

## Insurance Bureau of Canada

Insurance Bureau of Canada (IBC) is the voice of companies that insure the homes, cars and businesses of Canadians. Member insurance companies provide about 90 per cent of the private property and casualty insurance sold in Canada.

IBC is committed to raising consumer awareness about fire prevention because fire can't enter your home without an invitation.

This brochure provides information on how to prevent a fire in your home. If a fire does occur, a number of important tips have been included to keep you and your family safe from its effects and dangers.

To learn more about IBC, visit [www.ibc.ca](http://www.ibc.ca).

# How to prevent fire in your home

(and what to do if there is a fire)

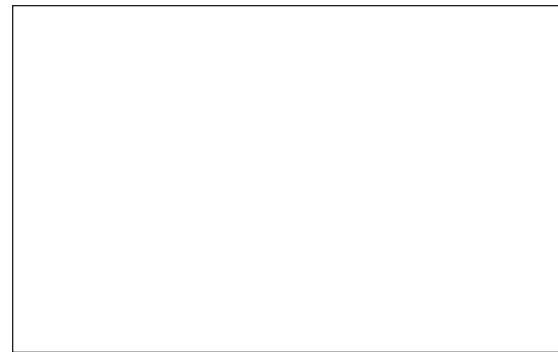


## How to keep fire from knocking on your door!

Fire can't enter your home... without an invitation.

Now is a good time to review a few common-sense precautions that can reduce the threat of fire coming into your home.

Be sure to post the ABCs of fire safety where all members of your household can refer to them easily.



11/04

## How fire-conscious are you?

Chances are that your “Home Sweet Home” could be a lot safer. Among the major causes of fatal fires in Canada are:

- failure of electrical and mechanical equipment
- careless handling of flammable material
- misuse of heating and cooking appliances
- careless smoking

## Electrical and mechanical equipment

If a circuit breaker trips or a fuse blows, it's always sensible to find out why. Don't use a fuse or breaker rated at more than the capacity of the circuit.

Use extension cords only temporarily and with care. Remember that voltage decreases over distance and that this can cause overheating in appliances that have minimum voltage requirements. Never hang electrical cords from nails or run them under carpets or doors.



Remember that peak loads are handled best by balanced circuits. A 100-amp service with 20 circuits is often better than a 200-amp service with only 10 circuits. If in doubt, consult a licensed electrician.

Look for a recognized seal of approval on electrical appliances and cords – usually Canadian Standards Association (CSA) or Underwriters' Laboratories of Canada (ULC).

Be extremely cautious with aluminum wiring, particularly at terminals and junctions and in combination with copper wire. When corroded aluminum resists electrical current, it can get very hot. Aluminum wire tends to “flow” when it is under compression, causing terminal screws to loosen and the current to spark like a welding machine.

Remember that even a fuse of correct amperage cannot prevent fires that are caused by sparks from frayed wires.

Look out for thermostats serving electrical heaters and appliances, because they can sometimes weld themselves shut, even when they are in the “off” position.

Keep insulation and combustible material well away from recessed ceiling “pot lights.” Even approved lights can cause problems. Don't exceed the maximum bulb wattage specified by the maker of any lighting equipment.

Telephone service wires, along with television and other outdoor aerials, should be grounded. Use lightning arresters in exposed locations.

Don't risk a grass fire: make sure your gas mower's muffler or spark arrestor is in good working order. On electrical mowers, ensure that your cord is in good shape and use it only with a groundfault receptacle.

## Fuels, solvents and other flammable materials

Fuels and solvents should be stored in approved, correctly marked containers. Gasoline, in particular, should be stored in a container that will tolerate the pressure of expansion as temperatures change. Gasoline should never be stored in your home.

Don't tempt arsonists by leaving fuels and solvents in plain view.

Be particularly careful around pilot lights, which can ignite paint or solvent fumes.

Oily rags can ignite spontaneously. If you must keep them, store them in a small, sealed, metal container. Even lanolin-based hand cleaner can cause cloths to ignite.

Never use gasoline as a solvent. Even the friction of a cloth can ignite it.

Never use gasoline as a fire starter.

Don't use an open flame instead of a flashlight, especially anywhere that dust or vapour could ignite.



Use a heat sink or shield when soldering plumbing close to combustible surfaces.

Be cautious when refueling gasoline cans in the back of lined half-tonne trucks. Since the can is not grounded, there is a high possibility that static electricity will come into contact with the gasoline.

If you must use a propane tank indoors, use one that is no larger than 400 grams. Remember that propane is heavier than air and can accumulate in floor drains and other low-lying areas. Never use propane or other compressed fuel without a regulator. Don't park a propane-powered vehicle in an underground garage.

Do not put foam and/or rubber articles in clothes dryers.

Treat hair-spray, nail-polish and remover with respect, because they contain a high proportion of solvent. These products and smoking don't mix.

