Fire Sense℠

A Smart Way to Prevent, Detect and Escape Home Fires

A Message from Bill Novelli

Executive Director, AARP

It's a scary fact, but it's true. Older adults are the most likely of any group of Americans to die in home fires. Although people 65 and over represent just 13 percent of the U.S. population, they account for 30 percent of the fire fatalities.

The real tragedy – most of those fires were easily preventable. And in the fires that were not preventable, most victims did not have to be victims. With proper planning, they could have escaped. We have far more power over fire than we realize.

This brochure from The Hartford is filled with practical tips on what you can do to prevent fire in your home, and how to escape should a fire occur in spite of your best efforts. I urge you to read it carefully and to act on the information provided. It could save your life and the lives of your loved ones.

AARP Auto & Homeowners Insurance Program from The Hartford

"I'll never forget the sight as I was coming down the stairs. It was such a huge flame. The kitchen area was directly below our bedroom, so if we had fallen asleep, I think the house would have been gone. I still think about it a lot. It hasn't left my mind."

John Tekach

John Tekach and Velma Balint, whose house was damaged by a fire that started in the dishwasher.

Home Fires

happen every 83 seconds, destroying homes and disrupting lives.

Home. It's the place where you expect to feel safe. But more injuries and deaths from fire occur in the home than in any other place. Nearly 85 percent of fire fatalities and 78 percent of fire injuries occur in the home. Yet most Americans underestimate the danger of fire and overestimate their ability to protect themselves and their families.

Now you have a smart way to prevent, detect and escape home fires with *Fire Sense*℠ – a home fire safety guide developed by The Hartford Financial Services Group, Inc. This guide will help you understand the dangers of fire and assess the fire risks facing you, your family and your home. You'll also learn ways to help you escape and survive should a fire occur. To develop this guide, we consulted fire safety experts and talked with people who have faced home fires and escaped. With *Fire Sense*, you'll share some of their experiences and learn ways to protect yourself and those you care about from the dangers of fire.

The Power of Fire

Fire is sinister. It can start in an instant and consume your entire home in just minutes. It takes lives, injures people, destroys homes and steals precious possessions. Nationwide, a home fire injury occurs every 23 minutes, and a home fire death occurs every 130 minutes. And it's not usually the flames that kill; it's the smoke.

In 2000 alone, 3,420 people died in home fires in the United States. This is one of the highest fire death and injury rates among industrialized nations. Fire can harm all of us; however, adults 65 and older are affected most by its power. They account for a disproportionate number of U.S. fire deaths. Although older adults represent just 13 percent of the U.S. population, they suffer 30 percent of the fatalities.

To keep your family safe, you need to understand how fire burns and how it can harm you. Only then will you be able to protect yourself, your family and your home.

Fire requires heat, fuel and oxygen, both to ignite and to continue burning. Some heat sources in the home that can start a fire include a hot stove burner, a spark from a worn electrical wire and a burning cigarette. Almost any material in the home can be fuel: furniture, draperies, food, clothing, clutter and more. Oxygen, which is present in the air, also fuels the fire. As a fire burns, the heat it creates warms nearby items, making it even easier for them to start burning, too. The bigger the fire gets, the more quickly it spreads. That's why in less than 30 seconds a small flame can get completely out of control and turn into a major blaze.

People don't realize how quickly a fire grows. They overestimate their ability to extinguish it and underestimate the amount of time they need to escape. The best action to take if a fire starts in your home is to get out and stay out.

Fire Creates Poisonous Smoke

Smoke's poisonous gases spread quickly from where the fire begins and can overwhelm you long before you see any flames. Inhaling these gases can disorient you and slow your reaction time, making escape more difficult. Smoke contains poisonous carbon monoxide that displaces oxygen from the blood, and carbon dioxide that causes you to breathe more quickly and inhale more poisonous gases. Nearly 75 percent of home fire victims die primarily from the effects of smoke.

Fire Creates Intense Heat

During the first few minutes of a home fire, room temperature can reach 100° F at floor level and 600° F at eye level. This intense heat can melt clothing onto skin and cause severe burns to the body; burns account for 25 percent of home fire deaths. Breathing this superheated air causes rapid, severe lung damage. And unconsciousness follows in just minutes.

In five minutes, the room temperature can reach 1100° F, which is hot enough to ignite every combustible object in the room simultaneously. This is called *flashover,* and conditions in a burning home deteriorate rapidly after it occurs, making survival unlikely.

"The minute he opened the front door and went out, it went 'poof' and flames spread throughout the whole house, not just the room where the fire started. I would say five minutes more, he probably would not have gotten out of there. Unless you've been through it, you don't have a sense of how quickly it happens."

Doug Hazlett

Doug Hazlett, and son Curt, who at the age of 13 escaped a candle fire that destroyed their home.

"I studied in Spain and took many pictures of 16 different cities. Those pictures burned, too. History, artifacts… treasures of a lifetime. This trauma was very deep and emotional."

Delmar Benson, who lost his 20-year collection of historical artifacts in a shed fire.

Carol and Delmar Benson

Fire Creates Emotional Trauma

In addition to the obvious physical dangers to people and property, fire takes a tremendous emotional toll on people and their families. Losing one's home, treasured possessions and photographs is traumatic. It is impossible to replace the belongings collected throughout a lifetime or handed down for generations.

Rebuilding and recovery can be overwhelming. Under normal circumstances, cataloging every item in your home would be a daunting task, even if you had the items right in front of you. But fire victims must remember and record everything they own, while coming to terms with the tragedy.

Fire victims also must work through the hundreds of decisions involved in rebuilding their homes and replacing their possessions.

