

In case of flood



This guide was designed to help people who have been affected by floods, during and after the event. Reading it will help you find out what to do if water is threatening your home and provide guidelines and advice to ensure your safety and that of your loved ones, as well as for safeguarding your home or business if it was unfortunately affected by flooding.

Help Is Available!

Pay attention to your reactions and those of your loved ones after experiencing a disaster:

- Anxiety, distress or frequent crying
- Apathy or loss of energy
- Aggressiveness
- Difficulty concentrating or confusion
- Increased alcohol or drug use

Psychosocial support is available to you. Psychosocial intervention professionals are available to support, advise and direct you to resources tailored to your needs or those of your loved ones. Call Info-Social, at 811, and select option 2 to speak with a professional. This service is free and confidential, and it is available 24 hours a day, 7 days a week.

Published and updated by Urgence Québec, in collaboration with the Organisation de la sécurité civile du Québec – spring 2023.

Full or partial reproduction of this document is authorized, provided the source is credited.

ISBN : 978-2-550-94278-8 (PDF)

Translated from the original French.

The information in this guide is also available online at [Quebec.ca/flooding](https://quebec.ca/flooding).

© images: Adobe Stock, Freepik, Macrovector et Urgence Québec



Table of contents

<u>Carbon monoxide poisoning</u>	4
<u>Electricity</u>	6
<u>Flood-damaged vehicle</u>	7
<u>Food conservation</u>	10
<u>Government financial assistance and compensation</u>	12
<u>Home evacuation and relocation</u>	14
<u>House cleaning</u>	16
<u>Natural gas and propane</u>	21
<u>Plumbing</u>	23
<u>Protecting your home and your belongings</u>	24
<u>Residual materials</u>	26
<u>Restoring a flood-damaged home</u>	28
<u>Returning home</u>	32
<u>Septic system</u>	33
<u>Water consumption</u>	35
<u>Well disinfection</u>	37
<u>Yard cleaning</u>	38





Carbon monoxide poisoning

Use of fuel-burning appliances

If you are using fuel-burning appliances (devices that run on propane, wood, fuel oil, gasoline or natural gas), you should be aware that these devices can produce carbon monoxide, an odourless, colourless gas that can be fatal. You should protect yourself by using a battery-powered carbon monoxide detector.



Instructions to prevent carbon monoxide poisoning

- Follow the usage, maintenance and safety guidelines for your fuel-burning appliances.
- If they are designed for outdoor use, don't use them indoors, and keep them as far away from doors and windows as possible.
- Never operate them in an enclosed space, even if the door is open.
- Never obstruct an appliance's air intake or exhaust system.
- Use a battery-powered carbon monoxide detector or carry a personal detector with visual and audible alarm while you are performing hazardous work.
- Never use a gas-fired kitchen range or portable stove for heating purposes.

If your carbon monoxide detector goes off, or if you or someone else in your household is experiencing symptoms such as headache, nausea, fatigue, vomiting, dizziness or weakness, act immediately:

- Go outside.
- Dial 911 or call the Centre antipoison du Québec (poison control centre) at **1-800-463-5060**.
- Leave the door open to ventilate the premises thoroughly.
- Have your fuel-burning appliances inspected by a professional before using them again.



Don't go back inside, even for a few minutes, **until authorized to do so by a firefighter.**



Carbon monoxide poisoning

Use of auxiliary equipment

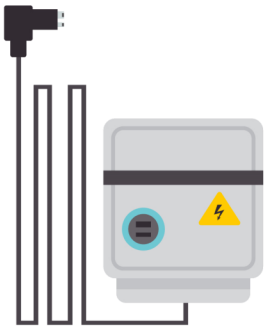
Auxiliary heating, cooking or barbecue equipment designed for outdoor use, camping equipment, and non-electrical pumps and generators powered by gas or gasoline can release carbon monoxide and result in serious or fatal poisoning. Never use such equipment indoors or near doors and windows.



Use a generator

Install the generator outside your home, away from doors and windows, on an elevated base sheltered from the elements. This is important to avoid carbon monoxide poisoning.

Turn off the main breaker in your home before plugging in the generator, then plug your electrical devices into the generator's power outlet.



If you are using extension cords, make sure they are safe and are approved by a body recognized by the Régie du bâtiment du Québec. Never allow power cables to lie in water.

Don't overload the generator's capacity. Once every eight hours, turn it off and let it rest for an hour. Before refueling, turn it off and let it cool down.

Once the power has been restored, turn off the generator and unplug it before turning on the main breaker in your home.

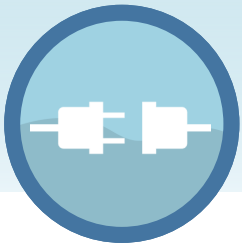
Read the manufacturer's instructions when you purchase your generator and follow the installer's instructions if it was installed by a professional.

To learn more >>>

Ministère de la Santé et des Services sociaux et Urgence Québec

 [Quebec.ca/en/health/health-issues/a-z/carbon-monoxide-poisoning](https://quebec.ca/en/health/health-issues/a-z/carbon-monoxide-poisoning)

 [Quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/use-your-equipment-safely](https://quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/use-your-equipment-safely)



Electricity

A house flooding is a stressful event. In haste, be careful about electrical accidents. Your safety and that of your loved ones is the most important thing.

If flooding is inevitable but water has not reached the basement

Cut power to the whole house, in order to avoid any electrical or fire hazard. As you do so:

- Make sure your feet are not on a wet floor and that you are not leaning against a metallic object.
- Flip the master switch to the “off” position.

If water has started flooding the basement

Don't touch anything! Call Hydro-Québec* immediately by dialing **1-800-790-2424** to get service interrupted at the meter or the post.



After the water recedes

- If the service was interrupted by Hydro-Québec, it can only be restored by a master electrician.
- If service wasn't interrupted, but water flooded the house, consult with a master electrician before restoring power. They will be able to evaluate the condition of your installation and do the necessary repairs to get it back in working order.

*Hydro-Québec is the main supplier of electricity in Quebec. If you are dealing with another power company, contact them directly.

To learn more >>>

Hydro-Québec

 hydroquebec.com/safety/house/flooding-electrical-safety.html

 1 800 790-2424

Corporation des maîtres électriciens du Québec

 cmeq.org



Flood-damaged vehicle

Don't try to restart a flood-damaged vehicle

For safety reasons, you should never try to restart a road vehicle that has been immersed in water or any other liquid as a result of flooding, an accident, heavy rains, a sewer system overflow or any other incident, because it may no longer function properly. To move the vehicle, you must have it towed or transported.

Flood-damaged vehicles are not safe

Given all the electronic components in a vehicle, flooding causes damage that can lead to malfunction, which constitutes a risk for highway safety. If a flood-damaged vehicle is put back into operation, it may not function properly and the vehicle's occupants may develop health problems caused by the growth of mould and bacteria in the vehicle's absorbent materials (fabric, foam, etc.).