## Heating and cooking

Guard open fires carefully – fire screens are advisable.

Never try to get more heat out of an appliance than it was designed to provide.

Keep portable heaters and space heaters at least one metre (three feet) away from anything that can burn.

Establish, and stick to, regular maintenance schedules to ensure everything is in good working order.

Beware of blocked chimneys. Ensure that all in-use chimneys conform to existing building codes. Cap unused flue holes with metal or concrete.

Frequently clean chimneys that use oil or solid fuels.

Respect specified clearances between heating appliances and combustible walls and floors. Older appliances, in particular, must often be mounted on a base of insulated metal, concrete or other incombustible material.

If a fire starts in a conventional oven or microwave, close the door to starve the fire of oxygen.

When deep-fat-frying, use only a thermostatically controlled electric appliance that is approved by CSA or ULC.

Clean stove-hood filters, vents and grease traps frequently.

Smother grease fires with dry powder from a fire extinguisher, or tightly cover the burning contents of the pan or pot. You can throw baking soda or salt on a grease fire, but never throw water, because this tends to spread the flames.

Never throw flour or uncooked cereal on a fire.

Don't store flammable liquids above a stove or furnace.

Keep all combustible items, including wooden and plastic items, dishcloths and paper towels, at a safe distance from your stove.

Don't use an outdoor-style BBQ indoors. Keep BBQs well away from walls of buildings and overhanging roofs.

Never leave cooking unattended, especially if you are using oil or high temperatures.

Be sure to wear tight-fitting or rolled-up sleeves when using the stove. A dangling sleeve on a housecoat or sweater can easily brush against a hot burner and catch fire.

Always keep a large lid near the stove when you are cooking. If a pot catches fire, slide the lid over the pot, turn off the stove and wait for it to cool. Always keep pot handles turned inward (over the stove).

## Careless smoking

Keep your matches and lighters out of the reach of children. Store matches in fire-resistant containers. Beware of butane lighters (especially those without safety valves) because they explode easily.

Provide smokers with plenty of deep, non-tip ashtrays. Soak cigarette butts in water before disposing of them.

Don't smoke while refueling vehicles or equipment, or near solvents and paints.

Never smoke in bed.

Before going to bed or leaving your home after someone has been smoking, check under and around cushions and upholstered furniture for smouldering cigarettes.



## More fire-safety tips

Remember that even mothball fumes are flammable, and that alcohol burns without visible flame.

Clear away rubbish. Don't give fire a place to start.

Never leave a Christmas tree or holiday decorative lights unattended.

Unplug “instant-on” televisions that are unused for long periods.

When draft-proofing a home, make sure that fuel-burning appliances have enough air to “breathe”.

Make sure that babysitters know the escape exits and the basic rules of fire prevention.

Dust can explode. Vacuum cleaner dust and floor sweepings should be wrapped carefully and discarded with household garbage.

Never leave small children at home alone. Some kids like to experiment with fire.

Be aware that direct sun can char internal wood surfaces of outer walls. Consider vines, vents and other methods of cooling your home's exterior.