As one fire survivor explains, *"The only thing left standing was the floor and the outside walls. It's the most horrendous thing to walk into a building after a fire. Everything is gone. And you think to yourself, 'How am I going to do this? How am I going to replace all this stuff?'"*

– Shirley Carnal, a fire survivor who lost her home to a fire that began in the middle of the night.

Fire Causes and Prevention

A home contains many fire hazards, including some you may not be aware of. Most fires do not start spontaneously, but are the result of our unintentional actions or oversights. We often don't realize that particular behaviors or activities increase our fire risks. To minimize unsafe activities, you must first understand the potential fire hazards in your home and know the steps you can take to reduce your risks.

When you assess the fire dangers in your home and plan for fire safety, carefully review the products you use and the tasks you perform each day. Find out how likely you are to have a fire in your home by completing the Personal Fire Risk Assessment on page 24.

Cooking is the leading cause of home fires and fire injuries, with stove fires dominating this problem.

Cooking – A Watched Pot Never Burns

Cooking is the leading cause of home fires and fire injuries, with stove fires dominating this problem. Most cooking fires are caused by people's behavior, not appliance failures. A majority of these fires happen when people leave food cooking unattended on the stovetop. Other common mistakes include leaving burners or ovens on after cooking, leaving combustibles such as potholders too close to heat sources, and wearing loose-fitting sleeves near hot burners.

Injuries from cooking fires are most prevalent among people age 30 to 49. Although adults 65 and older have a smaller percentage of cooking-fire injuries compared to adults in other age groups, they have a higher risk of dying from these injuries – more than four times greater than the rest of the population.

Fortunately, you can reduce the risk of cooking fires with these simple precautions.

"I left a pot of cooking oil on the stove. I can't sit still so I thought, 'That oil isn't going to get hot right now, I can do something else.' The smoke alarm went off. There were flames on the pot, and I picked it up. I was trying to go outside. When I realized I was on fire, I stopped everything and went out to roll in the grass."

Louise Alvord, who suffered extensive burns while heating oil on the stove.

Stove and Oven Safety

- Keep an eye on all food being heated.
- Wear short or tight-fitting sleeves when cooking and avoid reaching over burners or hot surfaces.
- When using an electric stove, use a burner that is the right size for the pan. Using a burner that is too large can cause the pan and its contents to heat too quickly, which can lead to boil-overs, scorching and burning.
- When using a gas stove, keep the flame entirely under the pan. A flame that surrounds the pan can easily ignite a loose-fitting sleeve.
- Keep potholders, wooden utensils and other combustible items away from hot burners or pilot lights.
- Create a kid-free zone of three feet around the stove, and supervise older children when they cook.
- Keep the stovetop, oven and range hood free of grease and spills that can catch fire.

Grease Fires

Take extra care when frying or deep frying food or when cooking with oils, lard, butter or other grease products. If a grease fire occurs, remember to:

- Put a lid on the pan.
- Or toss baking soda on the flames.
- Leave the house and call 911 if you can't put out the fire quickly and safely.

Using a fire extinguisher or water to put out a grease fire in a pan could cause the hot oil to splatter, spreading the fire instead of extinguishing it.

"These burns are bad enough that I will never leave when I'm cooking. This is going to be with me for a long time. I can't ever leave cooking food again."

– Louise Alvord

Smoking – Kick This Fire Risk

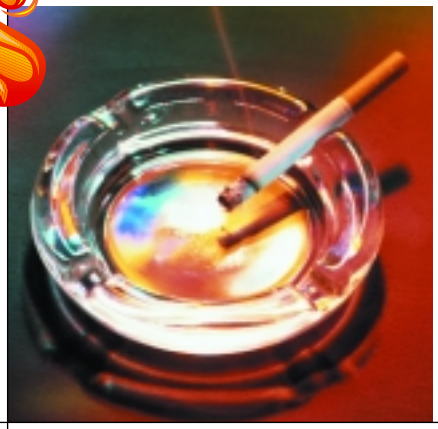
"When I noticed the fire, I yelled out to her. I wouldn't allow her to smoke in the house, so she must have been smoking on the porch. I kept calling and she didn't answer. Immediately after I called 911, the lights went out and I had to grope my way. But it didn't help her any ..."

– Myron Korach, who lost a loved one and his home in a fire started by a lit cigarette.

More people die in fires started by smoking materials than in any other type of fire. These fires start when lighted tobacco products, most often cigarettes, are improperly discarded or abandoned and ignite mattresses, bedding, upholstered furniture, trash and other combustible items. Most victims were asleep, slowed by alcohol or medication, or challenged by physical, sensory or cognitive problems, making escape more difficult.

Fires caused by smoking are particularly dangerous because some of the materials most commonly ignited are mattresses or bedding, upholstered furniture and clothing. The close proximity of the fire reduces the person's ability to extinguish or escape a fire before being overcome. As people age, their risk of injury or death in home fires caused by smoking rises. Smoking is responsible for 21 percent of home fire injuries and 34 percent of home fire deaths in older adults, compared to 11 percent and 23 percent for the rest of the population.

Matches and lighters in the home are attractive to children and that makes them a special fire risk. Of all the home fires caused by child play, nearly 80 percent are caused by children playing with matches or lighters. These fires also cause the most fire deaths in children under the age of five. In most cases, these children were playing with matches or lighters alone in their bedrooms.



More people die in home fires started by smoking materials than in any other type of fire.

Adopt these *Fire Sense* behaviors to minimize the risk of fires caused by smoking materials, matches and lighters, and help protect everyone in your house:

- If you smoke, consider quitting or refraining from smoking in your home. Your smoking puts everyone in the house at risk, not just you. Do not allow others to smoke in your home.
- Never smoke in bed, when sleepy or when you have used medications or alcohol that could make you drowsy.
- Use large, heavy, non-tip ashtrays.
- Extinguish smoking materials thoroughly to prevent butts and ashes from igniting other materials. Douse smoking materials under water.
- Use child-resistant lighters, and keep matches and lighters out of the reach of children.