Flood-damaged road vehicles—including motorcycles and recreational vehicles (such as motor homes and camping trailers)—**must never be put back into operation** to ensure that unsafe vehicles don't end up on the highways.



A flood-damaged vehicle is “unrebuildable”

A flood-damaged road vehicle must be declared “unrebuildable” by the insurer. Consult the section “Is my vehicle ‘unrebuildable?’” for details. An “unrebuildable” vehicle can never be put back into operation and only some of its parts can be salvaged for reuse.

The ban on flood-damaged road vehicles being put back into operation applies to all vehicles, including motorcycles and recreational vehicles (such as motor homes and camping trailers). The only exceptions are tool vehicles, farm tractors, snowblowers, and trailers and semi-trailers other than those fitted out to be used entirely or partially as a dwelling or office.

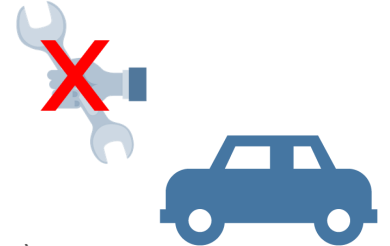


Flood-damaged vehicle

A flood-damaged vehicle from outside Québec cannot be repaired

A flood-damaged vehicle cannot be brought into Québec from another province for the purposes of being rebuilt. This applies regardless of:

- Its point of origin
- Its status (whether or not its status is indicated on the registration certificate)
- Its title of ownership or registration certificate



Certain parts of a flood-damaged vehicle can be recycled

Most parts of a flood-damaged vehicle can be recycled, except for the major components of its electrical system (consult the section “Is my vehicle ‘unrebuildable?’” for details) and any components entirely or partially made of absorbent materials (fabric, foam, etc.) since they could harbour bacteria or mould and pose a health risk.

Vehicle declared “unrebuildable”

A flood-damaged vehicle is declared “unrebuildable” if it meets **at least one** of the following criteria:

- The vehicle was flooded to the junction of the engine wall and the floor of the passenger compartment or up to a higher level.
- The vehicle was flooded up to a level that could have affected one of the major components of its electrical system (with certain exceptions).
- The vehicle was flooded and presents a health risk, because of the presence of mould or bacteria.
- The vehicle was flooded and declared a “total loss” by the insurer.

A flood-damaged vehicle that meets any of the above criteria is “unrebuildable”, even if the vehicle is not covered by an insurance contract. It cannot be put back into operation.

The major components of a vehicle’s electrical system are:

- The fuse panel or breaker panel
- The electrical wiring with unsealed connections inside the passenger compartment
- Any electronic component
 - Of the occupant supplemental restraint system
 - That controls an element of the drivetrain system
 - Of the self-diagnostic system
 - Of the passenger compartment’s heating, air conditioning or ventilation system
 - Of the defogging or defrosting system
 - Of the braking, acceleration or steering system or of any other system affecting the drivability of the vehicle, its stability or its safety.



Flood-damaged vehicle

Exception

An exception may be made for a flood-damaged vehicle **if all of the following conditions are met:**

- The vehicle does not come from outside Québec.
- The vehicle was not flooded by salt water.
- The damage to the vehicle is limited to major components of its electrical system located outside the passenger compartment.
- The damage to the vehicle is covered by an insurance contract or the owner of the vehicle is a person exempt from the requirement to hold an insurance contract.
- The repairs made to the vehicle have eliminated any risk related to the flooding, which is demonstrated by the fact that:
 - All major components that were damaged have been replaced by new genuine components and the insurer has implemented control mechanisms to make sure that this was done, AND
 - The repairs were made by a person whom the insurer has deemed to have sufficient expertise and knowledge to make the repairs according to the rules of the trade.

To learn more >>>

Société de l'assurance automobile du Québec



saaq.gouv.qc.ca/en/road-safety/flood-damaged-road-vehicles



1 800 361-7620



Food conservation

Pantry

- Inspect canned food and throw out any damaged cans. This includes cans that are bulging, leaking, pierced, broken, extremely rusted, or so crushed or dented that they cannot be stacked normally or opened with a manual can opener.
- Clean, rinse and dry cans before opening them.
- Examine the food inside each can after opening it to see if it looks normal.

Refrigerator

Following a power outage **lasting for more than 6 hours**, carefully sort the food in your refrigerator to avoid food poisoning.

Only the following refrigerated foods can be consumed, provided they show no signs of deterioration:

- Whole fresh fruits and vegetables, pasteurized fruit juices
- Blocks of firm cheese (such as cheddar, Swiss, mozzarella), parmesan, cheese slices, processed cheese, butter, margarine, yogurt
- Jams, jellies, marmalades, sweet spreads, peanut butter
- Mustard, ketchup, relish, commercial mayonnaise, salad dressings, BBQ sauces, taco sauces, olives, pickles
- Baked fruit pies, cakes, muffins, cookies

Don't hesitate to discard these foods if their appearance is abnormal. Discard all other food, even if it appears normal to you.



Don't take medications left in your refrigerator. Take them back to your pharmacy.



Food conservation

Freezer

Partially thawed food with frost on the packaging can be refrozen if it is still hard in the center.

Raw food that has thawed but remained at a temperature of 4 °C or less can be cooked immediately and either eaten right away or refrozen after cooking.

Food that has thawed completely—including blocks of firm cheese, baked goods (such as bread, muffins, bread dough, unfrosted cakes, fruit pies and cookies), pasteurized fruit juices and fruit—can be refrozen if the containers are intact.

Finally, perishable food that has thawed completely must be thrown out if it has been exposed to temperatures above 4 °C. Perishable food includes meat, poultry, fish and seafood, dairy products, eggs and prepared dishes containing eggs whether raw or cooked.

Note that food in a well-functioning freezer will usually keep for approximately: 48 hours if the freezer is full; 24 hours if the freezer is half-full.

Vegetable garden

If your garden has been flooded, discard all above-ground fruits, vegetables and herbs, such as strawberries or lettuce. Carefully clean any vegetables grown underground, such as potatoes and carrots.

To learn more >>>

Ministère de l'Agriculture, des Pêcheries et de l'Alimentation



[Quebec.ca/sante/alimentation/salubrite-des-aliments/conserver-jeter-panne-courant-inondation](https://quebec.ca/sante/alimentation/salubrite-des-aliments/conserver-jeter-panne-courant-inondation)

(In French only)



1 800 463-5023



smsaia@mapaq.gouv.qc.ca

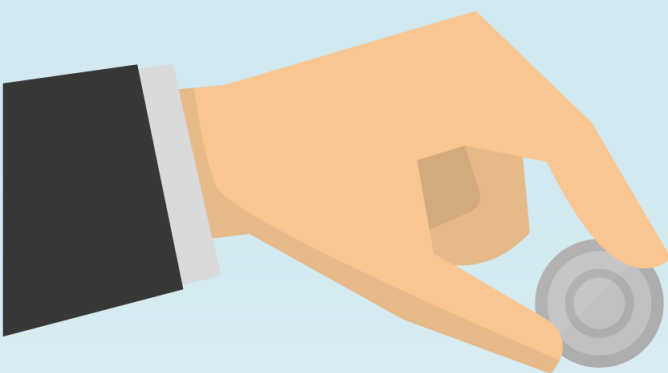


Government financial assistance and compensation

If you were affected by flooding, you could receive government financial assistance and compensation.