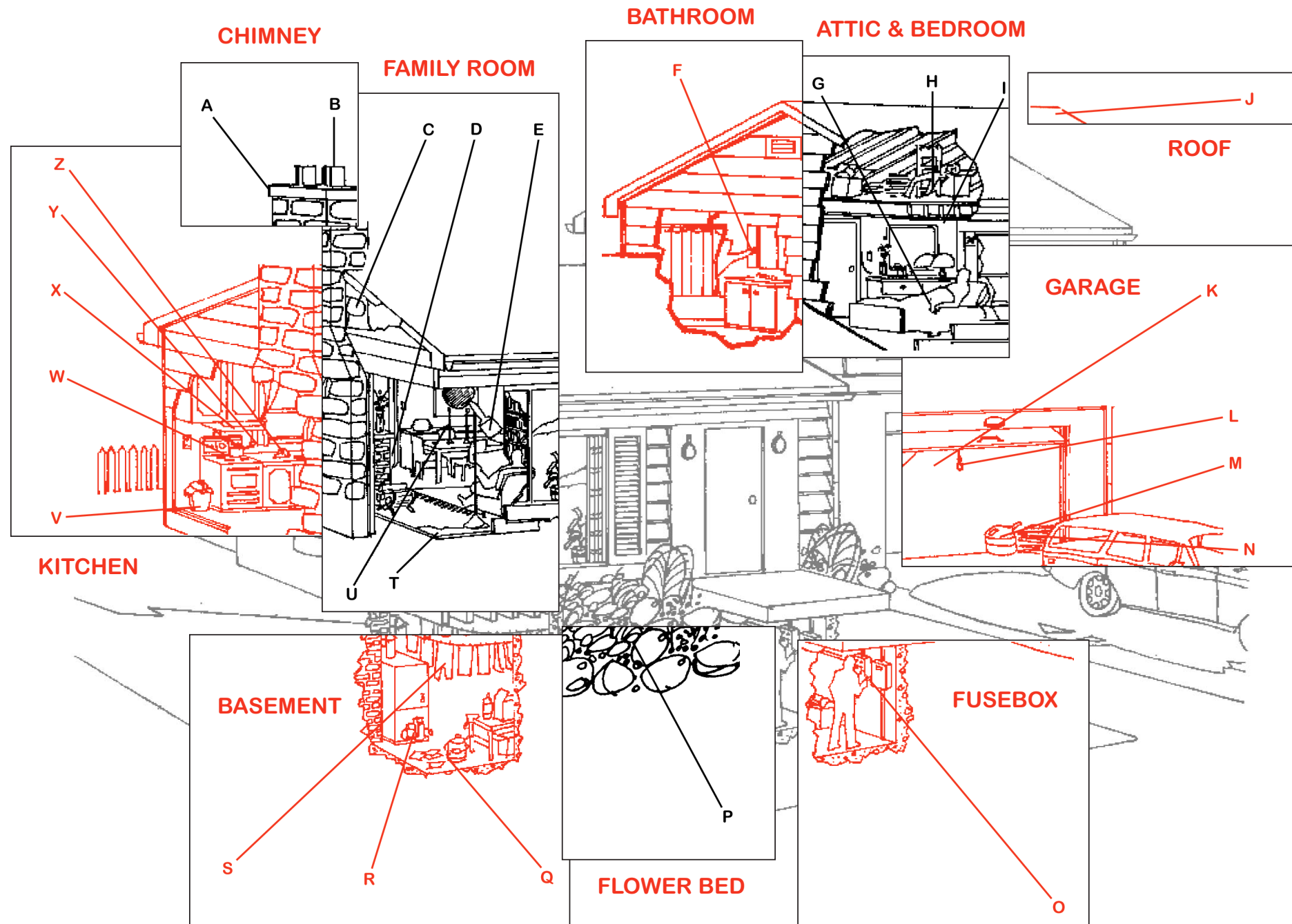
Never make major structural changes without a building permit. Fire safety is a major concern of building inspectors.

Where a garage is attached to a house, the partitions between them should be fire-resistant, the door should be self-closing and the lintel should be raised above the floor. Never prop the door open.

Keep discarded bottles out of sunlight, because they can act as heat-concentrating lenses and start a fire.



# Home, Sweet Home?



## IN CASE OF FIRE

### Get out! Stay out!

- If you smell smoke or see flames, get everyone out of the building immediately. During a fire, the air is cleaner near the floor.
- Get down on your hands and knees and crawl to an exit.
- Close doors to slow the spread of smoke and flames.
- Agree on a meeting place, go there and “take attendance” to be sure that no one is left inside the building.

### Call the fire department!

- Phone the fire department from outside the building and give the complete address of the fire.
- Don't hang up until you're told to do so.
- Be sure that no one goes back inside the building for any reason.
- Tell the fire department if anyone is trapped inside the building.

### Don't fight fire unless...

- 1) Someone has called the fire department; **and**
- 2) You still have a clear exit; **and**
- 3) You have the right tools and know exactly what to do.

**Remember,**  
**things can be replaced,**  
**but you cannot.**

- A) The chimney's too short, so fireplace sparks could easily reach the second-storey roof or blow through an open window.
- B) Inspect and clean chimney flues regularly, especially when burning oil, coal or wood.
- C) This old flue access should be covered with the same material as the rest of the chimney or filled in with concrete.
- D) A fireplace screen will keep sparks from smouldering on the floor and carpet.
- E) Never exceed recommended bulb wattage. The wattage label is usually on the inside of the shade.
- F) An electrical shock could render you unconscious and unable to escape a fire. Ground-fault interrupters are a good idea in bathrooms (and are compulsory in new construction).
- G) Never smoke in bed.
- H) An attic full of junk is a definite no-no! Never give fire a place to start.

- I) Where are the smoke alarms and carbon monoxide detectors? It is important they be installed outside bedrooms. Carbon monoxide poisoning is the number one cause of accidental poisoning in North America.
- J) Lightning arresters can be a worthwhile investment for houses on high ground or in exposed locations.
- K) Only fire-rated doors with automatic closers should connect garages with living areas.
- L) A properly wired light fixture and switch would be better than this temporary extension cord arrangement.
- M) There are safer places to store gasoline! Never store more than you need in a month. Apart from being dangerous, stored gasoline goes stale and gummy.
- N) Old newspapers stacked next to a gas can under a dangling light bulb? This is a good recipe for a fire.
- O) Correct fuses or breakers? Enough circuits? (Check aluminum wiring occasionally, even if it has been correctly installed.)
- P) Dry leaves and rubbish should never be allowed to