Furnishings – In the Hot Seat

Your upholstered furnishings may be one of the greatest fire hazards in your home. Upholstered seating and mattresses contain foams and fillers that burn rapidly, release tremendous heat, produce toxic gases and consume oxygen rapidly.

Careless smoking and small open flames such as those from matches or lighters are the leading causes of fatal fires involving upholstered furniture. Sparks from fireplaces and wood stoves, and heaters also start these fires.

Most consumers don't know how easily their furnishings and mattresses can burn. Although foam manufacturers provide warning labels about the hazards of burning foam, these warnings don't always reach a consumer buying new furniture. When shopping for upholstered furniture, choose products that are specifically designed to be more fire resistant than conventional furniture. Look for furniture made under the Upholstered Furniture Action Council (UFAC) program, or furnishings that meet the requirements of California Bureau of Home Furnishings (CAL 117 or CAL 133).

- Manufacturers complying with the UFAC voluntary standard use foam and/or certain fabrics that are more resistant to ignition from smoldering cigarettes. This furniture is available nationwide. Look for the removable gold UFAC hang tag on the furniture at the time of purchase.
- Upholstered furniture that complies with CAL 117 is also made with foam and/or certain fabrics that are more fire resistant than conventional furniture. It is the only new upholstered furniture that can be sold in California. Some manufacturers sell CAL 117 furniture in other states, as well. Look for a special white CAL 117 label on the underside of the seating or beneath the cushion.

NOTICE

THIS ARTICLE MEETS THE FLAMMABILITY REQUIREMENTS OF CALIFORNIA BUREAU OF HOME FURNISHINGS TECHNICAL BULLETIN 117. CARE SHOULD BE EXERCISED NEAR OPEN FLAME OR WITH BURNING CIGARETTES.

- The most fire-safe upholstered furniture complies with the CAL 133 standard. Many manufacturers will produce CAL 133-compliant seating on request and at additional cost. This furniture will have a special white CAL 133 label on the underside of the seating or beneath the cushion.

NOTICE

THIS ARTICLE IS MANUFACTURED FOR USE IN PUBLIC OCCUPANCIES AND MEETS THE FLAMMABILITY REQUIREMENTS OF CALIFORNIA BUREAU OF HOME FURNISHINGS TECHNICAL BULLETIN 133. CARE SHOULD BE EXERCISED NEAR OPEN FLAME OR WITH BURNING CIGARETTES.

While upholstered furniture that complies with any of these standards will still burn, it is safer than conventional furniture and offers better protection for you and your family.

Smoking and Upholstered Furniture and Mattresses

Follow these safety steps to reduce the risk of upholstered furniture or mattress fires:

- Do not smoke when drowsy, intoxicated or medicated.
- When lighting smoking materials, be sure sparks do not land on the seating.
- Use large deep ashtrays and do not rest them on a sofa or chair.
- Check under cushions and in crevices for discarded cigarettes, ashes or matches when a person has smoked in the room.
- Replace your old mattress. Mattresses manufactured after 1973 are required to be more resistant to ignition by cigarettes.

Furniture Placement

- Leave three feet of space between furniture and space heaters, fireplaces, and wood stoves.
- Keep electrical cords, lamps and appliances away from upholstered furniture and mattresses.
- Keep open flames such as candles away from upholstered furniture, draperies and lampshades.

"I got to the living room, and it was all in flames. So I grabbed water and put it on the couch, but I shouldn't have stayed. The fire spread so fast. I called 911 and got out of the house. By that time, the whole living room was engulfed."

Shirley Carnal

Electrical – Live Wire Fire Risks

Electricity powers our lives. But each time you turn on a switch or an appliance, you may be increasing your fire risk because electrical currents carried by wiring, switches, plugs and appliances generate heat. Excessive or uncontrolled heating can start fires.

Electrical fires cause an average of $614 million in property damage per year. The chief fire culprits are:

- Incorrectly installed wiring.
- Overloaded circuits and extension cords.
- Improper plugs, switches and outlets.
- Misuse and poor maintenance of lighting.

The threat is particularly great in homes built prior to the 1950s when the electrical wiring didn't always meet today's safety standards. More electrical fires occur in winter months because people spend more time indoors and are more likely to use their lighting, heating and appliances.

To prevent electrical fires, you need to understand and respect the power of electricity and the role it can play in home fires. The following warning signs may indicate electrical problems that could cause a fire. If you experience any of these warnings in your home, contact a licensed electrician to repair the problem:

- Flickering or dimming lights.
- Switches or outlets that are hot to the touch or emit an acrid odor.
- Discolored cords, outlets and switchplates.
- Repeated blown fuses or tripped circuit breakers.

Follow these additional safety tips to reduce the risk of electrical fires in your home:

Home Wiring Systems

Hire a qualified, licensed electrician to:

- Inspect a home and make any needed repairs before you purchase it.
- Ensure that any electrical modifications meet existing codes.
- Inspect and repair outlets and switches.
- Inspect aluminum wiring in homes built from 1965 to 1973. There have been problems with aluminum wiring used in wall sockets, switches and cable connections.

Fuses and Circuit Breakers

- Replace fuses or circuit breakers with ones of the correct size, and have a qualified, licensed electrician repair any problems.

Cords, Outlets and Plugs

- Don't run cords under carpeting, bedding or other combustible material, or across doorways or frequently traveled areas.
- Discard frayed or broken cords and never splice two cords together.
- Don't overload outlets or use extension cords in place of outlets. These unsafe methods create too much heat and can easily cause fires. Call an electrician to install additional outlets, if necessary.
- Be sure plugs fit snugly in outlets to prevent shock and excess heat.

