

The Rural Municipality of Malpeque Bay  
Emergency Measures

# 72 HOURS

## IS YOUR FAMILY PREPARED?

The Rural Municipality of Malpeque Bay is currently working on developing an Emergency Measures Plan for the community. The following is a list of current council representatives.

Paul Brown, Mayor 902-432-4704

Herb Clark, Deputy Mayor 902-836-9645

Joanne McCarvill, Chief Administrative Officer (CAO) 902-836-5029

Ted Andrews, Councillor 902-888-9608

Wayne Crosby, Councillor 902-448-3203

Ghislaine Duplain, Councillor 902-388-1442

Brian MacKinnon, Councillor 902-598-8531

**If you live in the community and have access to a generator, a snowmobile, tractor, boat or any other type of equipment/vehicle that you would be willing to share in the event of an emergency or disaster please email us at [communityofmalpequebay@gmail.com](mailto:communityofmalpequebay@gmail.com) We would also like to hear from you if you are in the healthcare field, have first aid training and interested in volunteering in the community if a disaster were to strike. Our plan will only be as good as the information we are able to obtain from residents.**

**Below is a list of Emergency Contact number for your information.**

<b>Agency</b>	<b>Emergency</b>		
<b>FIRE</b>	<b>911</b>		
<b>POLICE</b>	<b>911</b>		
<b>AMBULANCE</b>	<b>911</b>		
<b>POISON CONTROL</b>	<b>1-800-565-8161</b>		
<b>TELEHEALTH</b>	<b>811</b>	<b>NON-EMERGENCY</b>	
<b>KIDS HELPLINE</b>	<b>1-800-668-6868</b>		
<b>ISLAND HELPLINE</b>	<b>1-800-218-2855</b>		
<b>CHILD PROTECTION</b>	<b>1-877-341-3101</b>		
<b>ADULT PROTECTION</b>	<b>902-888-8440</b>	<b>SUMMERSIDE</b>	
<b>ADDICTION SERVICES</b>	<b>1-888-299-8399</b>		
<b>PEI RAPE &amp; SEXUAL ASSAULT</b>	<b>1-888-368-8055</b>		
<b>ENVIRONMENTAL EMERGENCY</b>	<b>902-368-5024</b>	<b>1-800-565-1633</b>	
<b>ANDERSON HOUSE</b>	<b>1-800-240-9894</b>		
<b>CHIEF MARY BERNARD MEMORIAL SHELTER</b>	<b>1-855-297-2332</b>		
<b>BEDFORD MCDONALD HOUSE</b>	<b>1-902-892-9242</b>		
<b>PEI EMO</b>	<b>1-902-894-0385</b> <b>1-877-894-0385</b>	<b>1-902-368-6362</b>	

In Prince Edward Island, coastal areas are subject to flooding and storm surges. Each of our seasons brings with it specific hazards. In the fall, Islanders are vulnerable to hurricanes; in the winter, blizzards and ice storms are a reality, and

all regions are vulnerable to fires at any time of the year. In addition to natural disasters there are other types of risks. There are power outages, industrial accidents and major transportation accidents. As well, there is the possibility of acts of terrorism on Canadian soil. The following list contains the natural risks and other hazards monitored by the Prince Edward Island Emergency Measures Organization.

- [Floods](#)
- [Chemical releases](#)
- [Hurricanes](#)
- [Pandemic influenza](#) - Public Health Agency of Canada
- [Power outages](#)
- [Severe storms](#)
- [Storm surges](#)
- [Tsunamis](#)
- [Wildfires](#)

## **MORE INFORMATION**

To learn how to prepare for more emergencies in Prince Edward Island such as: blizzards, drought, severe weather (heat/cold), and terrorism, contact your Community Emergency Management Coordinator (TBA) through your local municipal office 902-836-5029 [communityofmalpequebay@gmail.com](mailto:communityofmalpequebay@gmail.com) Or, for more information on emergency management programs in Prince Edward Island, contact the [Prince Edward Island Emergency Measures Organization](#).