To speed up the processing of your case and to allow a quick return to normal life, it is your responsibility to take the following steps before submitting your application for financial assistance and compensation:

- Contact your municipality as soon as possible to inform them that you were affected by flooding.
- Contact your insurance company to open a claim. Ask them to supply a written answer, whether or not your claim was accepted or refused. If your flood protection is inadequate or you do not have any, you may be eligible for financial assistance and compensation from the gouvernement du Québec.
- After the flooding, don't wait for a visit from an adjuster to assess the situation. It is crucial to take pictures or videos of all damages. These photos and videos will help determine the amount of financial assistance and compensation you are entitled to.
- For health reasons, once you've assessed the situation, start your cleanup and demolition work without delay.
- Keep all receipts and all proofs of purchase for damaged belongings.
- Before starting with renovation or rebuilding, contact your municipality to find out about applicable regulations and whether or not a permit is required.





Government financial assistance and compensation

How do I apply for financial assistance and compensation?

See [Québec.ca/aide-inondation](https://quebec.ca/aide-inondation) page (in English) to find out more about the Flooding or disaster related financial assistance and compensation. You will find information about the eligibility conditions and expenses covered by the program.

Apply online to speed up processing and facilitate transmission of required documents.

- You can also contact the Ministère de la Sécurité publique by telephone, at **418-643-AIDE (2433)**, or toll-free, at **1-888-643-AIDE (2433)**, to open your claim.
- If you are opening your claim by telephone, you should preferably send your documents via email at aide.financiere@msp.gouv.qc.ca.
- To find out the deadline for submitting your application for financial assistance and compensation, see [Québec.ca/aide-inondation](https://quebec.ca/aide-inondation) page (in English). If you are unable to file your application by the deadline, you must explain in writing to the Ministère de la Sécurité publique why you are unable to act sooner.



To learn more >>>

Ministère de la Sécurité publique



[Quebec.ca/en/public-safety-emergencies/financial-assistance-and-compensation-flooding-or-disaster](https://quebec.ca/en/public-safety-emergencies/financial-assistance-and-compensation-flooding-or-disaster)



Home evacuation and relocation

Evacuate your home if the authorities require you to do so or if you feel that your health or safety is compromised. Take your pets with you, if possible. However, do not jeopardize your safety if you are unable to find them or take them with you.

Instructions and recommendations for a safe evacuation

- Close the doors and windows of your home and lock its doors before leaving.
- If you have the time, and if possible:
 - Shut off the electrical supply.
 - Shut off the natural gas supply so as to ensure your own safety and the integrity of your installations. Note that your municipality's fire department can also see to it that your natural gas supply is shut off in an emergency situation.
- If you smell an odor of gas or if natural gas equipment damage is visible, immediately leave your home and contact the emergency service of your natural gas distributor, Énergir or Gazifère.
- If you leave your home of your own volition for safety reasons, inform your municipality by indicating the time of your departure and the location of your temporary housing, for example, with family members, neighbours or friends.
- If you go to a temporary housing centre set up by the authorities, where services will be offered to you, register with the staff on-site. The housing centre may not accept pets. Make other arrangements for them (e.g. a shelter, kennel or at a family member's home).
- As a last resort, if you leave your home without taking your pets, leave a note on the main door to notify first responders.

Notify your service providers (e.g. power company, telecommunication services, gas company, housekeeping services, etc.) of your situation and work out with them the necessary arrangements. A list of your service providers, their contact information and your account information should be part of your emergency kit.

When evacuating, respect the signage in place and, where applicable, the safety perimeters established by the authorities.

Remember that designated, competent authorities actively monitor evacuated areas in order to ensure that the sites remain secure.

If you must miss work, **notify your employer** within a reasonable time and work out together the necessary arrangements.

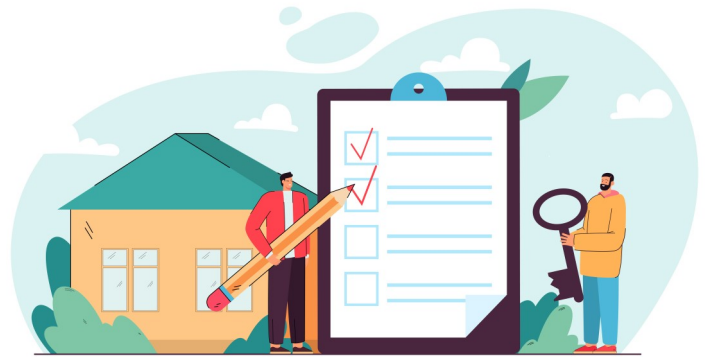


Home evacuation and relocation

Tell your family members of your situation, preferably by text message, email or message in the social media to avoid overburdening telephone lines.

If you have the time, and without putting yourself in danger, take the following essential items for each member of your family:

- Medications
- Personal hygiene items
- A change of clothes
- Blankets
- Money
- Identity papers
- Your house and car keys
- Milk, baby bottles and diapers for infants
- Electronic devices and adapters/charging devices
- Items needed for the well-being of individuals with special needs
- Items that your service dog or pet needs



Follow these recommendations before getting on the road:

- Dial 511 or visit quebec511.info to find out about road conditions.
- Follow posted traffic signs, especially near flooded areas, and do so for any means of transportation you may be using.
- Comply with established security perimeters when access is prohibited or traffic is banned. These directives can be put in place by authorities as preventive measures or because of flooding further ahead, in the area you are trying to get to.
- Establish several evacuation routes, since flooding can impede or block traffic.
- Make sure your vehicle emergency kit is fully stocked and that it is in the trunk of your vehicle.
- Inform close ones of your travel plans and itinerary.

To learn more >>>

Ministère de la Sécurité publique

 [Quebec.ca/flooding](https://quebec.ca/flooding)

Ministère des Transports et de la Mobilité durable

 quebec511.info



House cleaning

Within 24 to 48 hours after a flood or as soon as you return home after an evacuation, you should clean, disinfect and dry all objects and all surfaces that were affected by flood water to avoid the growth of mould.

For safe and effective cleaning

Follow the instruction given below in the order they are presented:

- Wear the necessary individual protection equipment (N-95 mask, rubber gloves and boots, protective clothing and glasses).
- Open the doors and windows to air out the rooms and lower the humidity to less than 50%.
- Take the following steps to dispose of porous materials and objects that cannot be cleaned.



