

# Power Outages

What to do?



IS YOUR FAMILY PREPARED?

www.GetPrepared.ca



## **TABLE OF CONTENTS**

Introduction	1
Preparing Your Home	2
During a Power Outage	3
After the Power Returns	5
Make an Emergency Plan	6
Get an Emergency Kit	7
Resources	a

## **Our partners**

This publication was produced by Public Safety Canada in collaboration with: Canada Mortgage and Housing Corporation (CMHC), Canadian Red Cross, and St. John Ambulance.

An electronic version of this brochure is available at **www.GetPrepared.ca**.

This publication is also available in multiple formats (audio, Braille, large print, and diskette). To order, please call: 1 800 O-Canada (1-800-622-6232); TTY: 1-800-926-9105.

© Her Majesty the Queen in Right of Canada 2008

Cat. No.: PS48-9/3-2008E-PDF ISBN: 978-0-662-48181-2

Printed in Canada





### INTRODUCTION

Most power outages will be over almost as soon as they begin, but some can last much longer – up to days or even weeks. Power outages are often caused by freezing rain, sleet storms and/or high winds which damage power lines and equipment. Cold snaps or heat waves can also overload the electric power system.

During a power outage, you may be left without heating/air conditioning, lighting, hot water, or even running water. If you only have a cordless phone, you will also be left without phone service. If you do not have a battery-powered or crank radio, you may have no way of monitoring news broadcasts. In other words, you could be facing major challenges.

You can greatly lessen the impact of a power outage by taking the time to prepare in advance. You and your family should be prepared to cope on your own during a power outage for at least 72 hours. This involves three basic steps:

- 1) Finding out on what to do before, during, and after a power outage.
- 2) Making a family emergency plan, so that everyone knows what to do, and where to go if you need to leave your home.
- 3) Getting an emergency kit, so that you and your family can be self-sufficient for at least 72 hours during a power outage.

## PREPARING YOUR HOME

- You can install a non-electric standby stove or heater.
   Choose heating units that are not dependent on an electric motor, electric fan, or some other electric device to function. It is important to adequately vent the stove or heater with the type of chimney flue specified for it.

  Never connect two heating units to the same chimney flue at the same time.
- If you have a wood-burning fireplace, have the chimney cleaned every fall in preparation for use and to eliminate creosote build-up which could ignite and cause a chimney fire
- If the standby heating unit will use the normal house oil or gas supply, have it connected with shut-off valves by a certified tradesperson.
- Before considering the use of an emergency generator during a power outage, check with furnace, appliance and lighting fixture dealers or manufacturers regarding power requirements and proper operating procedures.

### People with disabilities or others requiring assistance

Consider how you may be affected in a power outage, including:

- Your evacuation route without elevator service (if applicable)
- Planning for a backup power supply for essential medical equipment
- Keeping a flashlight and a cell phone handy to signal for help
- Establishing a self-help network to assist and check on you during an emergency
- Enrolling in a medical alert program that will signal for help if you are immobilized
- Keeping a list of facilities that provide life-sustaining equipment or treatment
- Keeping a list of medical conditions and treatment

 If you live in an apartment, advise the property management that you may need assistance staying in your apartment or that you must be evacuated if there is a power outage. This will allow the property manager to plan and make the necessary arrangements on your behalf.

## **DURING A POWER OUTAGE**

- First, check whether the power outage is limited to your home. If your neighbours' power is still on, check your own circuit breaker panel or fuse box. If the problem is not a breaker or a fuse, check the service wires leading to the house. If they are obviously damaged or on the ground, stay at least 10 meters back and notify your electric supply authority. Keep the number along with other emergency numbers near your telephone.
- If your neighbours' power is also out, notify your electric supply authority.
- Turn off all tools, appliances and electronic equipment, and turn the thermostat(s) for the home heating system down to minimum to prevent damage from a power surge when power is restored. Also, power can be restored more easily when there is not a heavy load on the electrical system.
- Turn off all lights, except one inside and one outside, so that both you and hydro crews outside know that power has been restored.
- Don't open your freezer or fridge unless it is absolutely necessary. A full freezer will keep food frozen for 24 to 36 hours if the door remains closed.
- Never use charcoal or gas barbecues, camping heating equipment, or home generators indoors. They give off carbon monoxide. Because you can't smell or see it, carbon monoxide can cause health problems and is life-threatening.
- Use proper candle holders. Never leave lit candles unattended and keep out of reach of children. Always extinguish candles before going to bed.

 Listen to your battery-powered or wind-up radio for information on the outage and advice from authorities.