Individuals and families can take responsibility for themselves and make their own emergency plan. In your plan you should be prepared to take care of yourself and your family for a minimum of 72 hours during an emergency. Go over your plan with the people who live in your household and know what to do before an emergency strikes. Know how to protect yourself during an emergency and be prepared to keep your family safe after the emergency has past. If the emergency is serious enough, you may decide to evacuate on your own or you may be asked to leave your home and go to a nearby evacuation centre. The Rural Municipality of Malpeque Bay does not have an evacuation centre and at this time will rely on the Provincial Government to identify a safe environment to send residents.

Call 911 if an emergency occurs. The Canadian Red Cross, St. John Ambulance and the Salvation Army work in partnership with governments to help Canadians deal with emergencies, from providing first aid training to disaster relief. The Provincial Government of Prince Edward Island has an Emergency Measures Organization (EMO), which manages large-scale emergencies and provides assistance to municipal or community response teams as required. Federal

departments and agencies support provincial or territorial EMOs as requested. They also manage emergencies that involve areas of federal jurisdiction, such as nuclear safety, national defence and border security.

## **SOME GUIDELINES TO FOLLOW**

1) Have an emergency survival kit for your home and your car. 2) Understand the basic principles of first aid and safety. 3) Take the time before an emergency happens to become familiar with how you can protect yourself and your family. 4) Check out [www.getprepared.ca](http://www.getprepared.ca) and the Emergency Measures Organization of Prince Edward Island.

It's quick and easy to buy an emergency kit. The Canadian Red Cross has a [kit available to buy on their website](#). The Salvation Army also has a [standard kit](#) as well as a [car kit](#) available for purchase on its website.

Various other kits and emergency supplies are also available for sale from other commercial entities.

Add items to your kit such as:

- Additional emergency supplies
- A copy of your emergency plan
- Photocopies of personal documents
- A household emergency contact list

**Home Survival Kit that you can make yourself may include the following items:**

- flashlight / batteries
- radio / batteries
- first aid kit (see below for suggestions)
- candles / matches
- extra set of car and house keys
- cash and coins
- sleeping bag
- duffle bag to carry these supplies in case you have to evacuate
- whistle

### Babies / Children / Toddlers:

- diapers / wipes and change of clothing
- bottled milk
- favorite toy and/or blanket
- books/small games
- crayons and paper

### Other family members:

- at least one week supply of prescription medication and copy of prescriptions
- extra clothing
- personal supplies (soap / toilet paper / feminine napkins)
- eyeglasses and/or contact lenses
- paper/pen/books/cards/

### Pets:

- pet food, at least a three day supply
- Home Survival Kit continued

### Food and Water

- have foods available that your family likes
- choose food that doesn't require refrigeration such as ready-to-eat canned meats, fruits and vegetables
- water - 1 gallon or 4 litres / per person / day
- canned juices / soup
- powdered or canned milk (store extra water to mix)
- high-energy foods (peanut butter, honey, jelly, crackers, granola bars, trail mix)
- cookies, hard candy, sweetened cereals, instant coffee, tea bags
- manual can opener
- paper cups, plates, and plastic utensils
- all-purpose knife
- aluminium foil / plastic wrap / sealable plastic bags

Keep these supplies in an easy to find spot in your home in case you need them in an emergency: You should have at least a 3 day supply of items and remember to check them regularly (when you change your smoke detectors?) to ensure that the items are viable.

### **Car Survival Kit:**

It is recommended that the following items be kept in the trunk of your car:

- shovel
- sand or salt
- traction mats
- tow chain
- compass
- cloth or roll of paper towels
- warning light or road flares
- set of extra clothing and footwear
- emergency food pack (water / granola bars / canned food)
- booster cables
- ice scraper and brush
- matches and a candle in a deep can (to warm hands, heat a drink or use as an emergency light)

### **Your basic first aid kit**

A basic first aid kit may contain:

- ★ plasters in a variety of different sizes and shapes
- ★ small, medium and large sterile gauze dressings
- ★ at least 2 sterile eye dressings
- ★ triangular bandages
- ★ crêpe rolled bandages
- ★ safety pins
- ★ disposable sterile gloves
- ★ tweezers
- ★ scissors
- ★ alcohol-free cleansing wipes
- ★ sticky tape