Make sure to:

- Discard all materials (carpets, insulating material, gypsum plasterboard, etc.) that are damp or that have been in contact with flood water. Also discard any objects that cannot be properly cleaned, including stuffed items that are water-soaked (mattresses, pillows, cushions, plush toys, etc.) to prevent mould from developing and avoid exposure to certain viruses and bacteria.
- Open the walls and remove drywall (gypsum plasterboard), panelling, wood lathes and insulating material to at least 50 cm (20 in.) above the high-water line. For structures that cannot be removed, use a cleaning method adapted for the type of material involved (such as a vacuum sander for wood, concrete, etc.). Wait for everything to dry before resealing the wall.
- Discard all appliances with filters or insulating material if they have been in contact with water (refrigerator, freezer, water heater, dishwasher, etc.).
- Discard cosmetics and other toiletries that may have been in contact with flood water.
- Discard wooden cutting boards, baby bottle nipples and pacifiers that may have been in contact with flood water.
- Change the clothes you wear during clean-up every day and wash them separately from your other clothes.



House cleaning

Avoid any risk of electrocution before beginning clean-up work:



- Shut off electrical power to the flood-affected area from the breaker box.
- Avoid all contact between electrical equipment or extension cords and water.
- Wear rubber boots at all times if there is water on the floor.
- Ask for assistance from your power company if necessary.

For safe and effective cleaning

- Once you have disposed of everything that needs to be discarded, use non-ammonia soap and clean hot water to clean non-porous surfaces and objects such as metal or glass that may have been in contact with contaminated water. These surfaces and objects should be scrubbed and cleaned with a mild soap, then dried. For these types of materials, this is usually sufficient to eliminate most contamination.
- Also clean surfaces that have not been in contact with flood water.
- Once surfaces and objects have been washed and disinfected, let them air dry.

Special care should be taken with objects that may come into contact with the mouth, such as toys and other objects for children. Clean surfaces and objects that could come in contact with food, before disinfecting them. Use a commercial disinfectant or a mixture of 5 ml (1 teaspoon) of bleach per litre of water. **Never mix bleach with ammonia or other cleaning products.**

Protect your health and your safety during clean-up work

Follow the advice given below:

- If you suffer from asthma, you are strongly advised not to do the clean-up yourself.
- You should also keep children away from the clean-up site until all soiled materials have been disposed of.
- See the “**Carbon Monoxide Poisoning**” section before starting work. If you don’t have a carbon monoxide detector, carry a personal detector with visual and audible alarm while you are performing hazardous work.



House cleaning

Avoid any risk involving stored chemicals:

- Follow the instructions on the manufacturer's label or safety data sheets. This information is usually available on the manufacturer's website. You can also consult the data sheets in the Répertoire toxicologique (toxicological directory) of the Commission des normes, de l'équité, de la santé et de la sécurité au travail (CNESST): <https://reptox.cnesst.gouv.qc.ca/en/Pages/to-english-users.aspx>.
- Don't mix incompatible cleaning products together, as this can generate irritating and toxic fumes.
- Aerate rooms where chemical products were spilled. If a chemical presents a fire hazard, don't use electrical devices.
- Wear the necessary protection equipment in accordance with safety guidelines.
- Don't attempt to move unlabeled or broken containers of chemicals or damaged propane cylinders without first consulting your local fire department or your municipality.
- Don't smoke, eat or drink when near spilled chemicals.
- Contact your municipality for information on how to dispose of hazardous waste. Make sure there is sufficient ventilation and keep some space between hazardous residual materials when storing them.
- Check your oil, heating oil or gasoline, tanks, etc. If there are leaks – and if your safety isn't at risk – seal off the leaks and contact the Urgence-Environnement service of the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs at **1-866-694-5454**.
- In the event of a chemical spill, contact a specialized firm for assistance and notify your insurer.



Detect and eliminate mould:

- Mould may appear after a flood, once the water has receded. As mould grows and spreads, it releases particles, spores and compounds that can be breathed into the lungs and cause health problems.
- Watch out for the presence of musty, earthy or alcohol-like odors and the appearance of greenish or blackish splotches on walls or ceilings or inside cabinets.
- Throw out porous materials that may contain mould.
- For small, easy-to-clean surfaces of less than 1 square metre, remove mould with a home cleaning product not containing chlorine bleach according to the manufacturer's instructions. Be sure to dry the surface well after cleaning.
- If surfaces need cleaning on a larger scale (surfaces larger than 1 square metre, multiple surfaces, difficult-to-clean surfaces, etc.) or if mould returns after you clean, call in a firm specializing in post-disaster clean-up.



House cleaning

Avoid any health risk from mould inside buildings or from water contaminated by viruses, bacteria, soil particles, etc.:

- Wear rubber work gloves to avoid all contact between your skin and contaminated water. Avoid touching clean surfaces with dirty gloves and wash your hands after removing gloves.
- Protect any cuts on your skin with a sterile, waterproof bandage.
- Wear safety glasses or goggles or a visor to prevent dirty water from being splashed into your eyes.
- Wear an N95 disposable respirator mask to protect against mould, dust and other air particles. This equipment should cover your nose and mouth and should be changed after every few hours of use, or more often if it becomes wet, dirty, torn or saturated or if the valve ceases to function. Depending on the extent of the clean-up, a full-face respirator with a filter may be necessary. You must ensure that the mask is the right size for and well-adjusted to the face, to avoid air entering from the sides. Light pressure can be applied to the mask, after putting it on, to make sure it is tightly fitted. Nothing should compromise the fit between the respiratory protection device and the skin (e.g., piercings or facial hair).
- Avoid contact with dead animals. Use a shovel or other tool that will prevent direct contact. Consult the section Yard cleaning for more details.
- Wash your hands frequently with soap and water, or use an alcohol-based disinfectant.
- Refrain from eating, changing your contact lenses or smoking while working at the clean-up site.
- Bring an extra set of clothing with you to change into after the clean-up, put the clothes you wore during the clean-up into a sealed bag or container, and wash them separately from the other clothing in your home.



If you have questions about your or your family's health, call Info-Santé, at 811, or consult a health care professional.



House cleaning

Prevent injuries:

- Avoid pushing, pulling or lifting a load that is too heavy or too bulky for you to handle. If you do, you could strain yourself and experience muscle problems in your back, shoulders or knees.
 - Avoid carrying objects that are too heavy; avoid straining.
 - Minimize the weight of each load you carry.
 - Use the proper equipment for carrying and handling loads.
 - Make it a team effort so they everyone does their share.
 - Make each load as compact as possible so that you can get an easy grip on it and hug it close to your body.
 - Minimize the walking distance you have to travel while carrying loads.

