE

Parents/guardians/caregivers should be aware that some communities do not have 9-1-1 emergency service. We therefore recommend that before you began training you confirm the emergency number with your local emergency service provider.
Children and fire . . . a deadly combination!

Children have a natural curiosity that can be exasperating at times. This curiosity is how children learn about their environment. Unfortunately, fire is so unpredictable and dangerous that a moment of carelessness can result in a lifetime of regret.

Education and information are the best two weapons that a parent/guardian or teacher has to prevent a child from experiencing burn injuries. Teaching the child fire safe behaviors early can reduce the level of curiosity, thereby removing the child’s urge to experiment on their own. If you do not know what to teach your child, contact your local fire department.

Not all children start fires because they are curious. Some children use fire to release feelings of anger or depression. These children are probably experiencing other forms of unacceptable behavior as well. A statewide firesetter hotline is available for parents or teachers to access information and resources to deal with these types of children. The hotline number is 1-800-446-1589 and it is monitored 24 hours per day. A trained Youthful Firesetter Intervention Specialist from the Illinois Youthful Firesetter Intervention Association will return your call and offer options for resolving the problem.

Children, for malicious reasons, set some fires. These fires are started to cover up other crimes and are usually premeditated. These types of firesetters are introduced into the legal system and are not a part of the fire safety program.

The Youthful Firesetter program starts with an in depth interview process that allows the Intervention Specialist the ability to meet the family. The interviews are broken into three sections. The first is done with the child. Questions are asked from the Federal Emergency Management Agency (FEMA) JFS Guidelines. While this interview is being conducted, the parents fill out a parental questionnaire. Finally, the family is brought together and interviewed as a group. All three interviews are then reviewed. Scores from these tests are tabulated and from that information, a decision is made as to how to approach the process of discontinuing the firesetting behavior. The main choices are fire safety education, mental health intervention with fire safety education, or referral to police.

As caregivers for a child, it is the responsibility of the parents/guardians and the teachers to insure the child stops playing with fire. The consequences of ignoring this problem could be deadly. The Youthful Firesetter Program was designed to refocus the child’s behavior towards constructive activities and eliminating the inappropriate ones. The program has a very high success ratio.
WHAT IS A BURN?

A burn involves the destruction of skin cells, and sometimes the underlying structures of muscle, fascia and bone. It occurs when these structures absorb more heat than their capacity to dissipate it.

Children and older adults, by virtue of their thinner skin, sustain severe burns at lower temperatures and in less time than an adult. Exposure for just three seconds to water which is 140°F (the temperature of the average home’s hot water as it comes from the tap) can result in a full thickness or third degree burn, which would require hospitalization and skin grafts. An adult would have to be exposed to the same temperature for up to five seconds to sustain the same burn. At a higher temperature, the time required to obtain a serious burn can be reduced to a fraction of a second.

Most people think of burns in terms of degrees: first, second and third degree burns. The medical profession often categorizes burns in terms of thickness – full thickness and partial thickness.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Cause</th>
<th>Surface Appearance</th>
<th>Color</th>
<th>Pain Level</th>
<th>Healing time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST</strong></td>
<td>Sunburn, scald, flash flame.</td>
<td>Dry, no blisters.</td>
<td>Pink</td>
<td>Painful</td>
<td>2 - 5 days with peeling, no scarring, may discolor.</td>
</tr>
<tr>
<td>(Superficial)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECOND</strong></td>
<td>Contact with hot liquids or solids, flash flame, chemical.</td>
<td>Moist blisters.</td>
<td>Pink to cherry red</td>
<td>Painful.</td>
<td>Superficial: 5-21 days no grafting. Deep: no infection, 21-35 days; If infected, converts to full thickness.</td>
</tr>
<tr>
<td>(Partial thickness)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THIRD</strong></td>
<td>Contact with hot liquids or solids, flame, chemical, electrical.</td>
<td>Dry and leathery until removed. Charred blood vessels visible under skin.</td>
<td>Mixed white, waxy, pearly or dark khaki, mahogany. Charred.</td>
<td>No pain, nerve endings dead.</td>
<td>Large areas may need months with skin grafting. Small areas may heal with grafting within weeks.</td>
</tr>
<tr>
<td>(Full thickness)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WHAT ARE APPROPRIATE FIRST AID RESPONSES?

