

Integrated Safety Management 2014

Home Fire Safety

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Home Fires

Each year more than **2,500 people die and 12,600 are injured** in home fires in the United States, with direct property loss due to home fires estimated at **\$7.3 billion** annually.

Home fires can be prevented!

To protect yourself, it is important to understand the basic characteristics of fire. Fire spreads quickly; there is no time to gather valuables or make a phone call. In just two minutes, a fire can become life-threatening. In five minutes, a residence can be engulfed in flames.



Learn About Fire



Only when we know the true nature of fire can we prepare our families and ourselves.

Learn About Fire

Fire is HOT!

Heat is more threatening than flames. A fire's heat alone can kill.

Room temperatures in a fire can be 100 degrees at floor level and rise to 600+ degrees at eye level. Inhaling this super-hot air will scorch your lungs.

This heat can melt clothes to your skin. In five minutes, a room can get so hot that everything in it ignites at once: this is called flashover.



Learn About Fire

Fire is FAST!

Comparison of Room Furnishings

Legacy Room



Modern Room



02:20



Underwriters
Laboratories

Learn About Fire

Fire is DARK!

Fire isn't bright, it's pitch black. Fire starts bright, but quickly produces black smoke and complete darkness.

You may be blinded, disoriented and unable to find your way around the home you've lived in for years.



Learn About Fire

Fire is DEADLY!

Smoke and toxic gases kill more people than flames do.

Asphyxiation is the leading cause of fire deaths, exceeding burns by a three-to-one ratio.



Before A Fire

Create and Practice a Fire Escape Plan

In the event of a fire, remember that every second counts, so you and your family must always be prepared. Escape plans help you get out of your home quickly.



Before A Fire

Twice each year, practice your home fire escape plan. Some tips to consider when preparing this plan include:

Find two ways to get out of each room.

If the primary way is blocked by fire or smoke, you will need a second way out. A secondary route might be a window onto a neighboring roof or a collapsible ladder for escape from upper story windows.



Before A Fire

Only purchase collapsible ladders evaluated by a nationally recognized laboratory, such as Underwriters Laboratory (UL).

Make sure that windows are not stuck, nailed, or painted shut. Be sure screens can be taken out quickly, and that security bars can be properly opened.

Practice feeling your way out of the house in the dark or with your eyes closed.

Make sure everyone in the family understands and practices how to properly operate and open locked or barred doors and windows.

Teach children not to hide from firefighters.



Smoke Alarms



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Smoke Alarms

A properly installed and maintained smoke alarm is the only thing in your home that can alert you and your family to a fire 24 hours a day, seven days a week. A working smoke alarm significantly increases your chances of surviving a deadly home fire.

Replace batteries in battery-powered and hard-wired smoke alarms at least twice a year, coordinated with the time changes.



Smoke Alarms

Install smoke alarms on every level of your home, including the basement. The U.S. Fire Administration recommends installing smoke alarms both inside and outside of sleeping areas.

Always follow the manufacturer's installation instructions when installing smoke alarms.

Replace the entire smoke alarm unit every 8-10 years or according to manufacturer's instructions.

Never disable a smoke alarm while cooking – it can be a deadly mistake. Open a window or door and press the “hush” button, wave a towel at the alarm to clear the air, or move the entire alarm several feet away from the location.



More Fire Safety Tips

Sleep with your door closed.

Only those trained in the proper use of fire extinguishers should consider using them when appropriate.

Consider installing an automatic fire sprinkler system in your residence.

Ask your local fire department to inspect your residence for fire safety and prevention.



During a Fire

Crawl low under any smoke to your exit - heavy smoke and poisonous gases collect first along the ceiling.

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

If there is smoke blocking your door or first way out, use your second way out. Smoke is toxic. If you must escape through smoke, get low and go under the smoke to your way out.

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



During a Fire

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

If you open a door, feel it for heat first, then open it slowly. Be ready to shut it quickly if heavy smoke or fire is present.

If you can't get to someone needing assistance, leave the home and call 9-1-1. Tell the emergency operator where the person is located.

If pets are trapped inside your home, tell firefighters right away.

If you can't get out, close the door and cover vents and cracks around doors with cloth or tape to keep smoke out. Call 9-1-1. Say where you are and signal for help at the window with a light-colored cloth or a flashlight.



During a Fire

If your clothes catch fire, stop, drop, and roll

– stop immediately, drop to the ground, and cover your face with your hands.

- Roll over and over or back and forth until the fire is out.

If you or someone else cannot stop, drop, and roll, smother the flames with a blanket or towel.

Use cool water to treat the burn immediately for 3 to 5 minutes.

Cover with a clean, dry cloth. Get medical help right away by calling 9-1-1.



Escaping the Fire

Consider escape ladders if your residence has more than one level, and ensure that burglar bars and other antitheft mechanisms that block outside window entry are easily opened from the inside.

Teach family members to stay low to the floor (where the air is safer in a fire) when escaping from a fire.



Fire Escape Planning for Older Adults and People Access or Functional Needs

Live near an exit. You'll be safest on the ground floor if you live in an apartment building. If you live in a multi-story home, arrange to sleep on the ground floor, and near an exit.

If you use a walker or wheelchair, check all exits to be sure you get through the doorways.