#### **Tips**

- Make sure your home has a working carbon monoxide detector. If it is hard-wired to the house's electrical supply, ensure it has a battery-powered back-up.
- Protect sensitive electrical appliances such as TVs, computer, and DVD players with a surge-protecting powerbar.

#### **Use of home generators**

Home generators are handy for backup electricity in case of an outage, but must only be used in accordance with the manufacturer's guidelines. A back-up generator may only be connected to your home's electrical system through an approved transfer panel and switch that has been installed by a qualified electrician. Never plug a generator into a wall outlet as serious injury can result when the current produced by the home generator is fed back into the electrical lines, and transformed to a higher voltage. This can endanger the lives of utility employees working to restore the power.

#### To operate a generator safely

- Follow the manufacturer's instructions.
- Ensure that the generator operates outdoors in wellventilated conditions, well away from doors or windows, to prevent exhaust gases from entering the house.
- Connect lights and appliances directly to the generator.
  If extension cords must be used, ensure they are properly rated, CSA-approved cords.

#### If you have to evacuate

Evacuation is more likely during winter months, when plummeting temperatures can make a house inhabitable. Although a house can be damaged by low temperatures, the major threat is to the plumbing system. If a standby heating system is used, check to see that no part of the plumbing system can freeze.

If the house must be evacuated, protect it by taking the following precautions:

- Turn off the main breaker or switch of the circuit-breaker panel or power-supply box.
- Turn off the water main where it enters the house. Protect the valve, inlet pipe, and meter or pump with blankets or insulation material.
- Drain the water from your plumbing system. Starting at the top of the house, open all taps, and flush toilets several times. Go to the basement and open the drain valve. Drain your hot water tank by attaching a hose to the tank drain valve and running it to the basement floor drain.
- Note: If you drain a gas-fired water tank, the pilot light should be turned out – call the local gas supplier to re-light it.
- Unhook washing machine hoses and drain.
- Do not worry about small amounts of water trapped in horizontal pipes. Add a small amount of glycol or antifreeze to water left in the toilet bowl, and the sink and bathtub traps.
- If your house is protected from groundwater by a sump pump, clear valuables from the basement floor in case of flooding.

# **AFTER THE POWER RETURNS**

- Do not enter a flooded basement unless you are sure the power is disconnected.
- Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked and cleaned by a qualified electrician.
- Replace the furnace flue (if removed) and turn off the fuel to the standby heating unit.
- Switch on the main electric switch (before, check to ensure appliances, electric heaters, TVs, microwaves computers, etc. were unplugged to prevent damage from a power surge).

- Give the electrical system a chance to stabilize before reconnecting tools and appliances. Turn the heating-system thermostats up first, followed in a couple of minutes by reconnection of the fridge and freezer. Wait 10 to 15 minutes before reconnecting all other tools and appliances.
- Close the drain valve in the basement.
- Turn on the water supply. Close lowest valves/taps first and allow air to escape from upper taps.
- Make sure that the hot water heater is filled before turning on the power to it.
- Check food supplies in refrigerators, freezers and cupboards for signs of spoilage. If a freezer door has been kept closed, food should stay frozen 24 to 36 hours, depending on the temperature. When food begins to defrost (usually after two days), it should be cooked; otherwise it should be thrown out
- As a general precaution, keep a bag of ice cubes in the freezer. If you return home after a period of absence and the ice has melted and refrozen, there is a good chance that the food is spoiled. When in doubt, throw it out!
- Reset your clocks, automatic timers, and alarms.
- Restock your emergency kit so the supplies will be there when needed again.

## **MAKE AN EMERGENCY PLAN**

Every Canadian household needs an emergency plan. It will help you and your family to know what to do in case of an emergency. Remember, your family may not be together when the power goes out.

Start by discussing what could happen and what you should do at home, at school or at work if an emergency happens. To be prepared, make a list of what needs to be done ahead of time. Store important family documents, such as birth certificates, passports, wills, financial documents, insurance policies, etc.

in waterproof container(s). Identify an appropriate out-of-town contact that can act as a central point of contact in an emergency.

Write down and exercise your plan with the entire family at least once a year. Make sure everybody has a copy and keeps it close at hand.

For more information on making an emergency plan, call 1 800 O-Canada or visit **www.GetPrepared.ca** to download or complete an emergency plan online.

# **GET AN EMERGENCY KIT**

In an emergency you will need some basic supplies. You may need to get by without power or tap water. Be prepared to be self-sufficient for at least 72 hours.

You may have some of the items already, such as a flashlight, battery-operated radio, food, and water. The key is to make sure they are organized and easy to find. Would you be able to find your flashlight in the dark?