Remember: a quick response can help lessen the extent of injury.

1. Stop the burning process (remove the source of heat).
   If clothes are on fire, “STOP, DROP and ROLL.”
   If clothes get soaked with a hot liquid, remove clothing.
   If liquid chemical spills on skin, rinse with tepid water.
   If powder chemical spills on skin, brush off, and then rinse with tepid water.
   Remove any clothes that have been contaminated by a chemical immediately.
2. Remove belts, all jewelry, and all tight clothing, especially from around the person’s neck. Burned areas will swell immediately.
3. Cover burns with clean, dry dressing, bandage or sheet.
4. Keep person warm with a blanket.
5. Seek medical attention immediately.
NEVER:

1. Pour cold water on a burn.
2. Pack burned area with ice.
3. Apply butter or ointment immediately

Doing any of the above can make injuries worse.

SPECIAL CONSIDERATIONS

1. MINOR BURN INJURIES:
   Cool burn with cool water. Antimicrobial ointment may be applied with a bandage after the wound is cooled. Consult with physician for additional treatment, particularly if skin breaks or pain does not subside.

2. ELECTRICAL INJURIES:
   **DO NOT TOUCH** the person who is in contact with electricity. **YOU WILL BE INJURED.** Disconnect the source of power or call for assistance, then begin first aid. Primary concern is airway, breathing, circulation, and cervical spine immobilization, then assess for additional injuries.

3. CHEMICAL INJURIES:
   Remove clothing before flushing with water. Check for contact lenses, which should be removed before irrigation. Use caution not to flush chemical on parts of body that are not contaminated. Read the container label for information or consult with Poison Control Center before administering first aid for specific chemical reactions.

"A burn injury may be one while painful, poses no risk to the patient's life and will heal with no cosmetic deformity or impairment. Unfortunately, burn injuries can also be the most serious forms of injury that a patient experiences, places their life at great risk and causes long term impairment and disability. Recognizing burn injuries and the importance of initial intervention are critical to a successful outcome."

Richard L. Gamelli, M.D.
Loyola University Burn Center

BURNS
CANDLE SAFETY

For many people of all ages, candles are at the center of birthdays, family occasions, religious festivals and the home itself. However candles, as with any naked flame, can be a cause of fire, especially in the home and particularly where there are children.

Follow these fire and burn prevention tips:
• Do not purchase candles that have dried flowers or potpourri embedded in the wax or display candles in a centerpiece with foliage (those materials are flammable).
• Keep candles away from hair and combustible materials such as clothing, furniture, drapes, bedding, carpets, decorations and other flammable items.
• Avoid spraying aerosols (like hair spray or air freshener) near a candle.
• Always burn candles on a flat, protected, heat-resistant surface specially designed for candle use. The holder should be big enough to collect dripping wax. A ceramic tile is a good heat resistant surface to place candles on.
• If you are to put a candle on a stove top, be sure the area is clean and free from any grease or residue.
• Don’t place lit candles in windows, where blinds or curtains can close on them or be blown into the flame.
• Keep candles out of the reach of children and pets. Do not place lighted candles where they can be knocked over by children, pets or anyone else.
• Remember to extinguish all candles when leaving the room or going to sleep.
• Never leave a child unattended in a room and don’t leave candles lit in a room in which a child is sleeping. Keep all matches and lighters up high and out of reach of children, preferably in a locked cabinet.
• Do not carry a lit candle or use a candle to look for things in a closet or other confined spaces.
• Candles should not be used during a power outage, flashlights and other battery-powered lights are much safer light sources than candles.
• Do not use a candle for light when fueling equipment, such as a kerosene heater or lantern, as a flame may ignite the vapors.
• The best way to extinguish a candle is to use a special candle sniffer or candle quencher or, if not available, hold your finger in front of the flame and blow at your finger. The air will blow around the finger and extinguish the candle from both sides preventing hot wax from spattering.
• Discontinue use of a container or votive candle when 1/2 inch of the unmelted wax remains. This will prevent possible heat damage to the counter/surface and prevent glass containers from cracking or breaking. Do not burn a candle in a container that is chipped or cracked.
• Do not allow the flame to touch the sides of the container. Containers can become very hot! Handle with care.
• Extinguish taper and pillar candles when they get down to within two inches of their holders or decorations.
• Clean and trim candlewicks to 1/8 inch to 1/4 inch before lighting. Long or crooked wicks cause uneven burning and dripping. Keep candles free of wick trimmings, matches or any flammable materials that might ignite.
• Check burning candles frequently to be sure they are not burned too far down or that hot wax isn’t dripping.