Lighting

- Purchase lamps and fixtures listed with Underwriters Laboratories (UL), an independent, not-for-profit safety testing and certification organization.
- Use the right bulb wattage for all lamps and fixtures.
- Keep combustible materials from touching lampshades or bulbs.
- Position lamps away from open windows where strong breezes can blow draperies onto hot light bulbs.

Overloaded outlets or extension cords used in place of outlets can create too much heat and easily cause fires.

"When we were leaving, I slammed the fireplace door. It must not have closed. We lost everything but two bedrooms and clothing."

Lorenzo Roberts

Marion and Lorenzo Roberts, whose home was destroyed after fire in a fireplace re-ignited.

Beat the Home Heating Fire Risk

Increasing fuel and utility prices have led many homeowners to use alternate heat sources. One-third of the U.S. population uses fireplaces, wood stoves or portable fuel-fired appliances as primary heat sources in their homes.

A home where a space heater is the primary heat source is three to four times more likely to have a heating fire than a home with a central heating system as the primary source of heat. Improper use of supplemental heating equipment – portable electric heaters, room gas heaters, portable kerosene heaters, wood stoves and fireplaces – is the leading cause of home fires in the months of December, January and February. Most home heating fires are caused by failure to clean wood-burning devices, lack of proper clearance around space heaters, improper heater refueling and simple human error.

Supplemental heating sources add warmth – and considerable fire risks – to your home. To help prevent fires:

- Allow three feet of open space on all sides of space heaters, wood stoves and fireplaces.
- Refuel your heater only when it is cool.
- Refuel the heater away from open flames such as pilot lights, candles or lit cigarettes.
- Choose a portable heater with a "tip switch" that automatically shuts off the unit if it is tipped over.
- Be sure your wood or coal stove is properly installed and up to code.
- Have wood or coal stoves, fireplaces and chimneys inspected yearly. Clean regularly.

Candles – Shedding Light on a Growing Fire Hazard

"He lit a candle, then went out to get the mail. When he came back in, the lampshade above the candle was on fire and that spread to the chair next to it. The Fire Marshal said a candle in a glass jar produces a tornado shaped heat pattern that rises higher into the air than a regular candle. In 45 minutes, the house was gone."

– Doug Hazlett

Candles have become increasingly popular in U.S. homes, whether to create atmosphere, release fragrance or keep insects away. But this trend brings increasing tragedy as well. From the early 1980s to 1998, the number of home fires caused by candles tripled and the number of deaths in fires caused by candles increased 750 percent.

These fires were caused when burning candles were left unattended, combustible materials were too close to the flames, children were playing with candles or people fell asleep while the candles were lit. December is the peak month for candle fires, due in large part to their use in holiday decorating and during winter storms. These safety steps can give you more peace of mind when you burn candles at home.

Stop Candle Fires Before They Start

Follow these tips when using candles in any room of your home:

- Place candles on stable furniture where children and pets cannot knock them over.
- Never fall asleep while candles are burning.
- Trim wicks to one quarter inch before lighting and use non-combustible holders to catch wax drippings.
- Extinguish candles when you leave a room or when the candles burn within two inches of their holders.
- Keep candles away from holiday decorations, papers, books, curtains, blinds, lampshades, flammable liquids, clothing and bedding.

When the Lights Go Off ...

Although your first reaction in a power outage may be to reach for a candle, choosing a battery-operated light is a safer option. But if you must use a candle, take these precautions:

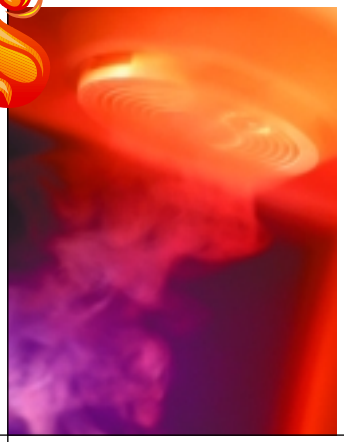
- Don't walk while holding a lit candle.
- Always supervise children who use candles for light.

From the early 1980s to 1998, the number of home fires caused by candles tripled.

Detect, Escape and Survive

When a fire strikes, it's too late to plan. Time is the enemy – in just 30 seconds, a small flame can grow out of control. You need to detect the fire early and escape quickly to survive. Installing smoke alarms (detectors) will help give you an early warning of smoke or fire. Creating an escape plan that fits every member of your home, practicing it periodically and following the plan in an emergency will help you and your family to get out quickly and safely during a fire.

Complete the Personal Fire Risk Assessment on page 24 to determine how prepared you are to detect, escape and survive a fire in your home.



More than half of home fire deaths occur between 9 p.m. and 6 a.m., when most people are sleeping.

Smoke Alarms – The Sound for Safety

"I did have smoke alarms, but I had taken out the batteries a week before because I had fried some bacon and it kept setting them off. Then, in the middle of the night, the dog kept whining and getting on the bed, and he would not stop, so I got up. I got to the living room and it was all in flames."

– Shirley Carnal

Removing smoke alarm batteries to prevent nuisance alarms is a common practice ... but it can be deadly. Smoke alarms can save lives only if they are properly installed and maintained. The most common cause of smoke alarm failures is missing, disconnected or dead batteries. Having enough smoke alarms and keeping them in working condition are important fire safety steps you can take to save lives in your home.