In the event of injury during clean-up work

- Immediately clean any injury—even a minor one—with clean water and soap, then dress the wound with a sterile bandage.
- For wounds that are deep or soiled, see a doctor as soon as possible.
- Make sure your tetanus vaccination is up to date.



To learn more >>>

Ministère de la Santé et des Services sociaux



[Quebec.ca/en/health/health-issues/a-z/health-problems-caused-by-mould](https://quebec.ca/en/health/health-issues/a-z/health-problems-caused-by-mould)



Urgence Québec

[Quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/clean-up-your-house-and-yard](https://quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/clean-up-your-house-and-yard)





Natural gas and propane

Don't attempt to re-enter any flooded area in your home that contains electrically powered equipment or natural gas-powered equipment with an electrically assisted exhaust, because electrical discharges could cause serious injury.

- Any natural gas-powered appliance, meter or regulator that has been totally or partially submerged is a potential danger.
- Once your natural gas connection or your gas-powered appliances have been shut off, don't attempt to turn them on again to restart the flow of gas. If you do, you could endanger your and your family's health and safety, as well as damaging your equipment.
- Note that a propane container may have been moved during a flood and that its connection to the building could be damaged.

Appliances that have been damaged or in contact with water

If your appliances or a propane container have been damaged or in contact with water, make sure to have a properly licenced contractor (natural gas) assess their condition and make any necessary repairs to ensure that they can be operated safely.

Following the verification and, if necessary, the repairs, an Énergir or Gazifère technician or a propane distributor will confirm that your appliances can be reactivated. At their discretion, they can also reactivate your connection and ignite your natural gas or propane appliances.

A list of qualified and specialized gas contractors can be sent to you by your distributor depending on where you live.

Appliances that have not been damaged or in contact with water

If your appliances have not been damaged or in contact with water, contact your natural gas distributor's customer service department directly to schedule an appointment so that a qualified technician can restore your gas connection and reactivate your gas-powered equipment. **Note that you must be present when your appliances are reactivated.**



Natural gas and propane

Construction heaters

Be very careful when using propane-powered construction heaters to dry out your building. Use of such heaters is subject to several regulatory requirements, the most important of which are as follows:

- To avoid carbon monoxide poisoning, no one is allowed to live in the building at any time while construction heaters are in use.
- Ventilation must be sufficient to eliminate all traces of carbon monoxide before anyone returns to the building.
- Storing propane cylinders inside the building is strictly prohibited, as a gas leak could result in an explosion.
- The heater must be placed on a horizontal, solid and non-combustible base.
- The heater must be placed at a proper distance from any combustible materials, as indicated in the instructions on its nameplate.
- An adequate air supply must be provided (refer to the nameplate).
- If a flexible hose is used to supply the heater with propane, it must be no less than 4.6 m (15 feet) but no more than 24 m (75 feet) in length.




Barbecue

A propane barbecue must always be used outdoors, just like all other equipment designed for outdoor use. **Never store propane bottles indoors.**

To learn more >>>

Ministère de l'Économie, de l'Innovation et de l'Énergie

 economie.gouv.qc.ca
(In French only)


 1 866 248-6936

Association québécoise du chauffage hydronique

 aqgn.ca (In French only)

 1 833 207-2746

Association québécoise du propane

 propanequebec.com
(In French only)

 1 888 990-9044

Corporation des maîtres mécaniciens en tuyauterie du Québec

 cmmtq.org (In French only)



Plumbing

Before using your plumbing system, be sure that your municipal water and sewer system or your septic tank are operational. Then proceed as follows:

- Clean the faucet outlets (clean or replace aerators, shower heads and their flexible tubing).
- If necessary, inspect and clean the outlets of sanitary fixtures. Make sure they are operating properly (including the toilet tank and the overflow outlet for sinks and bathtubs, as well as the pipes on a whirlpool bath).
- Clean holding tanks and inspect them to see that sump pumps are operating properly.
- Locate, inspect and clean floor drains and inspect valves (non-return valve protecting against sewer backup).
- If necessary, have non-return (anti-backup) equipment inspected by a certified technician.
- Drain, clean and replace filters on all water treatment equipment in your home, including, as the case may be, treatment units hooked up to faucets and filters found in refrigerators (cold water or ice dispenser). If you have any doubts about the required maintenance, call a specialist or the company where the equipment was purchased.



To learn more >>>

Régie du bâtiment

 www.rbq.gouv.qc.ca/en/areas-of-intervention/plumbing

 1 800 361-0761

Corporation des maîtres mécaniciens en tuyauterie du Québec

 cmmtq.org (In French only)



Protecting your home and your belongings

Precautions to be taken if flood waters gets into your home:

- Move your valuables as well as any items that can be removed from the basement or ground floor to an upper floor.
- Put chemicals or harmful products in a safe place and out of children's reach.
- Block sewers in the basement to avoid backflow, in the absence of an anti-backflow valve.
- Plug the floor drain in the basement to reduce the amount of water that may come up through the drainpipe.
- Use an auxiliary sump pump to drain water from your home if necessary.
- Remove or secure all bulky objects outdoors that could be carried away by the water, posing a threat to others.
- For the natural gas supply, close the main gas entry valve, keeping in mind that it must be reopened only by a specialist. Close the valves on any propane bottles and tanks.
- Place bags of sand and membranes in front of each entrance and opening (doors, garage and window well) if the municipality advises you to do so.

Turn off the power and turn off the gas to eliminate the risk of electrocution or fire. However, do not turn off the power if the water has already started to enter your home. Immediately contact Hydro-Québec*, at **1-800-790-2424**.



*Hydro-Québec is the main supplier of electricity in Québec. If you are dealing with another power company, contact them directly.

To learn more >>>

Ministère de la Sécurité publique et Urgence Québec

 [Quebec.ca/flooding](https://quebec.ca/flooding)

