

FIRE PREVENTION GUIDE



Message from City of Leduc Fire Services

This Fire Prevention Guide is a publication of the City of Leduc Fire Services. It provides easy to understand information on home and personal Fire Safety to help you better protect yourself, family and neighbours.

The safety of our community is the number one priority of the City of Leduc Fire Services. We work very closely with our industrial, business and municipal partners, as well as all other stakeholders to prevent incidents from occurring that could negatively impact our personal and community safety.

In the event of a major emergency or disaster there will be a period of time where normal emergency services have been interrupted. Therefore you will have to rely on your own emergency planning. This guide is a resource to assist you during the first 72 hours

Please review this Fire Prevention Guide regularly with all members of your family and keep it in a place where it can be readily accessed. By doing this, you and your family will know what to do in an emergency and you'll be contributing to make the City of Leduc an even safer community.

Leduc Fire Services

780-980-8475

Table of Contents

» Fire Escape Plan	4
» Smoke Alarms	5
» Carbon Monoxide Detectors	6
» Use of Candles in the Home	8
» Fire Sprinklers in the Home	9
» Fire Pit Safety	9
» Fire Safety Tips for Smokers	10
» Fire Extinguishers	10
» Arson Prevention	12
» Emergency Number Directory	13

FIRE PREVENTION GUIDE

Fire Escape Plan

Statistics reveal that 78% of deaths from fire occur in the home, with most of the fatalities taking place between 2 to 4 a.m., while occupants are asleep. It is critical to develop an escape plan, because one needs to react quickly since with a fire:

- » The smoke is black and very thick, making it impossible to see.
- » There is no time for indecision; an entire home can be engulfed within five minutes.
- » Most people are killed by smoke inhalation, not the flame of the fire.
- » The heat of the fire is extremely intense and can kill you instantly.

The Canada Safety Council recommends these steps to prepare for a family fire drill:

- » Draw a floor plan of your house.
- » Mark two ways out of each room.
- » Establish a meeting place outside the house.
- » Be sure each family member has the plan and knows the escape route.
- » Post your fire escape plan on the fridge or family bulletin board.
- » Hold a fire drill for your family once or twice a year. Vary the drills, by practising your escape from different areas of your home



Create Your Fire Escape Plan

Map out your own fire escape plane at:

www.firepoint.ca/udrawescape

FIREPOINT Families In Readiness Escape F.I.R.E.

Develop Your Home Escape Drawing

WALL WINDOW DOOR LABEL STAIRWAY ESCAPE ROUTE FIRST AID KIT EXTINGUISHER FLASHLIGHT PET HEAT SENSOR SMOKE SENSOR CO SENSOR TRASH

FIREPOINT Home Escape Drawing Dial: SAVE PRINT



3minutedrill.alberta.ca

Smoke Alarms

Locating/Installing Smoke Alarms

- » Read and follow the manufacturer's instructions carefully.
- » For best performance, an alarm should be mounted on the ceiling in or near the centre of the room, hall or stairway, and at the head of each stairway leading to an occupied area.
- » Optimum location for wall mounts is at least 15 cm (6 inches) from the ceiling but not more than 30 cm (19 inches) from it.
- » Avoid installing where the temperature is less than 5°C (41 °F) or exceeds 48 °C (119°F).
- » Keep alarms away from doors and windows.
- » Never locate an alarm in front of an air register, fans or vents.
- » Keep alarms at least 60 cm (2 feet) from any corner.
- » Don't recess an alarm.
- » Smoke alarms in rooms with ceiling slopes greater than 30 cm (one foot) rise per 2.4 m (eight feet) horizontally should be located on the high side of the room.
- » Avoid locating an alarm at the peak of an "A" frame type ceiling.
- » Never paint a smoke alarm.
- » Keep alarms 60 to 90 cm (two to three feet) away from light fixtures.
- » When having an alarm connected into the electrical wiring system of a house you should:
 - » Use a qualified electrical contractor.
 - » Never install the alarm in the electrical circuit except at the main panel. Alarms must also never be installed in a circuit connected to an on/off switch.
- » Check the alarm when installation is complete.