Make sure your kit is easy to carry. Keep it in a backpack, duffel bag or suitcase with wheels, in an easy-to-reach, accessible place, such as your front hall closet. Make sure everyone in the household knows where the emergency kit is.

## Basic emergency kit

- Water at least two litres of water per person per day.
  Include small bottles that can be carried easily in case of an evacuation order
- Food that won't spoil, such as canned food, energy bars and dried foods (remember to replace the food and water once a year)
- Manual can opener
- Wind-up or battery-powered flashlight (and extra batteries)

- Wind-up or battery-powered radio (and extra batteries)
- First aid kit
- Special items such as prescription medications, infant formula and equipment for people with disabilities
- Extra keys to your car and house
- Cash in smaller bills, such as \$10 bills (travellers cheques are also useful) and change for payphones
- A copy of your emergency plan and contact information

Tip: You may want to ensure you have a land-line and corded phone in your home, as most cordless phones will not work during a power outage.

#### Recommended additional items

- Candles and matches or lighter (Do not leave candles) unattended. Place candles in sturdy containers and put them out before going to sleep)
- A change of clothing and footwear for each household member
- Sleeping bag or warm blanket for each household member
- A whistle (in case you need to attract attention)
- Garbage bags for personal sanitation
- Toilet paper and other personal care supplies
- Safety gloves
- Basic tools (hammer, pliers, wrench, screwdrivers, fasteners, work gloves)
- Small fuel-driven stove and fuel (follow manufacturer's) directions and store properly)
- Two extra litres of water per person per day for cooking and cleaning.

You can also purchase a pre-packaged emergency kit from the Canadian Red Cross at www.redcross.ca, from the St. John Ambulance/ Salvation Army at www.sja.ca or from retailers across Canada. Visit www.GetPrepared.ca for a list of retailers by province and territory.

## **RESOURCES**

#### **National Resources**

Public Safety Canada – Other publications:

- Your Emergency Preparedness Guide
- Floods What to do?
- Earthquakes What to do?

For more emergency preparedness information or to order brochures, visit **www.GetPrepared.ca**.

Canada Mortgage and Housing Corporation – for more information on reoccupying your house after a prolonged winter power outage, contact CMHC toll-free at 1-800-668-2642 or visit **www.cmhc.gc.ca**.

Canadian Red Cross - www.redcross.ca

St. John Ambulance – www.sja.ca

#### **Provincial and Territorial Resources**

For more information on electrical safety, electricity use or actions to take following a power outage, contact your electric supply authority.

For regional or local information on emergency preparedness, contact your emergency management organization as follows:

Alberta Emergency Management Agency

Telephone: (780) 422-9000 / Toll-free: 310-0000

www.aema.alberta.ca

British Columbia Provincial Emergency Program

Telephone: (250) 952-4913 / Emergency: 1-800-663-3456

www.pep.bc.ca

Manitoba Emergency Measures Organization

Telephone: (204) 945-4772 / Toll-free: 1-888-267-8298

Emergency: (204) 945-5555

www.manitobaemo.ca

New Brunswick Emergency Measures Organization

Telephone: (506) 453-2133 / Toll-free (24/7): 1-800-561-4034

24 hr: (506) 453-2133 www.gnb.ca/cnb/emo-omu

Newfoundland and Labrador Fire and Emergency Services Telephone: (709) 729-3703

www.ma.gov.nl.ca/ma/fes/default.htm

Northwest Territories Emergency Measures Organization Telephone: (867) 920-6133 / Emergency: (867) 873-7554

www.maca.gov.nt.ca/safety/emergency\_measures

Nova Scotia Emergency Management Office

Telephone (24 hr): 1-866-424-5620

www.gov.ns.ca/emo

Nunavut Emergency Management

Telephone: (867) 975-5403 / 24 hr Emergency: 1-800-693-1666

cgs.gov.nu.ca/en/nunavut-emergency-management

**Emergency Management Ontario** 

Telephone: (416) 314-3723 / 24 hr: 1-877-314-3723

www.ontario.ca/emo

Prince Edward Island Emergency Measures Organization Telephone: (902) 888-8050 / After hours: (902) 892-9365

www.peiemo.ca

Quebec – Ministère de la sécurité publique Telephone (toll-free): 1-866-776-8345

General information (Services Québec): 1-877-644-4545

www.msp.gouv.qc.ca/Index\_en.asp

Saskatchewan Emergency Management Organization

Telephone: (306) 787-9563 www.cps.gov.sk.ca/SaskEMO

Yukon Emergency Measures Organization

Telephone: (867) 667-5220 / Toll Free: 1-800-661-0408

www.community.gov.yk.ca/emo/index.html