- ★ thermometer (preferably digital)
- ★ skin rash cream, such as hydrocortisone or calendula
- ★ cream or spray to relieve insect bites and stings
- ★ antiseptic cream
- ★ painkillers such as tempera/tylenol/advil include children's painkillers as well as those for adults remember children under the age of 16 should not be given aspirin
- ★ cough medicine
- ★ antihistamine tablets
- ★ gravol

## **Preparing for a flood**

### **To reduce the likelihood of flood damage**

- Put weather protection sealant around basement windows and the base of ground-level doors.
- Install the drainage for downspouts a sufficient distance from your residence to ensure that water moves away from the building.
- Consider installing a sump pump and zero reverse flow valves in basement floor drains.
- Do not store your important documents in the basement. Keep them at a higher level, protected from flood damage.
- If you have a livestock farm, remember that livestock have a natural "move away instinct" to flash flood waters. They generally seek higher ground if possible. When purchasing or designing your livestock operation, it is important to allow livestock a way to reach high ground in each pasture. Without access, livestock will fight fences and be at a greater risk of drowning. Livestock will initially panic during flash floods. This complicates livestock handling.

### **If a flood is forecast**

- Turn off basement furnaces and the outside gas valve.
- Take special precautions to safeguard electrical, natural gas or propane heating equipment.
- If there is enough time, consult your electricity or fuel supplier for instructions on how to proceed.

- In floods, in a rural farm setting, sheltering livestock may be the wrong thing to do. Leaving animals unsheltered is preferable because flood waters that inundate a barn could trap animals inside, causing them to drown.
- If evacuation of the animals is being considered, then evacuation procedures, places, and routes should be planned. Animal evacuation routes must not interfere with human evacuation routes. Alternate routes should be found in case the planned route is not accessible. Places where animals are to be taken should be decided in advance and arrangements made with the owners of these places to accept the animals.

## **If flooding is imminent**

- Move furniture, electrical appliances and other belongings to floors above ground level.
- Remove toxic substances such as pesticides and insecticides from the flood area to prevent pollution.
- Remove toilet bowls and plug basement sewer drains and toilet connections with a wooden stopper.
- Disconnect eavestroughs if they are connected to the house sewer.
- In some cases, homes may be protected with sandbags or polyethylene barriers. This approach requires specific instructions from your local emergency officials.
- Do NOT attempt to shut off electricity if any water is present. Water and live electrical wires can be lethal. Leave your home immediately and do not return until authorities indicate it is safe to do so.

## **During a flood**

- Keep your radio on to find out what areas are affected, what roads are safe, where to go and what to do if the local emergency team asks you to leave your home.
- Keep your emergency kit close at hand, in a portable container such as a duffel bag, back pack, or suitcase with wheels.

## **If you need to evacuate**

- Vacate your home when you are advised to do so by local emergency authorities. Ignoring such a warning could jeopardize the safety of your family or those who might eventually have to come to your rescue.
- Take your emergency kit with you.
- Follow the routes specified by officials. Don't take shortcuts. They could lead you to a blocked or dangerous area.



- Make arrangements for pets.
- Time permitting, leave a note informing others when you left and where you went. If you have a mailbox, leave the note there.

## **Never cross a flooded area**

- If you are on foot, fast water could sweep you away.
- If you are in a car, do not drive through flood waters or underpasses. The water may be deeper than it looks and your car could get stuck or swept away by fast water.
- Avoid crossing bridges if the water is high and flowing quickly.
- If you are caught in fast-rising waters and your car stalls, leave it and save yourself and your passengers

## **After a flood**

Restore your home to good order as soon as possible to protect your health and prevent further damage to the house and its contents.