Mark your calendar: Testing & Cleaning

- » Test your smoke alarm monthly and clean it every 6 months. Mark it on your calendar so that you don't forget. Things to remember when testing your smoke alarm:
 - » Ensure that power is being transmitted to the alarm and that it will activate in the presence of smoke.
 - » Test your smoke alarm by pressing the test button.
 - » Even alarms with a pilot light that indicate power is being transmitted, should be tested regularly.
 - » Battery-operated smoke alarms will warn you when batteries need replacing. Despite this, make it a habit to change the batteries yearly.
 - » When you've been away from home for a few days, check your alarm on your return to ensure it is working properly.
 - » Remember, your smoke alarm can't protect you if the batteries have been removed or a plug has been disconnected.
 - » The lifespan of a typical smoke alarm is about 10 years, but some models last as little as 5 years.
 - » To clean the alarm, open the cover and gently vacuum the interior of it. The alarm will sound while the unit is being cleaned.

Carbon Monoxide Detectors

What is Carbon Monoxide?

Carbon monoxide (CO) is a colourless, odourless, tasteless and toxic gas and is often referred to as the “silent killer”. When inhaled it inhibits the blood’s capacity to transport oxygen throughout the body. It can poison the body quickly in high concentrations, or slowly over long periods of time.

Carbon monoxide is a by-product of incomplete combustion of fuels such as natural gas, propane, heating oil, kerosene, coal, charcoal, gasoline or wood. This incomplete combustion can occur in any device that depends on burning for energy or heat, such as furnaces, room heaters, fireplaces, hot water heaters, stoves or grills and any gas-powered vehicle or engine. Automobiles left running in attached garages, gas barbecues operated inside the house, grills or kerosene heaters that are not properly vented, or chimneys or vents that are dirty or plugged may create unsafe levels of CO.

When properly installed, maintained and vented, any CO produced by these devices will not stay inside the home.

What are the symptoms of carbon monoxide poisoning?

Exposure to CO can cause flu-like symptoms such as headaches, nausea, dizziness, burning eyes, confusion, drowsiness or loss of consciousness. In severe cases, CO poisoning can cause brain damage and death. The elderly, children and people with heart or respiratory conditions may be particularly sensitive to CO.

How can unsafe levels of carbon monoxide be detected?

Carbon monoxide alarms monitor airborne concentration levels (parts per million) of carbon monoxide and sound an audible alarm when harmful CO levels are present. CO alarms give early warning of potential life threatening CO levels in your home. Be sure that your alarm has been certified to the Canadian Standards Association CAN/CGA 6.19 standard or the Underwriters Laboratories (UL) 2034 standard.

If you suspect carbon monoxide in your home...

If you or anyone in your home is experiencing the symptoms of CO poisoning, ensure that everyone leaves the home immediately, leaving the door open. Call your local fire department or 9-1-1 from a neighbour’s telephone. If your CO alarm sounds, do NOT assume it to be a false alarm. Open all doors and windows to ventilate the home. If you cannot find the problem and the alarm continues, contact the fire department. If there is a strong smell of natural gas in your home, evacuate immediately, leaving the door open, and contact your local gas utility.

If no symptoms are experienced, reset the alarm and check to see if it activates. If the alarm sounds a second time, call the local fire department for their assistance.

If the alarm does not sound a second time, check for common conditions that may have caused a CO build-up (see the accompanying illustration) or contact a qualified heating contractor to check your fuel-burning equipment.



Where should a CO alarm be located in the home?

Proper placement of a CO alarm is important. In general, the human body is most vulnerable to the effects of CO during sleeping hours, so an alarm should be located in or as near as possible to the sleeping area of the home.

If only one alarm is being installed, it should be located near the sleeping area, where it can wake you if you are asleep.

Where sleeping areas are located in separate parts of the home, an alarm should be provided for each area.

Additional CO alarms should be placed on each level of a residence and in other rooms where combustion devices are located (such as in a room that contains a solid fuel-fired appliance, gas clothes dryer or natural gas furnace), or adjacent to potential sources of CO (such as in a room or suite located adjacent to an attached garage).