To ensure adequate protection, select UL-listed models and set up a schedule for maintaining them properly. Be sure that everyone in the house is familiar with the sound of the alarm and can hear it from the bedrooms. This is especially important because more than half of home fire deaths occur between 9 p.m. and 6 a.m., when most people are sleeping and more likely to be overcome by smoke before they can escape. An alarm can alert you and your family to danger before the smoke and heat harm you.

If there is a chance a family member in your home may not be able to hear an alarm, purchase an alarm that uses flashing lights or vibrations to signal an emergency.

Install in the Right Place

- Place smoke alarms outside each sleeping area, inside any bedroom where the door is typically shut and on every story of the house, including the basement.
- Install wall-mounted smoke alarms four to 12 inches from the ceiling, and ceiling-mounted models at least four inches from the nearest wall.

Safe Maintenance

- Test units monthly.
- Install new batteries once a year, such as on the day you change your clocks for daylight-saving time, or when the low-battery warning alarm sounds.
- Clean your smoke alarms regularly by vacuuming with the brush attachment.
- Replace smoke alarms every 10 years to achieve optimum performance.

Understand Everyone's Risks and Abilities

A home fire is fast, dark and deadly. The moment you realize there is a fire in your home, you might become so frightened or disoriented that you might not think clearly. Consider how much more difficult it would be to make life-saving decisions if the alarm were to wake you from a sound sleep and you must get yourself and your loved ones out of a dark, smoky house.

Escaping a fire is a challenge for anyone, day or night, but consider how difficult it must be for someone with a functional limitation that restricts his or her ability to detect a fire or get out quickly. Functional limitations exist in all age groups and can range in severity. An 18-year-old may not hear a smoke alarm because he sleeps soundly. A 40-year-old who has consumed too much alcohol may stay and try to fight the raging blaze. A 68-year-old may have limited ability to escape because of a jogging injury.

Children often have limitations that hinder their ability to escape. They have less control over their environments and limited ability to react appropriately to a fire. They are often asleep at the time of a fire or are too inexperienced to know how to escape safely.

Anyone who has hearing, vision or mobility limitations may have difficulty escaping a fire. Individuals who have hearing difficulties may not be alerted to fire dangers in time. Loud smoke alarms may make it difficult for visually impaired persons to process

"I have arthritis in my knees, and I can't walk very fast. I was maybe 30–40 feet away from where she was in the fire. If I had gone to her, that would have been the end of me, but I would have gone if I could have saved her."

Myron Korach

audible clues or instructions. People with limited mobility may have to rely on the physical assistance of others in order to escape safely.

Even the healthiest older adults experience normal age-related changes that increase their fire risk. Changes in reflexes, strength and dexterity may cause slower reaction time. Changes in skin can diminish the sensation of pain and compromise healing. And decreased lung capacity can increase the severity of a smoke inhalation injury.

In addition, disease-related conditions may be more prevalent in later life. These conditions are the primary causes of some functional limitations that would put someone at greater risk in a fire – namely, limitations in vision, hearing, mobility or judgement. These impairments may hinder a person's ability to detect a fire or escape its effects. For example:

- A woman who has visual limitations from advanced macular degeneration could have difficulty finding her way out of a home she has lived in for 50 years.
- A man who has a moderate hearing impairment may take longer to hear and respond to a smoke alarm in the middle of the night when his hearing aid is not in place.
- A woman who has rheumatoid arthritis may not be able to get downstairs quickly.
- A man who has Alzheimer's Disease may not be able to respond appropriately to a fire situation.

When you create your fire escape plan, consider your abilities and those of every member of your household – regardless of age. Understand that anyone who has a functional limitation is at greater risk in a fire. Good preparation can help minimize these risks.

Plan for a Safe Escape

"He knew he had to crawl because the smoke was already halfway through the house. We always told him we had a meeting place – the lamppost in front of the house. So he took all the animals, marched out in the snow and waited there until the fire department came. I think that saved his life."

– Doug Hazlett, who taught his son a fire escape plan that the boy used five years later to survive a fire.

Despite your best prevention efforts, a home fire may still occur. At the first sign of smoke or fire, you must act calmly, carefully and quickly. Develop an effective escape plan and practice it often to help you react appropriately in a fire emergency. When you create your plan, be sure to include everyone in your family, as well as your pets.

Plan Two Ways Out of Every Room

If fire or smoke blocks a primary exit, you will need a second way out. If you live in a two-story home, consider whether you will escape through a window, roof or balcony, and if you will need a portable fire escape ladder. Evaluate each escape route for ease of access, and eliminate clutter on stairs and in hallways.

Make sure windows are not blocked or painted shut. If you have window security bars, be sure they have quick-release mechanisms that everyone can operate.

Locked doors should be easy to open from the inside. If doors require keys to open, such as a keyed deadbolt, be sure the keys are always accessible near the door.

It's usually easier to get out of a ground floor bedroom, especially for people who may have physical restrictions that limit their ability to escape. If you or family members have mobility difficulties, consider sleeping in ground floor rooms to get out more easily.

Establish a Meeting Place Outside

Select one location where everyone will meet after escaping so you can account for everyone and quickly notify firefighters if someone is missing. Choose an area away from the house, preferably in the front yard where firefighters will arrive. During a fire, do not allow anyone to go back into the house for any reason. If someone is missing, notify the firefighters who are properly equipped to rescue people. Do not go back inside your home, even for pets.

If fire or smoke blocks a primary exit, you will need a second way out.

"When my granddaughter was staying with us, we had fire drills. How to exit just in case. We talked about how to get out, and we practiced how to unlock a window in case of an emergency."

Lorenzo Roberts

Know Your Emergency Number

Every family member should memorize the emergency phone number for your town. Once you have escaped and reported to your meeting place, have one family member call the emergency number from a neighbor's home, or use a cellular phone. Do not stay inside and make the call. It is too dangerous.