Hydro-Québec

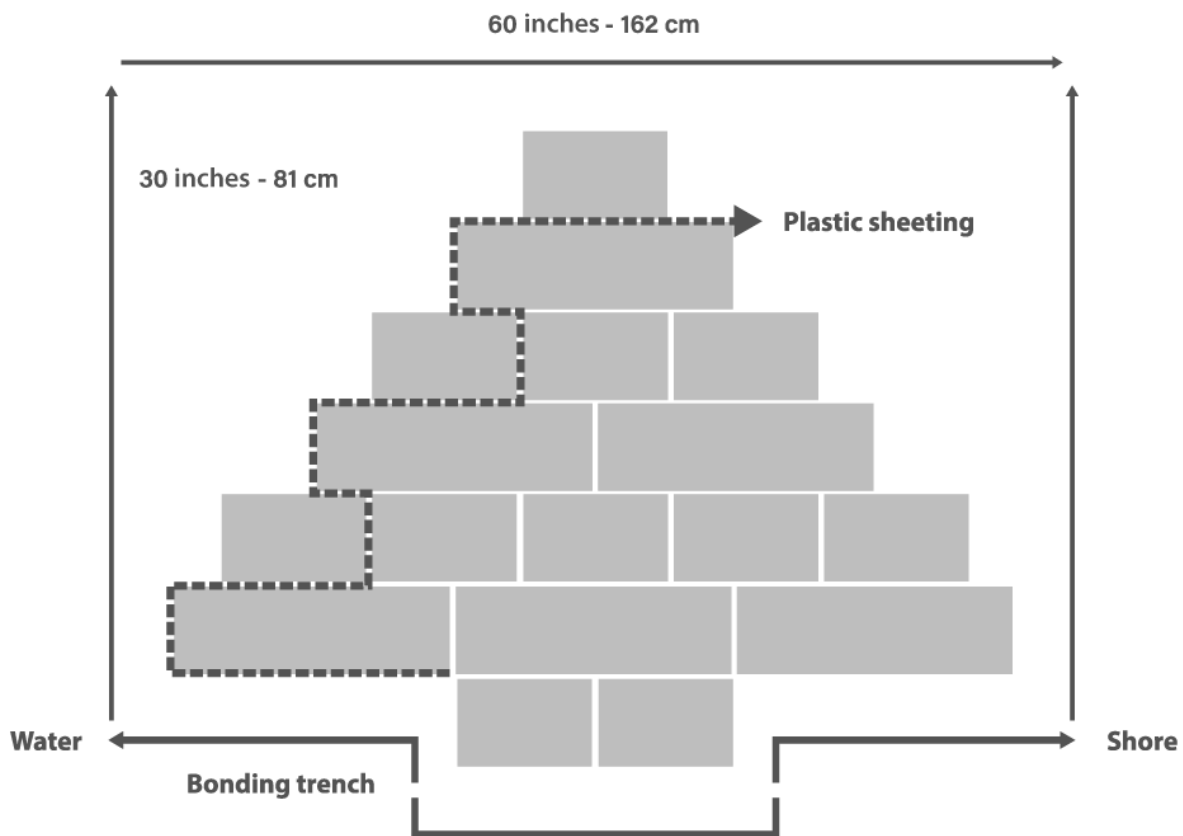
 www.hydroquebec.com/safety/house/flooding-electrical-safety.html



Protecting your home and your belongings

How to build a sandbag dike?

- Lay the bottom layer of sandbags perpendicular to the alignment of the dike and the direction of water flow.
- If possible, dig a bonding trench and use it as a foundation, as shown in the diagram below.
- Don't fill the bags completely. Partially filled bags bond together better and are less likely to shift.
- Alternate the direction of the bags from one layer to the next (perpendicular to the dike, parallel to the dike, etc.).
- To minimize seepage, weave a polyethylene sheet in and out between bag layers on the side of the dike exposed to rising water, as shown by the dotted line in the diagram below.



To learn more >>>

Ministère de la Sécurité publique et Urgence Québec

 [Quebec.ca/flooding](https://quebec.ca/flooding)



Residual materials

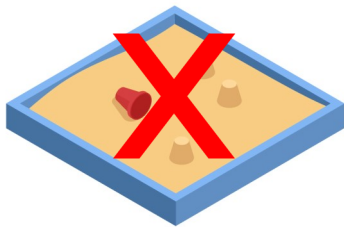
Dispose of your various waste materials in the appropriate manner, according to their nature. If you have questions about managing waste materials, contact your municipality.

Sandbags

If your sandbags are obviously contaminated (for example, if they give off an odor), return them to your municipality. If the sandbags you used to protect your house are not contaminated, you can:

- Keep them intact and store them for future use, or
- Return them intact to your municipality for proper disposal.

For sandbags in poor condition that cannot be re-used but are not contaminated, special pick-ups or temporary drop-off sites may be organized by affected municipalities to collect bags and send them to treatment or repurposing facilities. Municipalities may also inform residents if sandbags can be placed in containers used for regular selective waste collection. You can also discard the bags but keep the uncontaminated sand for your personal use, or you can contact your municipality to find out how to dispose of it.



Sand from sandbags should **NEVER UNDER ANY CIRCUMSTANCES** be used in children's play areas such as sandboxes. The sand used for such purposes must be free of organic, toxic or hazardous materials.



Residual materials

Non-hazardous wastes

Non-recyclable food items should be discarded.

Contact your municipality to find out how to dispose of the following types of waste:

- Demolition waste that is salvageable (wood, metal, aggregates, porous materials, carpeting, insulating materials, gypsum plasterboard, etc.)
- Debris scattered around your yard, whether or not it is recyclable
- Furniture and household articles that have been in contact with water and are not salvageable (mattresses, clothing, furniture, plush toys, cutting boards, etc.)
- Large household appliances that are not re-usable (kitchen range, freezer, washer, dryer, refrigerator, etc.)
- Electronic equipment that is not re-usable.

Hazardous wastes

Medications that are expired or have been in contact with water should be returned to a pharmacy.

Contact your municipality to find out how to dispose of certain hazardous household waste products (gasoline, fuel oil, household pesticides, aerosols, solvents, batteries, mercury lamps, paint and paint containers, oils, etc.).

Handle hazardous waste with care and make sure you are wearing the necessary protective equipment. If you have any doubts, call your municipality's fire department.

Special care should also be taken with swimming pool products that have been in contact with flood waters. Such products may react with water and release irritating or even toxic fumes. Report any such incident to your local fire department. If such products are spilled or accidentally released into the air, report the incident to Urgence-Environment at **1-866-694-5454**.

To learn more >>>

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs

 environnement.gouv.qc.ca/matieres/inter_en

 1 800 561-1616

RECYC-QUÉBEC

 recyc-quebec.gouv.qc.ca/citoyens/mieux-recuperer/quoi-faire-avec-chaque-matiere (In French only)



Restoring a flood-damaged home

Steps you should take before having work done on your home

- Make sure the building is safe before you enter it. If need be, consult with a construction professional. Also make sure that electricity has been cut in flooded rooms. When in doubt, contact your power company.
- Contact your municipality to find out regulations that apply to construction or reconstruction of flood-damaged buildings and to obtain a construction permit, if required.
- Remove the water without delay, to avoid the growth of moulds and other fungi. However, make sure you don't remove the water too quickly, especially if foundations are not made of poured concrete or if they have been weakened by cracks, for instance.
- Proceed with the cleaning. Stagnant water in a house could be contaminated. That is why you should take the necessary measures to protect yourself (see the House Cleaning section).



Be sure that your contractor has a **licence issued by the Régie du bâtiment du Québec**.

A few tips before work begins

- Document damages with pictures and videos.
- Keep invoices for cleaning and repair costs.
- Clean and dry all surfaces that have been soiled by water (concrete, house frame, interior walls, partitions, studs, etc.).
- Watch out for signs of fungus, including
 - musty, earthy or alcohol-like odours
 - greenish or blackish splotches on floors or walls
 - water stains
 - paint blisters
 - brownish wood
 - fuzzy filaments
- Air out your home after cleaning, but make sure the humidity level remains between 30% and 50%.
- Before closing up walls and ceilings (by installing gypsum plasterboard), make sure that all elements are completely dry. Some parts of the frame may take weeks to dry completely.