## **Re-entering your home**

- Do not return home until authorities have advised that it is safe to do so.
- If the main power switch was not turned off prior to flooding, do not re-enter your home until a qualified electrician has determined it is safe to do so.
- Use extreme caution when returning to your home after a flood.
- Appliances that may have been flooded pose a risk of shock or fire when turned on. Do not use any appliances, heating, pressure, or sewage system until electrical components have been thoroughly cleaned, dried, and inspected by a qualified electrician.
- The main electrical panel must be cleaned, dried, and tested by a qualified electrician to ensure that it is safe.
- Depending on where you live, your municipal or the provincial inspection authority is responsible for the permitting process required before your electric utility can reconnect power to your home.

## **Ensure building safety**

- Make sure the building is structurally safe.
- Look for buckled walls or floors.
- Watch for holes in the floor, broken glass and other potentially dangerous debris.

## **Water**

- Flood water can be heavily contaminated with sewage and other pollutants. It can cause sickness and infections.
- If your house has been flooded and you have a well, don't drink the water. Have it tested first.
- Household items that have been flood-damaged will have to be discarded according to local regulations.

## **Documentation**

- Store all valuable papers that have been damaged in a freezer until they are needed (After your cleanup, consult your lawyer to determine whether flood-damaged documents, or just the information in them, must be retained).
- Record details of flood damage by photograph or video, if possible.
- Register the amount of damage to your home with both your insurance agent and local municipality immediately.

## **Cleanup**

Maintain good hygiene during flood cleanup. Minimize contact with floodwater or anything that may have been in contact with it. Keep children away from contaminated areas during cleanup operations.

## **Recommended flood cleanup equipment**

- Gloves
- Masks and other protective gear
- Pails, mops and squeegees
- Plastic garbage bags
- Unscented detergent
- Large containers for soaking bedding, clothing and linens, and clotheslines to hang them to dry

## **Additional equipment**

- Depending on your situation, you may need to rent additional equipment such as extension cords, submersible pumps, wet/dry shop vacuums, a carbon monoxide sensor and dehumidifiers, fans or heaters.
- When using the equipment, keep extension cords out of the water.

## **Water**

- Remove water from your flooded home slowly. Drain it in stages - about one third of the volume daily - because if the ground is still saturated and water is removed too quickly, the walls or the floor could buckle.
- Use pumps or pails to remove standing water, then a wet/dry shop vacuum to mop up the rest.
- For instructions on how to disinfect and restore wells and cisterns, contact your local or provincial health authorities or emergency management organization.

## **Heating and appliances**

- Do not heat your home to more than 4°C (about 40°F) until all of the water is removed.
- If you use pumps or heaters powered by gasoline, kerosene or propane, buy and install a carbon monoxide sensor. Combustion devices can produce large amounts of lethal carbon monoxide if they're not tuned-up or are improperly ventilated.
- Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked by your local utility.
- Whether you use a wood, gas or electrical heating system, have it thoroughly inspected by a qualified technician before using it again. Replace the furnace blower motor, switches and controls if they have been soaked.
- Flooded forced-air heating ducts and return-duct pans should be either cleaned or replaced.
- Replace filters and insulation inside furnaces, water heaters, refrigerators and freezers if they have been wet. However, it is often cheaper to replace this equipment.

## **Dirt and debris**

- Remove all soaked and dirty materials as well as debris.

- Break out walls and remove drywall, wood panelling and insulation at least 50 centimetres (20 inches) above the high-water line.
- Hose down any dirt sticking to walls and solid-wood furniture then rinse several times.
- Wash and wipe down all surfaces and structures with unscented detergent and water. Rinse.

## **Floor drains**

- Flush and disinfect floor drains and sump pumps with detergent and water. Scrub them to remove greasy dirt and grime.
- Clean or replace footing drains outside the foundation when they are clogged. Consult a professional for advice or service.

## **Structures**

- Ventilate or dehumidify the house until it is completely dry.
- Rinse and then clean all floors as quickly as possible.
- Replace flooring that has been deeply penetrated by flood water or sewage.
- Clean all interior wall and floor cavities with a solution of water and unscented detergent.