- accumulate next to the outer wall of the house, especially if the cladding is wood.
- Q) See the solvents and rubbish stored close to the furnace? Don't be an "accidental arsonist."
- R) Have your furnace checked and cleaned regularly. A clean, properly-adjusted furnace is safer and saves fuel. Don't interfere with the draft hood or damper.
- S) Don't dry laundry next to a furnace! It creates a fire hazard.
- T) It's good that this extension cord doesn't run under the carpet. A better solution might be more wall outlets.
- U) Candles are pretty, but they should never be left unattended.
- V) The wastebasket next to the stove is definitely not a good idea.
- W) Pot handles should be turned inward over the stove.
- X) Always clean grease from the range hood and fan filters.
- Y) Let's hope this curtain doesn't blow over the burner!
- Z) Has this iron been left plugged in?

## Learn the ABCs of your fire extinguishers

Fire extinguishers can save lives and property when they are used to put out a small fire or to contain it until firefighters arrive. Before you begin to fight a small fire, make sure that everyone has left the building and that the fire department has been called. Have your back to an accessible exit so you won't be trapped, and be sure that the fire extinguisher is in good working order before trying to use it.

Your fire extinguisher must fit the fire:

- **"A"** is for ordinary combustibles such as wood, paper and plastic. Never use this type of extinguisher on a grease or electrical fire.
- **"B"** is for flammable liquids like gasoline, grease, oil paint, and flammable gas.
- **"C"** is for live electrical wiring and devices.

There is also an "ABC" fire extinguisher, which can be used on all types of fires.

## Apartments and fire

There are some special fire-protection tips for apartment buildings. All tenants have a duty to keep stairways clear and emergency exits unblocked. Never use an elevator during a fire, because the elevator shafts can become full of hot gases, and the elevator controls can quit or malfunction. Also, the doors could open onto a hall full of flames and smoke.



Know where the fire alarms are and learn the locations of fire extinguishers and hoses. Never toss a lit cigarette from a balcony, because it could blow into an open window below. And never barbecue on a balcony – it's too dangerous.

If there's a fire, feel the hall door before opening it. If it's hot, leave it shut. If smoke is entering under the door, plug the gap with wet towels. And remember, because smoke usually rises, it may be easier to breathe at floor level, at an open window, or out on a balcony. If you do leave the apartment, be sure to close the door behind you, and leave windows closed too.

## Know the fire extinguisher PASSword

- PULL the pin.
- AIM low.
- SQUEEZE the handle.
- SWEEP from side to side, keeping the extinguisher aimed at the base of the fire.

## If your clothes catch fire...

- Stop where you are. Don't fan the flames by running.
- Drop to the ground.
- Roll over and over in a rug, blanket or coat to smother the flames. Protect your face with your hands or a damp cloth.

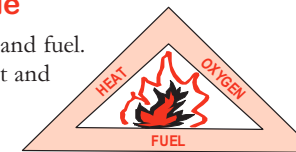


## Be careful; be prepared

No home is immune to fire. Although preventing fires is preferable to fighting them, you should always be prepared for the worst. Use a multi-purpose, listed fire extinguisher that is right for your kitchen. Fire extinguishers must only be used on small, contained fires.

## Break the fire triangle

Most fires need heat, oxygen and fuel. Break the triangle at any point and you'll extinguish the fire.



- (1) Cooling removes heat.
- (2) Smothering removes oxygen.
- (3) Removing combustible material removes fuel.

## Plan your exit

Make an escape plan. Practice fire drills. Every member of your household (babysitters too) should know the exits and how to use them. Try to think of two ways out of every room of your home. Remember, keys to double-cylinder door locks should be easily reached. Learn your fire-emergency telephone number and keep it handy to the phone. Program that number into your phone, if you can. It is usually best, however, to get out of a burning building immediately and phone for help from a safer location. Give your fire department early warning, because a small blaze can become a major fire in minutes. If seniors are often home alone, advise them to subscribe to an emergency alarm service. Never allow the fire to get between you and the exit!

## Maintain smoke alarms and carbon monoxide detectors

Smoke alarms and carbon monoxide detectors save lives, but an alarm or a detector with a dead or missing battery, or one that is wired to a switched circuit, is worse than none at all, because it builds a false sense of security. Smoke alarms and carbon monoxide detectors should be installed outside bedrooms and on each additional level of the home, including the basement. Avoid placing them near bathrooms, heating appliances, windows and ceiling fans. Keep alarms and detectors clear of dust, and never paint them. Remember to test your smoke alarms and carbon monoxide detectors monthly by pressing the test button. Never use rechargeable batteries, because they can quit without warning. Change the batteries in your smoke alarms and carbon monoxide detectors in the spring and fall when you adjust your clocks.