Unlike smoke, which rises to the ceiling, CO mixes with air. Recognizing this, a CO alarm should be located at knee-height (which is about the same as prone sleeping height). Due to the possibility of tampering or damage by pets, children, vacuum cleaners and the like, it may be located up to chest height. To work properly, a CO alarm should not be blocked by furniture, draperies or other obstructions to normal air flow.

If a combination smoke/carbon monoxide alarm is used, it should be located on the ceiling, to ensure that it will detect smoke effectively.

Always refer to the manufacturer's instructions for additional information regarding proper installation, use and maintenance.



Use of Candles in the Home

Candles are safe products, but unless they are used safely and watched carefully, they can lead to an accidental fire. More than 15,000 candle fires are reported annually. According to fire experts, the bulk of candle-fire incidents are due to consumer inattention to basic fire safety or to the misuse of candles.

The National Candle Association urges consumers to follow these rules for candle safety.

- » Always keep a burning candle within sight. Extinguish all candles when leaving a room or before going to sleep.
- » Never burn a candle on or near anything that can catch fire. Place candles away from drapes, bedding, carpets, books, paper, flammable decorations, etc.
- » Keep candles out of the reach of children and pets. Don't place lighted candles where they might be knocked over by children or pets.
- » Trim candlewicks to ¼ inch each time before burning. Long or crooked wicks cause uneven burning and dripping.
- » Always use a candleholder specifically designed for candle use.
- » The holder should be heat resistant, sturdy and large enough to contain drips or melted wax.
- » Don't burn a candle all the way down
- » Extinguish the flame if it comes too close to the holder or container. For a margin of safety, discontinue burning a candle when 2 inches of wax remains or ½ inch if in a container
- » Never touch or move a burning candle when the wax is liquid
- » Place burning candles at least three inches apart. This ensures they won't melt one another, or create drafts that can cause the candles to flare.
- » Never extinguish candles with water.
- » Be very careful if using candles during a power outage. Flashlights and other battery-powered lights are safer sources of light during a power failure.

Make sure a candle is completely extinguished and the wick is no longer glowing before leaving the room. Extinguish a candle if it flickers repeatedly, smokes, or the flame becomes too high. The candle isn't burning properly. Let it cool, trim the wick, check for drafts and then re-light. Never use a candle as a night light.



Fire Sprinklers in the Home

Home fire sprinklers can contain and may even extinguish a fire in less time than it would take the fire department to arrive on the scene.

Fire sprinklers save lives, reduce property loss and can even help cut homeowner insurance premiums.

Installing both smoke alarms and a fire sprinkler system reduces the risk of death in a home fire by 82%, relative to having neither.

Only the sprinkler closest to the fire will activate, spraying water directly on the fire. Ninety per cent of fires are contained by the operation of just one sprinkler.

See a Demonstration of a Sprinkler in Action

» homefiresprinkler.org/fire-sprinkler-water-usage

FAQs on Fire Sprinklers

» homefiresprinkler.org/fire-sprinkler-answers



Fire Pit Safety

When using a fire pit here are a few reminders for safe enjoyment. Make sure your backyard fire pit fits within City of Leduc guidelines.

According to City Bylaw, outdoor fire pits must be a minimum of 3 meters from buildings, property lines or other combustible material. The fire pit must not exceed .6 meters in height, and the opening must not exceed 1 meter in width at the widest points. The fire pit must be made of bricks, concrete blocks, heavy gauge metal or other non-combustible materials, and it must be covered with a mesh screen with openings no larger than 1.25 cm.

Outdoor fire places must be a minimum of 1 meter from buildings, property lines or other combustible materials and must be built of material such as bricks or rocks that are heat and flame resistant. The fireplace must have a chimney that is not less than 2.5 meters in height, and it must have a regulation screen to reduce airborne sparks. The base of the burning area must not be less than 0.3 meters and must be between 0.4 and 0.6 meters deep.