## **Carpets and furniture**

- Carpets must be dried within the first two days. For large areas, hire a qualified professional to do the job. Carpets soaked with sewage must be discarded immediately.
- Remove residual mud and soil from furniture, appliances, etc.
- If items are just damp, let the mud dry and then brush it off.
- To test if material is dry, tape clear food wrap to the surface of the item. If the covered section turns darker than the surrounding material, it is still damp. Dry until this no longer occurs.
- For upholstered furniture you should consult a professional to see what can be salvaged. In the meantime, remove cushions and dry separately. Do not remove upholstery. Raise furniture on blocks and place fans underneath.
- Wooden furniture: Remove drawers and open doors. Do not dry quickly or splitting may occur.

## **Mould**

- Mould can lead to serious health problems.

- You may need to have your home professionally cleaned for it to be covered by insurance. Check with your insurance company.
- If you are cleaning up in a room where mould is present, wear a face mask and disposable gloves.
- To minimize mould growth, move items to a cool, dry area within 48 hours and set up fans.
- Alternatively, textiles, furs, paper and books can be frozen until they are treated.
- Wet mould will smear if wiped. Let it dry and then brush it off outdoors.
- You can also kill mould spores by lightly misting the item with isopropanol (rubbing alcohol).

## **Food and medicine**

- All undamaged canned goods must be thoroughly washed and disinfected.
- Dispose of all medicines, cosmetics and other toiletries that have been exposed to flood water.
- Dispose of any of the following food items if they have been exposed to flood water:
  - Contents of freezer or refrigerator, including all meats and all fresh fruit and vegetables
  - All boxed foods
  - All bottled drinks and products in jars, including home preserves (since the area under the seal of jars and bottles cannot be properly disinfected)
  - Cans with large dents or that reveal seepage

## **What to discard**

All insulation materials, particleboard furniture, mattresses, box springs, stuffed toys, pillows, padding, cushions and furniture coverings that have been exposed to flood water.

## **What is salvageable?**

- Frames of high-quality furniture can often be saved. However, they must first be cleaned, disinfected and rinsed, then dried by ventilation away from direct sunlight or heat. Drying too quickly can cause warping and cracking.
- Clothes can be cleaned. Scrape heavy dirt from washable clothes. Rinse and wash them several times with detergent and dry quickly.

## **Before moving back in**

Once the flood waters have receded, you must not live in your house until:

- The regular water supply has been inspected and officially declared safe for use.
- Every flood-contaminated room has been thoroughly cleaned, disinfected and surface-dried.
- All contaminated dishes and utensils have been thoroughly washed and disinfected - either by using boiling water or by using a sterilizing solution of one part chlorine bleach to four parts water. Rinse dishes and utensils thoroughly.

## **Power outages**

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.

## **Before a power outage**

- 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.

## **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 or in garages. 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 well-ventilated conditions, well away from doors or windows, and never in your garage, 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 a power outage**

- 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.

## Storm Surge

- Storm surge can occur along all coastal areas of Canada. It can also occur in large lakes, such as the Great Lakes. A storm surge consists of very high waves and high water levels caused by wind and air pressure. It often results in coastal flooding. A storm surge can occur at any time of the year and can be particularly damaging in icy waters of winter.
- Storm surges can happen quickly, without allowing much time for preparation. Residents, particularly those living in low-lying areas near the coastline, should prepare in advance.

## Storm surge facts

- A storm surge is caused by an abnormal rise in water levels and can often accompany hurricanes, high winds or very intense winter storms.
- The storm surge itself is caused by the wind and pressure "pushing" the water onto the shore, often resulting in high waves and flooding.
- It should not be confused with a tsunami which is caused by an earthquake or landslide.
- Getting caught near the shoreline during a storm surge could be life-threatening.

## Listen for storm surge warnings

- If a storm surge has the potential to affect your region, the [Meteorological Service of Canada](#) will issue warnings.
- Statements informing the public of the potential for high surf, high water levels and coastal flooding are issued up to 48 hours in advance of any anticipated storm surge.