Restoring a flood-damaged home

Renovation and rebuilding work



To be sure your contractor holds a valid licence, consult the Registre des détenteurs de licence (licence holder's repertory) at rbq.gouv.qc.ca (in French only). Be sure to have a contract that contains the contractor's licence number, a detailed description of the work to be done and the schedule.

Depending on the extent of the damage, you may require some or all of the following:

- Installation of new floor coverings
- Replacement of certain damaged wooden components in walls, floors and ceilings
- Installation of new insulation and vapour barriers in exterior walls
- Installation of a new air barrier and new intermediate siding (exterior walls)
- Installation of new gypsum plasterboard on walls and partitions as well as plastering
- Installation of new appliances and fixtures (hot-water heater, air exchanger, bathtub, toilet, etc.)

Damaged materials

Damages can be more or less significant and vary according to the level of flooding and the way your house is built. To limit damages and prevent mould growth, some materials should be removed and discarded.

Remove materials that have been **in contact with water**, up to 50 cm (20 in) above the high-water mark—or even higher, since water can be drawn upward in porous materials by capillary action.

Remove and discard:

- Porous materials (that absorb water) such as gypsum, panels, melamine, etc.
- Degraded wood panels (Aspenite, OSB or plywood) that cannot be dried (be careful not to remove too much, however, to avoid structural issues)
- Fiber insulation (fiberglass, fiber rock or cellulose), vapour barrier (polyethylene membrane) and tar paper used to assemble walls and flooring



Restoring a flood-damaged home

Damaged materials (continued)

Inspect the following elements:

- Rigid insulation: polystyrene foam (Styrofoam) or polyurethane foam can sometimes fill up with water. It must be removed if wet or to allow the materials (cement, wood panels, etc.) they are leaning against to dry
- Lumber: studs and beams can be kept if it can be dried
- External cladding: If cladding is porous and damaged, it should be replaced. Otherwise, it could still have to be removed temporarily to allow materials under it to dry

Exterior siding

Exterior siding above the foundations can also be affected. Even if they are in good condition, it may be necessary to remove them to access the elements behind them. The opinion of an expert (contractor, architect) will be required to assess the condition of the materials.

Floor coverings

- Remove and discard the following floor coverings:
 - Flexible floor coverings that have been water-soaked, such as carpets including underlay, vinyl and linoleum
 - Laminate, floating and hardwood floors
 - Ceramic tiles, even if they don't seem to be detached
 - Basement subfloors
- Rinse and clean all subfloors. If the subfloor is made of wood (plywood) and is warped, it must be removed.
- Be sure that floor drains are not blocked.
- Replace any wooden stair treads that are swollen.





Restoring a flood-damaged home

Damaged materials (continued)

Mechanical and electrical systems

Have the following equipment inspected by a qualified technician:

- Electrical and mechanical equipment, household appliances, heating systems (including fuel oil tanks).
- Equipment such as hot-water heaters: depending on the extent of the damage, they may have to be replaced entirely.
- Air exchangers: all filters and insulation inside an air exchanger must be replaced.
- Electrical outlets, switches, thermostats, electrical panels, electric heating systems.

Materials that have not been water-soaked

Inspect the following surfaces:

- Suspended ceiling: moisture can be drawn up to it even if it has never been directly in contact with water.
- All carpeting that was not in direct contact with flood waters.

Clean all the walls in your home, even on upper floors that were not flooded. You may have to call in a professional to do a thorough cleaning. They may recommend that you remove certain materials. Note that musty odours indicate that mould has begun to develop (see the House Cleaning section).

To learn more >>>

Société d'habitation du Québec

 www.habitation.gouv.qc.ca/inondations (In French only)

 1 800 463-4315

Régie du bâtiment du Québec

 www.rbq.gouv.qc.ca/inondations (In French only)

 1 800 361-0761

Corporation des maîtres mécaniciens en tuyauterie du Québec

 cmmtq.org (In French only)



Returning home

You may return home if the return has been authorized and your safety is not in jeopardy

- Return home during the day, when it is easier to see problems and hazards.
- Make an inventory of the flood damage supported by photographs or videos. Upon request, you may be required to provide this inventory to your municipality, insurer, and the financial establishment that granted you a mortgage loan.
- Check whether extensive work will need to be carried out before you can return home. Walk around your house to identify any issues (e.g. electrical lines on the ground, smell of gas, large pieces of debris, hot spots that could ignite) and exercise caution when entering your home.
- Identify signs that could indicate structural issues as a result of water damage (e.g. weakened roof section, damaged framing, buckled wall, cracks in the ceilings, weakened floors, doors that no longer close).
 - Call on a building expert if you have any doubts about the condition of your home in order to ensure the safety of its occupants and that of your entourage and preserve the longevity of your home.
- Barricade the windows, lock the doors and cover damaged areas to keep away looters and curious bystanders, and to shield the building from bad weather.
- Choose recognized specialized firms for evaluation, cleaning or disinfection services, or repair work following a disaster.
- Keep the receipts of all your cleaning-related expenses.
- Notify your service providers that you have returned to your home and arrange to have services re-established in compliance with the standards in effect.



To learn more >>>

Ministère de la Sécurité publique et Urgence Québec

 [Quebec.ca/flooding](https://quebec.ca/flooding)



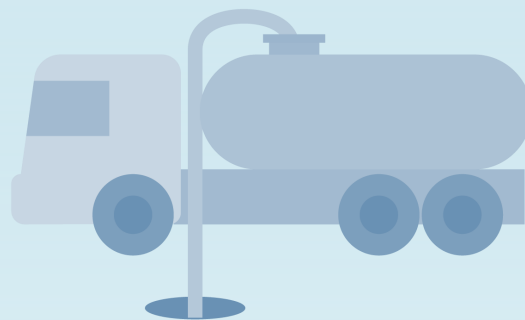
Septic system

In most instances, a well-designed and properly maintained septic system will continue to perform as expected, even if it is located in a flood plain.

Advice during a flood

- Avoid or minimize contact with flood waters.
- If you haven't already done so, cut off the power to all treatment systems.
- Don't empty your septic tank or holding tanks during flooding. If you do, you might damage them.
- Refrain from using your treatment system to prevent wastewater from backing up into your home.
- Read the manufacturer's instruction manual, or contact the manufacturer for specific recommendations if you have an NQ 3680 910 certified system.

During flooding, wastewater from isolated homes does not undergo treatment, and groundwater and flood waters may become contaminated as a result. Usually the impact of flooding on septic systems is minor because in most cases it lasts only a few days. Most septic systems are not damaged during flooding because they are buried underground. However, septic tanks and pumping stations may fill up with silt and debris and should be pumped out and cleaned by a professional.