RESIDENTIAL SPRINKLERS

Fires kill more people in the United States every year than all natural disasters combined.

80% of all fire deaths occur in the home. One of the most effective ways to prevent fire-related deaths is the installation of residential sprinklers. Sprinklers will extinguish a typical residential fire in less than one minute to dramatically improve survival rates. Combined with smoke alarms, they cut the risk of dying in a home fire by 82% compared to having neither.

Why are sprinklers important for life safety?
Sprinklers do not rely upon human factors such as familiarity with escape routes or emergency assistance. They go to work immediately to reduce the danger. Sprinklers prevent the fast developing fires of intense heat (flashover) which are capable of trapping and killing the occupants of a home. Sprinklers allow you to escape from the fire.
FIRE SPRINKLER FACTS

Only the sprinkler closest to the fire will activate, spraying water directly on the fire. Each sprinkler is individually activated by heat. Despite what is seen on some TV shows, smoke does not trigger sprinkler operation. The rest of the sprinklers in a house will not activate unless there is also a fire in that location. 90% of all home fires are contained with a single sprinkler.

Fire hoses, on an average, use more than 15 times the water that sprinklers do to contain a fire. Sprinklers use only a fraction of water that fire department hoses do. During a fire only the sprinklers closest to the fire are activated which limits the total amount of water needed to suppress a fire.

Won't sprinklers look strange in my house?
No. Due to advances in sprinkler technology, sprinklers look better than ever, if you can see them at all. Sprinklers can be concealed behind ceiling plates out of sight until needed to extinguish a fire. They are available in a wide range of sizes and colors to blend into the background of almost any room.

The odds of accidental activation are 1 in 16 million.
Sprinkler mishaps are generally less likely and less severe than accidents involving home plumbing systems.

DID YOU KNOW?
- Sprinklers rarely leak. They are tested at 175 pounds per square inch for 24 hours. Standard plumbing is only tested at 60 pounds per square inch.
- Only the sprinkler head that is affected by the fire will activate.
- Sprinkler heads are activated by heat only. Smoke without heat will not cause a sprinkler to activate.
- Sprinklers cause less damage than the fire itself. A sprinkler will control a fire in its early stages and use considerably less water than the fire department.
- Sprinklers are designed to activate at temperatures between 135 - 175 degrees F.
- Provides early fire warning (augments, but does not replace smoke alarms).
- One average size room only needs one sprinkler. A residential fire sprinkler sprays about only 10 to 18 gallons of water a minute. A hose used by firefighters flows 10 times that amount, 175-200 gallons a minute.

FIRE SAFETY FOR OLDER ADULTS

Older adults are at risk for fire and burn injuries for a number of reasons:
- They may be less able to take the quick action necessary in a fire emergency.
- They may be on medication that effects their ability to make quick decisions.
- Many older adults live alone and when accidents happen others may not be around to help.

SAFETY TIPS

Smoking (A major cause of fire deaths among older adults)
- Don't leave smoking materials unattended. Keep plenty of large, deep ashtrays available in smoker's area. Be sure smoking materials are cold and wet before they are thrown out. Throw them into the toilet or a metal container every night before going to bed.
- Check smoking areas, furniture in those areas, and clothing for ashes or smoking materials.
- Never smoke while reclining on upholstered furniture or while in bed.