Practice, Practice, Practice

Everyone in your household should participate in fire drills at least twice a year. Practice the plan at night, too, since most fatal home fires start while people are asleep. Practice feeling your way out of the house with your eyes closed to simulate escaping through smoke and darkness. And revise your escape plan when a family member has a change in health, or when there is a temporary or permanent change to your household, such as a visiting grandchild.

Put it in Writing

Put the plan in writing to share with everyone who stays at your home. Draw a floor plan and mark primary and alternate escape routes from each room, and show the meeting location outside your home. Post the floor plan near your phone where babysitters, visitors and overnight guests can see it.

Help Firefighters Find You

Most fire departments have detailed maps of the neighborhoods they protect, but you can help them locate your house more quickly in an emergency. Be sure to display your house number in large numerals with contrasting colors that can be seen easily from the road.

Take Care of Children

Preparation and education are key to preventing fire tragedies among children who may become frightened and try to hide from a fire. A prepared child is more likely to escape unharmed. Practice your fire escape plan with children who may be staying in your home, and talk to them about what to expect if a fire occurs.

When It's Not a Drill

Using *Fire Sense* can improve your chances of escaping from a fire. In an emergency, your first response may be to dart through the flames to escape. This may not be the right choice. Consider these steps to take in the event of a fire emergency:

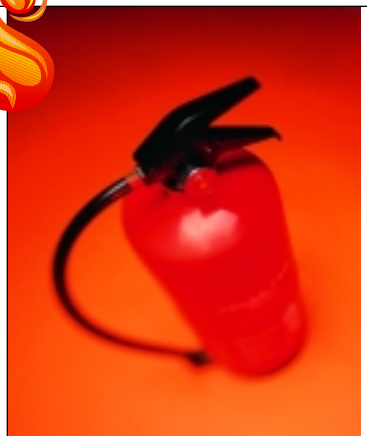
- As you escape, close all doors between you and the fire.
- Before opening doors along your escape route, use the back of your hand to feel the door, knob and space between the door and frame. Never open a warm door. Opening the door could cause heat, smoke and flames from the fire to rush into the room, overwhelming you in seconds. If the door is warm, use an alternate escape route.
- If you encounter smoke in your escape, use another route. If you must exit through smoke, crawl on your hands and knees. There is a temporary safety zone of breathable air about one to two feet above the floor.
- If your secondary exit is a window above the first floor, do not drop to the ground. If you cannot climb down an escape ladder, balcony, porch, tree or garage, wait at the window for the fire department and:
  - Prevent smoke from entering the room by using duct tape, towels or clothes to seal the cracks above, around and under the door.
  - Open the window a few inches at the top and bottom to allow fresh air in at the bottom and smoke out at the top. Shut the window tightly if the airflow begins to draw smoke into the room.
  - If the room has a phone, call the fire department and tell the dispatcher which room you are in.
  - Stay at the window and wave a flashlight or light-colored cloth to help firefighters find you.

If Clothing Catches Fire

If your clothing catches fire, don't run. The air rushing by you can fan the fire and cause it to spread quickly. Drop to the ground. Cover your face with your hands and roll back and forth to smother the flames. If someone else's clothes catch fire and he or she is unable to "stop, drop and roll," throw a heavy blanket or rug over the person to put out the flames. A person who uses a wheelchair or who is unable to stop, drop and roll should prepare in advance by mounting a small personal-use fire extinguisher in an accessible place and keeping a flame resistant blanket nearby to smother flames.

Fight Fire Only If You Know How

Use a portable fire extinguisher to put out a small fire only if you know when and how to use one properly. Remember, fires spread very quickly. If you are unsure about your ability to operate an extinguisher, don't guess. The smart move is to get out and call for help. Property can be replaced, but lives cannot.



If you are unsure about how to use a fire extinguisher, don't guess.

"Had she needed the fire extinguisher, she was so excited, I don't think she probably could have used it. So I think it's wise to have a fire plan and to practice it, and to have an escape plan and to practice that. Everyone thinks it will never happen to them."

Daryl McIlwain, whose wife experienced a cooking fire.

Chizue and Daryl McIlwain

To be confident to fight a fire, you must be sure that you have the right extinguisher for the type of fire likely to occur in your home. Extinguishers are labeled with standard symbols or letters for the classes of fire they can put out:
A – Paper, wood and ordinary combustibles.
B – Flammable liquids.
C – Energized electrical equipment.

An extinguisher labeled A:B:C can be used on all three classes of fire. Periodically review the extinguisher operating instructions and check the expiration date.

If you are highly confident that you can operate an extinguisher, use it only to fight small, confined fires, and do so only after family members and visitors have evacuated and the fire department has been called. Make sure you have a clear escape route before using the extinguisher, then remember PASS:

Pull the pin and release the locking mechanism.

Aim the extinguisher nozzle at the base of the fire.

Squeeze the discharge lever slowly and evenly.

Sweep the nozzle from side to side.

Sprinklers Offer Extra Protection

If you are planning to renovate or build a home, consider installing automatic fire sprinklers to provide significant protection for your family and property. In a study of recent fires, it was estimated that the number of home fire deaths could be reduced by up to 82 percent in single-family homes equipped with sprinklers.

Sprinklers will discharge water only in the immediate area of the fire and can put out most home fires before the fire department can arrive. Modern sprinklers are unobtrusive and will add only 1 to 1.5 percent to the total building costs for new construction. Most insurers offer premium discounts for homes equipped with sprinklers.

Use Your *Fire Sense*

A home fire leaves an indelible imprint on your life. Beyond causing injuries and destroying possessions and property, a fire changes the way you live your life, and the way you run your home.