1. Burn only clean-burning dry wood, charcoal, or natural gas
2. Do NOT burn wet grass, plastic, painted or treated wood
3. Use kindling and build up your fire slowly for a controllable fire. Lighter fluid is an unpredictable and dangerous method to start a fire.
4. Use common sense and courtesy. Note where the wind is taking the smoke—if it's right to your neighbour's house, perhaps don't have a fire that day.
5. Remember to respect your neighbours and keep the noise level down at night
6. Keep chairs and other furniture at least three feet away from fire pits. It only takes a few seconds and a spark or flame to start a fire.

FIRE PREVENTION GUIDE

Fire Safety Tips for Smokers

Smoking and careless discarding of cigarettes are one of the leading causes of fire in Canada. The City of Leduc Fire Services responds to several fires during the spring, summer and fall seasons resulting from careless discarding of cigarettes. The following tips will help keep your family, neighbours and property safe:

1. Smokers should smoke outside and use ashtrays with a wide, stable base that won't tip over.
2. Always make sure cigarettes and ashes are out
3. Never toss hot cigarette butts or ashes into the trash
4. Never use a flower planter as an ashtray
5. If you have dead plants in pots in and around your home, discard them properly. Throw them out in the trash or take the soil from the pots and spread it in your yards or gardens
6. Keep your plants well watered and maintained
7. If you keep your potting soil in your garage or on your deck, do not leave it near any combustible material
8. Soak cigarette butts and ashes in water before throwing them away
9. Chairs and sofas can burn fast due to the fill materials. Never put ashtrays on chairs and sofas, and check for cigarettes under cushions when people have been smoking in your home
10. If you are drowsy or falling asleep, put it out. Smoking in bed is dangerous and can be fatal



Fire Extinguishers

The ABCD's of Portable Fire Extinguishers

Keep an extinguisher in your kitchen and furnace room of your home at a minimum. The kitchen can be one of the most hazardous areas of your home having an appropriate sized extinguisher available for use is critical to containing a fire in its early stage.

Tip: *only fight a fire with an extinguisher if the fire is smaller than you, if bigger evacuate immediately and call 9-1-1 from an outside your home.*

A fire extinguisher is a storage container for an agent like water or chemicals. It is designed to put out a small fire, not a large one. Extinguishers are labelled ABC or D. Ensure you use the right extinguisher for the appropriate type of fire.

A. Ordinary Combustibles – Fires started with paper, wood, drapes and upholstery require a Class A type extinguisher.

B. Flammable and Combustible Liquids – Fires originating from fuel oil, gasoline, paint, grease in a frying pan, solvents and other flammable liquids require a Class B type extinguisher.

C. Electrical Equipment – Fires started with wiring, overheated fuse boxes, conductors, and other electrical sources require a Class C type extinguisher.

D. Metals – Certain metals such as magnesium and sodium require a special dry powder Class D type extinguisher.

A multi-purpose dry chemical labelled ABC puts out most types of fires: wood, paper, cloth, flammable liquids and electrical fires. If you intend to buy more than one, you may want to purchase a BC for the kitchen, an A for the living room and an ABC for the basement and garage.

How to use your Fire Extinguisher

Use the **PASS** Method

1. **P**ull the pin. Some units require the releasing of a lock latch, pressing a puncture lever, inversion or other motion.
2. **A**im the extinguisher nozzle (horn) at the base of the fire.
3. **S**queeze or press the handle.
4. **S**weep from side-to-side at the base of the fire and discharge the contents of the extinguisher.



Construction Fire Safety Plan

Fire Safety Plan sets out specific items for inclusion in a mandatory Fire Safety Plan to provide a safe environment for workers and outline emergency procedures at sites where construction, alteration and demolition are occurring. These provisions also ensure that hazard control measures are in place and maintenance of firefighting measures and systems are in compliance with the Alberta Fire Code (AFC) 2006.

The AFC applies to all construction and demolition sites including single family residential developments. Fire Safety Plans for construction or demolition sites will apply to all inspectors, workers, suppliers and contractors on site. There can only be one Fire Safety Plan for each site. Should circumstances change on site then the plan must be modified appropriately and resubmitted to the Safety Codes Officer, Fire (SCO-Fire) for acceptance.