Make any necessary accommodations, such as providing exit ramps and widening doorways, to facilitate an emergency escape.

Speak to your family members, building manager, or neighbors about your fire safety plan and practice it with them.



Fire Escape Planning for Older Adults and People Access or Functional Needs

Contact your local fire department's non-emergency line and explain your special needs. Ask emergency providers to keep your special needs information on file.

Keep a phone near your bed and be ready to call 911 if a fire occurs.



Prevent Home Fires



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Prevent Home Fires

Most home fires occur in the kitchen while cooking and are the leading cause of injuries from fire. Common causes of fires at night are carelessly discarded cigarettes, sparks from fireplaces without spark screens or glass doors, and heating appliances left too close to furniture or other combustibles. These fires can be particularly dangerous because they may smolder for a long period before being discovered by sleeping residents.

Home fires are preventable!

The following are simple steps that each of us can take to prevent a tragedy.



Cooking

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

Wear short, close-fitting or tightly rolled sleeves when cooking.

Do not cook if you are sleepy, have been drinking alcohol, or have taken medicine that makes you drowsy.

Keep children away from cooking areas by enforcing a "kid-free zone" of 3 feet around the stove.

Position barbecue grills at least 10 feet away from siding and deck railings, and out from under eaves and overhanging branches.



Smoking

If you smoke, smoke outside. Most home fires caused by smoking materials start inside the home. Put your cigarettes out in a can filled with sand.

Make sure cigarettes and ashes are out. The cigarette really needs to be completely stubbed out in an ashtray. Soak cigarette butts and ashes in water before throwing them away. Never toss hot cigarette butts or ashes in the trash can.

Check for cigarette butts. Chairs and sofas catch on fire fast and burn fast. Don't put ashtrays on them. If people have been smoking in the home, check for cigarettes under cushions.

Never smoke in a home where oxygen is used, even if it is turned off. Oxygen can be explosive and makes fire burn hotter and faster.

Be alert - don't smoke in bed! If you are sleepy, have been drinking, or have taken medicine that makes you drowsy, put your cigarette out first.



Electrical and Appliance Safety

Frayed wires can cause fires. Replace all worn, old or damaged appliance cords immediately and do not run cords under rugs or furniture.

Buy electrical products evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).

If an appliance has a three-prong plug, use it only in a three-slot outlet. Never force it to fit into a two-slot outlet or extension cord.

Use electrical extension cords wisely; never overload extension cords or wall sockets.

Immediately shut off, then professionally replace, light switches that are hot to the touch and lights that flicker.



Portable Space Heaters

Keep combustible objects at least three feet away from portable heating devices.

Buy only heaters evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).

Check to make the portable heater has a thermostat control mechanism, and will switch off automatically if the heater falls over.



Fireplaces and Woodstoves

Inspect and clean woodstove pipes and chimneys annually and check monthly for damage or obstructions.

Never burn trash, paper, or green wood.

Use a fireplace screen heavy enough to stop rolling logs and big enough to cover the entire opening of the fireplace to catch flying sparks.

Make sure the fire is completely out before leaving the house or going to bed.

Store cooled ashes in a tightly sealed metal container outside the home.



Children

Take the mystery out of fire play by teaching children that fire is a tool, not a toy.

Store matches and lighters out of children's reach and sight, preferably in a locked cabinet.

Teach children not to pick up matches or lighters they may find. Instead, they should tell an adult immediately.

Never leave children unattended near operating stoves or burning candles, even for a short time.

Check under beds and in closets for burned matches, evidence your child may be playing with fire.



More Prevention Tips

Avoid using lighted candles.

Never use the range or oven to heat your home.

Replace mattresses made before the 2007 Federal Mattress Flammability Standard.

Mattresses made since then are required by law to be safer.

Keep combustible and flammable liquids away from heat sources.

Portable generators should NEVER be used indoors and should only be refueled outdoors or in well ventilated areas.



Incident Notification at Argonne

LMS-PROC-157

An incident that requires notification to line management can be classified into one of two types:

Emergency or Non-Emergency

An **emergency** is an incident that requires immediate response of emergency services and security personnel.

On-site from an Argonne land line, dial 911.

On-site from a cell phone, dial 1(630)-252-1911.



Incident Notification at Argonne

When an incident occurs that is not an emergency, immediately notify your supervisor or next available senior supervisor of the non-emergency incident.

Complete and submit the Argonne incident notification web form within one hour after the incident is stabilized, regardless of the day or time, if computer access is readily available.

-OR-

If web reporting is not convenient, send an email to safety@anl.gov

Include the following information:

Name, badge number, and Division

Date, time, and location of incident

Type of incident (e.g., injury)

Brief description of incident



Incident Notification at Argonne

-OR-

Call 811, the incident reporting hotline, or 630-252-1811 from a cell phone or outside line, to report the incident within one hour after the incident is stabilized, regardless of the day or time, if computer access is not readily available. The hotline is staffed from 7:30 a.m. to 6:00 p.m., Monday-Friday; after hours, follow the voice mail instructions.

Note: 811 reporting within one hour is expected when an incident occurs on site. If an incident occurs off site, especially if it involves a medical emergency while on foreign travel or while doing field work in a remote location, reporting is expected as soon as practicable.



Questions?

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