"After the fire, we were okay, and that's all that mattered. But I think of things now in a whole different light. We are more cautious, more aware of what can happen if you don't pay attention, if you aren't prepared."

– John Tekach

Fire is destructive. *Fire Sense* gives you the tools and information you need to evaluate and reduce your fire risks and to detect and escape a blaze if one occurs in your home. Use your *Fire Sense* to protect yourself and those who matter most to you.

"Do everything you know how to do to be safe. If you're not sure, ask somebody who knows about fire safety for the home. Take precautions of all kinds. Don't take any chances. You cannot be too composed and say 'This will not happen to me.'"

– Marion Roberts

Acknowledgments

All testimonials included in this booklet were provided by insurance customers of The Hartford. We thank them for sharing their fire experiences in order to help others enhance their *Fire Sense* and their safety.

The following nationally recognized experts on the topics of fire safety or environmental design for older adults have served as advisors to The Hartford for *Fire Sense*.

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Katrinka Smith Sloan, Director
Applied Gerontology Group, AARP
Washington, D.C.

Personal Fire Risk Assessment

A fire can happen in a flash, catching you off guard and making it difficult to escape. Fortunately, you can improve your odds of preventing or surviving a home fire.

The first step is to understand your risk. Knowledge of common fire hazards is critical to preventing and surviving a blaze. For that reason, we encourage you to take this easy fire risk assessment to better understand your personal risk.

Part 1 explores some of your daily activities and your environment to highlight the likelihood of a fire occurring in your home. Part 2 examines how prepared you are to detect and escape a fire in your home. It also points out your vulnerability to injury and/or death if a fire were to occur.

Part 1: What is Your Risk of a Home Fire?

Choose the answer which *best describes* the situation in your home. Answer every question. Place the number for your answer on the line to the left of the question.

_____ **On average, how often do you (or someone in your household) cook at home?**

- **(6)** Practically every day.
- **(4)** Three to five days a week.
- **(2)** One or two days a week.
- **(1)** Less than once a week (including never).

_____ **If you (or anyone in the household who cooks) leave the kitchen while something is cooking on the stovetop, how do you remind yourself to return?**

- **(5)** I trust myself to remember.
- **(2)** I set an audible timer or carry along some kind of memory aid.
- **(1)** I never leave the kitchen.
- **(1)** There is very little (or no) cooking done at home.

_____ **Do you ever have open flames, such as candles or decorative oil lamps, around the house?**

- **(6)** Yes, I use them regularly, either for illumination or "atmosphere."
- **(2)** Yes, occasionally.
- **(1)** Rarely or never.

_____ **Do you ever use a fixed or portable space heater or wood stove?**

- **(4)** Yes, it's my primary source of heat.
- **(2)** Yes, occasionally.
- **(1)** Yes, but rarely.
- **(0)** Never.

_____ **Do you ever use a wood-burning fireplace?**

- **(4)** Yes, it's my primary source of heat.
- **(2)** Yes, occasionally.
- **(1)** Yes, but rarely.
- **(0)** Never.

_____ **How old is your home?**

- **(4)** Built in or before 1950.
- **(4)** Don't know.
- **(2)** Built after 1950.

_____ **If your home was built in or before 1950, does it have a fuse box or circuit breakers?**

- **(3)** Don't know.
- **(3)** Fuse box.
- **(1)** Circuit breakers.
- **(1)** The home was built after 1950.

_____ **In the room most often used for reading or watching TV, how old is most of the upholstered furniture (couch, easy chair, etc.)?**

- **(5)** Manufactured before the mid-1970s.
- **(4)** Don't know.
- **(3)** Manufactured after the mid-1970s.

_____ **How old are most of the mattresses in your home?**

- **(4)** Purchased before 1974.
- **(3)** Don't know.
- **(2)** Purchased in 1974 or later.

_____ **Does anyone smoke in your home?**

- **(15)** Yes, one or more regular smokers.
- **(5)** Yes, one or more occasional smokers, or visitors who smoke.
- **(0)** No.

_____ **If anyone smokes in your home, the construction of your upholstered furniture is important. Does your upholstered furniture have any indication of fire-safe construction?**

- **(4)** No, or don't know.
- **(1)** Yes, there is a sewn-in label indicating the upholstered furniture meets the requirements of the California Bureau of Home Furnishings Technical Bulletin 117.
- **(1)** Yes, at the time of purchase, there was a removable gold hang-tag from the Upholstered Furniture Action Council (UFAC).
- **(0)** No one ever smokes in my home, so the question does not apply to me.

_____ **Does your home have a working automatic fire sprinkler system?**

- **(20)** No, or don't know.
- **(10)** Yes, in some rooms.
- **(0)** Yes, the entire home has sprinklers.

Continue to next page for Part 1 score.

Part 1 Score

To compute your score for Part 1, add up the numbers you entered to the left of each question.

Write your total score here: _____ .

This helps you appreciate the likelihood of a fire occurring in your home.

51-80
Your household fire risk is too high. You can reduce your risk with any or all of the following: a no-smoking policy in your home; modernizing the home and its contents; and installing an automatic fire sprinkler system.

21-50
The fire risk in your home is about average. Some of the risk is inherent in the daily tasks of living in a combustible environment. You can lower your risk by following fire safe practices and by modernizing your home and its contents.

20 or below
Congratulations, you are living in a relatively low-risk fire environment. But, you can't be complacent because your safety depends on continual awareness of the threat of fire.

Continue to Part 2.

Part 2: What is Your Risk of Death or Injury in a Home Fire?

Choose the answer which *best describes* the situation in your home. Answer every question. Place the number for your answer on the line to the left of the question.