The owner, developer or contractor responsible for a construction or demolition site is required to develop a Fire Safety Plan acceptable to a SCO-Fire.

Requirements of Fire Safety Plan

1. Assignment of responsibility for fire safety duties to workers,
2. Emergency procedures to: provide fire warning, notify the fire department, evacuate the site and conduct first aid firefighting,
3. Control of fire hazards on the site, and
4. Procedures to ensure maintenance of firefighting measures.

FIRE PREVENTION GUIDE

Arson Prevention

There approximately 1200 arson fires each year in Alberta, from these fires there are 3 deaths and 23 injuries with a property loss of about \$53 million.

Even if the fire doesn't spread, one serious arson fire can damage an entire neighborhood. Burned out homes can be a community eyesore these results in friends and neighbours having to rebuild their lives and some having to move away. Arson hurts not just at the surface but deep into our social wellbeing preventing arson is a community responsibility.

What to look for:

1. Start with your own home, look over the area outside your home and consider what could be easily ignited and then grow into a larger fire
2. Clean the area, make it harder for people to find things to set on fire
3. Remove dead branches and overgrown plants and vegetation, two-thirds of all reported intentional fires are started in outdoor items like trash or brush
4. Pay particular attention to any large items on your property, such as an abandoned car. A large object can mean a large fire that can easily spread to a neighboring building. One out of every three intentionally set fires is an intentionally set car fire
5. Lock and board up vacant buildings and homes to make it harder for intruders to enter. This is especially important for a house or apartment building that has been vacant for a long time, under construction or renovation because the longer a building sits open and vacant, the better the chance of it being discovered by would-be fire setters
6. Watch for unusual behaviour in the neighbourhood, half the people arrested for arson are under the age of 18. The most common fire setters in your neighborhood are boys in their early teens who set fires either alone or in groups.
7. Get to know the families and kids in your neighborhood or apartment building
8. Report suspicious activity to your local police department
9. Get to know your neighbors and enjoy some fun neighborhood activities
10. Keep your eye on area businesses.
11. Arsonists may target other buildings, such as stores, churches, theaters and other recreational sites, and schools



Intentionally set fires are a community problem. But we can all take steps to help protect our properties and our neighborhoods. Being aware of what's going on in your neighborhood is a good starting point. In addition, make sure that everyone who lives in your home knows what to do when a fire occurs. Maintain your properties, both occupied and vacant, to slow the spread of fire and to hinder access. If something seems suspicious, call the police or fire department. Use these tools as we try to lessen the impact these intentionally set fires have on our community.

Emergency Number Directory

In an emergency... dial 9-1-1

» **Distress and Suicide Line:** 780-482-HELP (4357)



Leduc Fire Services			
General Information	780-980-8475	Chief of Fire Investigations	780-980-8485
Police (RCMP)			
Complaint line (24 hours)	780-980-7267	Information desk	780-980-7200
Distress assistance			
Canadian Red Cross <i>(Monday - Friday, 8:30 a.m. - 4:30 p.m.)</i>	1-888-800-6493 780-423-2680	Family and Community Support Services	780-980-7109
Victim Services	780-980-7232	Health Link Alberta	1-866-408-5465
Salvation Army, Emergency Relief Services	780-919-2431		
Utility Services - 24 hour emergency numbers			
AltaGas	1-866-222-2068	City of Leduc / Water	780-980-7177
Fortis Alberta	780-310-WIRE (9473)	City of Leduc - After Hours Emergency Water/Sewer	780-980-7108
Animals/pets			
Leduc Veterinary Hospital <i>(Monday - Friday 8 a.m. – 5 p.m.)</i>	780-986-3269	Guardian Veterinary Service <i>(after hours emergency)</i>	780-436-5880
Enforcement Services			
Enforcement Complaint Line	780-980-7200 (option 5)		

References

Information for this document was compiled using several resources. For more information, refer to the following websites:

- » www.fiprecan.ca
- » www.homefiresprinkler.org
- » www.candles.org
- » www.3minutedrill.alberta.ca