Heating
- Buy only Underwriter’s Laboratory (UL) approved heaters. Read manufacturer's instructions on proper usage.
- Keep all combustibles at least three feet from the furnace and hot water heater.
- Have furnaces inspected and cleaned at least once a year.
- Place portable heaters at least three feet away from beds, drapes, furniture, and other flammables.
- Do not dry or store objects on top of heaters.
- Use only portable heaters that have an automatic shut-off that activates if the heater tips over. Turn off portable heaters before leaving home or going to bed. Use appropriate fuel for heaters. (The wrong fuel can cause an explosion)
- Do not use electric space heaters in the bathroom or around other wet areas.
- Set a timer or alarm clock in case you fall asleep with a heating pad or electric blanket on.

Other
- Clean out storage areas. Discard old rags, newspapers and magazines.
- Know when and how to use a fire extinguisher. Keep a multi-purpose ABC fire extinguisher handy.
- Install smoke alarms on every level of the home and change the batteries twice a year.
- Hardwired smoke alarms are available with external strobe lights, which could alert neighbors/passers-by to a fire.
- Do not smoke while oxygen is on or if someone in the room is using oxygen.
- Be sure that the temperature of your hot water heater is not higher than 120 degrees. Temperatures higher than 120 degrees can cause a third degree burn in just seconds.

CANDLE SAFETY  RESIDENTIAL SPRINKLERS  FIRE SAFETY for OLDER ADULTS
FIRE SAFETY CHECKLIST
Any No Answer Can Be A Hazard

YES NO NA

1. Is there at least one smoke alarm on every level of your home?
2. Do you and your family know what your smoke alarm or building fire alarm sounds like?
3. Are your smoke alarms tested regularly?
4. Is there a fire extinguisher in your home and do you and your family know how to use it?
5. Does your family have a fire escape plan posted that shows all the exits from your house or apartment?
6. Have you and your family had a fire drill at home to be sure you would all know how to escape if you had to?
7. Does everyone know two ways out of every room in your house?
8. Does everyone in your family know where the meeting place is outside in case of a fire?
9. Does everyone in your family know to get out quickly and to stay out of a burning building?
10. Do you and your family know how to call the fire department in case of an emergency and is the number posted near every phone?
11. Are matches kept in a metal container away from heat and away from children?
12. Are all matches, cigarettes, and cigar butts carefully extinguished before disposing of them?
13. Do all the smokers at home know not to smoke in bed?
14. Are stoves, broilers, and other cooking equipment kept clean and free of grease?
15. Are the fuses or circuit breakers adequate for your home?
16. Are all electrical cords in good condition—not frayed or worn?
17. Are extension cords kept out from under rugs, carpets, and off nails and pipes?
18. Is only one appliance or device plugged into an extension cord?
19. Is the heating system in your home inspected annually by a qualified technician?
20. Are furnaces, stoves, and flues properly maintained and inspected?
21. Are curtains and clothing kept away from stoves and heaters?
22. Are spaces around water heaters, furnaces, etc., free from combustible materials and flammable liquids?
23. Are gasoline and other flammable liquids kept in approved safety containers and not in glass or plastic containers?
24. When you employ babysitters, do you instruct them in what to do in case of fire?
25. Did your entire family take part in completing this checklist?

ILLINOIS FIRE SAFETY ALLIANCE
P.O. Box 911 • Mount Prospect, IL 60056
(847) 390-0911 • FAX (847) 390-0920 • 1-800-634-0911

- Matches & lighters are tools for adults, not toys for children
- Never go back into a burning building
- Check your smoke alarm regularly
- If your clothes catch on fire, Stop, Drop, and Roll
- Have a family meeting place outside your home
- Get low in smoke
- Put cool water on a burn
- Know two ways out of a burning building
- Have a home fire escape plan
- Know your fire department emergency phone number