## **Preparing for a storm surge**

- Check your house and land for any potential dangers related to flooding. Identify any vulnerability and repair it.
- Sandbags are a valuable tool to prevent water from entering your home. This approach requires specific instructions from your local emergency officials.
- Learn how to turn off the gas and electricity in your house. You may be instructed by local authorities to shut these off.
- If you live in an area that is subject to flooding, do not store your important documents in the basement. Keep them at a higher level, protected from flood damage.
- Ensure that your family has an emergency kit and plan.
- Ensure your emergency kit is portable, in a back-pack or suitcase with wheels.

## **If a storm surge is forecast**

- Check supplies including medications, radio, flashlight and batteries.
- You may have to evacuate. Keep your emergency kit close at hand.
- Make sure the basement windows are closed.
- Fuel your car. If evacuation becomes necessary, it will be hard to stop for gas.

If you have any questions or need to know more about evacuation procedures, contact your local emergency management organization, or police or fire department.

## **During a storm surge**

- Stay inside where you are protected from the water. It's best to be on the downwind side of the house, away from windows.
- Monitor the storm's progress and listen for warnings or instructions from local officials.
- Before driving anywhere, listen carefully to rescue officials who will be coordinating evacuation plans.
- Do not drive through flood waters.
- Be aware of risks such as hypothermia from cold water or drowning from running water.

# What to do:

## Severe storms

Thunderstorms, hail, blizzards, ice storms, high winds and heavy rain can develop quickly and threaten life and property. Severe storms occur in all regions of Canada and in all seasons.

Listen to the local radio or television stations for severe weather warnings and advice. Keep a battery-powered or wind-up radio on hand as there can be power outages during severe storms.

## Preparing for severe storms

Stock up on heating fuel and ready-to-eat food, as well as battery-powered or wind-up flashlights and radios - and extra batteries.

When a severe storm is on the horizon, the [Meteorological Service of Canada](#) issues [watches, warnings and advisories](#) through radio and television stations, the [Weather Office Website](#), automated telephone information lines and [Environment Canada's Weatheradio](#).

## Ice storms

- Ice from freezing rain accumulates on branches, power lines and buildings. If you must go outside when a significant amount of ice has accumulated, pay attention to branches or wires that could break due to the weight of the ice and fall on you. Ice sheets could also do the same.
- Never touch power lines. A hanging power line could be charged (live) and you would run the risk of electrocution. Remember also that ice, branches or power lines can continue to break and fall for several hours after the end of the precipitation.
- When freezing rain is forecast, avoid driving. Even a small amount of freezing rain can make roads extremely slippery. Wait several hours after freezing rain ends so that road maintenance crews have enough time to spread sand or salt on icy roads.
- Rapid onsets of freezing rain combined with the risks of blizzards increase the chances for extreme hypothermia. If you live on a farm, move livestock promptly to shelter where feed is available. Forage is often temporarily inaccessible during and immediately after ice storms. Animal reactions to ice storms are similar to that of blizzards.

# Lightning

- Always take shelter during a lightning storm.
- There is no safe place outside during a thunderstorm. Safe shelter can be found either in an enclosed building or a hard-topped vehicle.

If you can see lightning or hear thunder, you are in danger of being hit. Seek shelter immediately.

## Other tips for preparedness

- If a severe storm is forecast, secure everything that might be blown around or torn loose - indoors and outdoors. Flying objects such as garbage cans and lawn furniture can injure people and damage property.
- Trim dead branches and cut down dead trees to reduce the danger of these falling onto your house during a storm.
- If you are indoors, stay away from windows, doors and fireplaces.
- You may want to go to the sheltered area that you and your family chose for your emergency plan.
- If you are advised by officials to evacuate, do so. Take your emergency kit with you.
- You can use a cellular telephone during a severe storm, but it's not safe to use a land-line telephone.
- Never go out in a boat during a storm. If you are on the water and you see bad weather approaching, head for shore immediately. Always check the marine forecast before leaving for a day of boating and listen to weather reports during your cruise.
- If you are in a car, stop the car away from trees or power lines that might fall on you). Stay there.
- Wait 30 minutes after the last lightning strike in a severe storm before venturing outside again.
- Do not ride bicycles, motorcycles, tractors, or golf carts. These will not protect you from a lightning strike.

Some information contained in this document was taken from EMO Canada Guide