_____ **Does your home have one or more smoke alarms (also called smoke detectors)?**

- **(20)** No.
- **(20)** Don't know.
- **(1)** Yes.

_____ **Is there a smoke alarm located near the sleeping area(s) of your home (i.e. typically in the hallway outside bedrooms)?**

- **(5)** There are no smoke alarms anywhere in the house.
- **(3)** No, there is no smoke alarm located near sleeping area(s).
- **(2)** Yes, there is a smoke alarm located near sleeping area(s).
- **(1)** Yes, there is a smoke alarm located near sleeping area(s) PLUS one inside every bedroom.

_____ **When did you last test the smoke alarms AND restore them all to working order if needed?**

- **(5)** There are no smoke alarms anywhere in the house.
- **(4)** More than three months ago.
- **(2)** Two to three months ago.
- **(1)** Within the past month.

_____ **Would anyone in the house have difficulty hearing or responding quickly to the sound of a smoke alarm (e.g., a particularly heavy sleeper, someone who is hard of hearing, or someone who regularly uses alcohol or medication that causes drowsiness)?**

(5) Yes.
(1) No.

_____ **In the event of fire, would anyone need help to get out of the house?**

(5) Yes. One or more people in my household could not get out easily without physical assistance.
(3) Very likely. Some people in my household might need guidance or assistance.
(2) Maybe. Some people in my household (or some who visit me occasionally) might need assistance.
(1) No, everyone would be able to get out of the house without help.

_____ **If anyone would need help to get out of the house, who would provide the help?**

(5) Don't know – haven't planned for it.
(3) Someone from outside (fire department or neighbors).
(2) Someone else who lives in the house.
(1) No one would need assistance.

_____ **If a fire started when people were asleep, would anyone have to go up or down stairs, or out a second floor (or higher) window in order to escape the fire?**

(5) Yes, everyone.
(3) Yes, some people.
(1) No.

_____ **Do you have a plan for escaping from the house in the event of fire?**

(5) No.
(4) Yes, but only a general idea.
(1) Yes, a specific plan.

_____ **Have the details of the escape plan been discussed with every person in the house (e.g., how to find and follow escape routes, where to meet once outside)?**

(5) We don't have an escape plan.
(5) No.
(5) Don't know.
(1) Yes.

_____ **Have you practiced the escape plan within the past six months?**

(5) We don't have an escape plan.
(3) No.
(1) Yes.

Part 2 continued on next page.

_____ **Does anyone smoke in your home?**

- **(5)** Yes, one or more regular smokers.
- **(3)** Yes, one or more occasional smokers, or visitors who smoke.
- **(0)** No.

_____ **How old is the youngest person who lives in the house?**

- **(5)** Younger than 6.
- **(2)** 6 or older.

_____ **How old is the oldest person who lives in the house?**

- **(5)** 85 or older.
- **(3)** 75 to 84.
- **(1)** 74 or younger.

Part 2 Score

To compute your score for Part 2, add up the numbers you entered to the left of each question.

Write your total score here: _____ .

This helps you appreciate the degree of danger to people in your home if there were a fire.

51-80

You are unusually vulnerable to being harmed by fire. If you don't have smoke alarms, buy, install and maintain them properly. Also, people in your household may be challenged in their ability to hear and quickly respond to an alarm, or easily escape a fire. You can help overcome this extra vulnerability by developing and practicing an escape plan that considers the abilities of every member of your household. Do it today.

21-50

If you have a fire, the chances of everyone escaping without death or serious injury are pretty good, but by no means assured. Remember, your best chance for escape is to have working smoke alarms and to know what to do *before* there's a fire.

20 or below

If you have a fire, the chances of someone being hurt or killed are relatively low. But unfortunately, no one's chance is zero. Don't forget to practice your escape plan at least twice a year. Update and communicate your escape plan when there is a change to your household, such as when a grandchild spends the night.

Now that you have completed this assessment, you have a better understanding of the fire risks specific to your household. Refer back to the information in this booklet for specific ways to minimize the risk of home fire for you and your loved ones, and to improve your ability to escape should a fire occur.

Fire Causes and Prevention

- **Cooking** – page 7
- **Smoking** – page 9
- **Furnishings** – page 10
- **Electrical** – page 12
- **Heating** – page 14
- **Candles** – page 15

Detect, Escape and Survive

- **Smoke Alarms – The Sound for Safety** – page 16
- **Understand Everyone's Risks and Abilities** – page 17
- **Plan for a Safe Escape** – page 19

Remember, no household is free from fire risk. And risks will change over time. It's a good idea to take this assessment periodically to identify any changes.

With *Fire Sense*, you now have important information to help you prevent, detect and escape a home fire. Encourage every member of your household to read this *Fire Sense* booklet.

You can also visit us on the Web at:
www.thehartford.com/firesense

Additional Resources for Fire Safety Information

Consumer Product Safety Commission (CPSC)
4330 East-West Highway #519
Bethesda, MD 20814
(301) 504-0990
www.cpsc.gov

National Association of State Fire Marshals (NASFM)
P.O. Box 8778
Albany, NY 12208
(877) 996-2736
www.firemarshals.org

National Fire Protection Association (NFPA)
One Batterymarch Park
Quincy, MA 02269-9101
(617) 770-3000
www.nfpa.org

United States Fire Administration (USFA)
16825 South Seton Avenue
Emmitsburg, MD 21727
(301) 447-1000
www.usfa.fema.gov

This guide is designed to educate readers and assist them in analyzing home safety issues related to fire safety. It is not intended to be an exhaustive source or to relate to any particular dwelling or safety situation. Readers are advised to consult the necessary professionals to assist them in analyzing their specific home safety needs and to refer to the sources identified in the section entitled "Additional Resources for Fire Safety Information" for additional information.

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