Septic system

Advice after a flood

- Refrain from using the treatment system while the ground is still flooded or saturated with water.
- Empty the septic tank as soon as possible after flooding, once the ground is no longer saturated with water.
- Empty the pumping station too, if you have one.
- Follow the manufacturer's recommendations if you have an NQ 3680-910 certified system.
- Have your septic system inspected by a qualified professional if you suspect that it has been damaged or if you notice that it isn't working properly.
- Make sure that septic tank covers are secure and that inspection holes are not blocked or damaged.
- Inspect all electrical connections for damage before restoring power. Make sure that all components are clean and dry.
- Inspect the vegetation covering the septic tank and the leaching field. Repair any damage caused by erosion.
- If wastewater has backed up into the basement, clean the area affected and disinfect the floor.
- Refrain from driving on the leaching field so as not to compact the soil.



To learn more >>>

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs



environnement.gouv.qc.ca/eau/eaux-usees/residences-isolees-en



1 800 561-1616



Water consumption

In the following situations, rinse your cold and hot water network completely by opening all faucets:

- After a long absence
- If there are lingering doubts about the presence of contaminated water in the network

It is not necessary to empty the hot water tank.

If in doubt as to the colour, odor or taste of your water, contact the municipal authorities before using it.

Water from a municipal water system

If your home water comes from a municipal water system, it is drinkable and fit for consumption, unless the municipal authorities in charge of the system inform you otherwise. You can drink it or use it to prepare meals or brush your teeth, for example.



Water from a private well

If your home water comes from a private well, it should be considered undrinkable and unfit for consumption, even if it is clear and odorless. Until you are certain that your well water is up to standard, boil it for 1 minute at a rolling boil before consuming it, or use bottled water. Boiled or bottled water can be drunk or used to prepare meals, beverages, ice cubes and baby bottles.

If you suspect the water in your home has been contaminated by chemicals, don't use it and don't attempt to treat it by boiling it, especially if you suspect contamination by hydrocarbons. Use only bottled water in this situation.

In both cases, see the Plumbing section if your home is equipped with water treatment equipment. This equipment could be central (water softener), hooked to a faucet (reverse osmosis) or found in a refrigerator (cold water or ice dispenser).

To learn more >>>

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs



[Quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/drinking-water-contamination-or-shortage](https://quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/drinking-water-contamination-or-shortage)



Well disinfection

Wait at least **10 days** after the flood waters have completely subsided before disinfecting your well and having your well water analyzed.

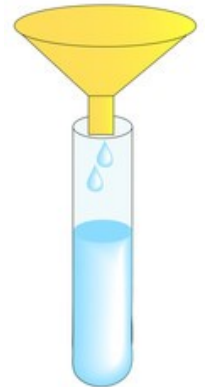
Disinfect your well as follows:

- Remove all foreign objects and deposits with a dip net.
- Pour chlorine bleach into the well and mix thoroughly with the well water. You can use a clean garden hose to spray into the well to make sure the bleach and water are thoroughly mixed. The quantity of bleach required depends on the type of well, its diameter, its depth and the height of the well water column. To find out the quantity required, refer to the website of the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs at environnement.gouv.qc.ca/eau/potable/depliant (in French only). The tables given on this web page will help you determine the proper dose for your well.
- If possible, brush the inside casing of the well to clean it.
- Open all the faucets in your home and allow the water to run until you can smell chlorine at every faucet. Close the faucets and leave them closed for 24 hours. Refrain from using this water during this time. Use bottled water instead.
- After 24 hours, open the faucets and let them run until the chlorine odor dissipates.

Have your well water tested

One week after disinfecting your well, have the water tested for bacteria (analysis of microbiological parameters for water – E.coli bacteria, Enterococci bacteria and total coliform) by a laboratory accredited by the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs.

The results will determine whether your well water meets the standards set out in the Regulation respecting the quality of drinking water. Until you have been assured that your well water meets those standards, boil it for at least 1 minute before drinking it. To find a laboratory near you, consult the website of the [Centre d'expertise en analyse environnementale du Québec](#) (in French only).





Well disinfection

If the water is still not up to standard, have your well inspected by a professional.

Until you are certain that your well water is up to standard, continue to boil it for 1 minute at a rolling boil before consuming it, or use bottled water.



In addition to testing for bacteria, you may have to have your well water tested for other contaminants (such as hydrocarbons and pesticides) if you suspect their presence in the flood-affected area.



To learn more >>>

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs

 [Quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/drinking-water-contamination-or-shortage](https://quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/drinking-water-contamination-or-shortage)

Centre d'expertise en analyse environnementale du Québec

 ceaeq.gouv.qc.ca (In French only)



Yard cleaning

Precautions when cleaning your yard

Never touch downed power lines or electrical installations. If you see a downed power line, call 911.

- If you see a downed telecommunications line or cable, contact the service provider. You can usually find an orange label with the provider's contact information on or near telecommunications devices. Never touch lines or devices that are on the ground.
- Carefully remove all debris from your yard.
- Contact your municipality to find out about permits or authorizations that may be required before undertaking backfilling, excavation or slope stabilization work on a lake shore or river bank or in a flood plane.

Dead animal

Dispose of an animal carcass as follows:

- Use a shovel or disposable plastic gloves to lift the carcass.
- Place the carcass in a sturdy plastic bag. Close the bag securely, place it in a second plastic bag and close the second bag.
- Put the bag in a trash can where it will be disposed of during regular waste collection.
- Clean the items you used to handle the carcass and wash your hands with soap and hot water.
- Contact your municipality if you find the remains of an animal too big to be disposed of in a plastic bag.





Yard cleaning

Recommendations for addressing the risks associated with felling trees



Contact your municipality for information on the by-laws in effect before you begin any work to cut down trees.

- Use equipment in good working order, designed for the job, and follow the manufacturers' recommendations.
- Be sure all safety features are in good working order.
- Wear personal protective equipment meeting the standards in effect: chainsaw safety chaps, safety boots for the use of a chainsaw, safety glasses and safety helmet.
- If felling the tree proves to be too complex, for example, owing to the presence of a structure (swimming pool, shed), call on a specialized enterprise.
- Never attempt to fell a tree that comes, or could come, within 3 metres of a live power line. Call on an enterprise accredited by the electrical grid operating entity. If in doubt, contact your power company.
- Use proper work methods and adopt proper work postures.

To learn more >>>

Hydro-Québec



hydroquebec.com/safety/distribution-lines/avoid-accidents-pruning-felling-trees



1 888 385-7252

Urgence Québec



[Quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/clean-up-your-house-and-yard](https://quebec.ca/en/public-safety-emergencies/emergency-situations-disasters-and-natural-hazards/clean-up-your-house-and-yard)

