

# Returning to Your Home After a Flood

Flood water not only damages buildings and other structures. It's often very contaminated with microorganisms (like bacteria), chemicals, and scattered waste (debris) that can be harmful to your health. These contaminants can stay in and around your home even after the flood waters move away (recede).

This is why it's important to know what to do to keep you and your family safe when you're returning to your home after a flood.

## Re-entering flood areas safely

**Do not** return to your home if you live in an area that was heavily damaged by the flood until you're told it's safe to do so. Once you're allowed to go back, be very careful.

Flood water risks include:

- human waste (raw sewage)
- chemicals
- debris
- openings in the ground that you can't see
- damage to structures and utilities, like electrical, gas, water, and sewage lines

## Be aware of hazards and take precautions

Make sure your home is safe before you go in.

- Look for buckled (bent) walls or floors.
- Look for holes in the floor, broken glass, and other debris that may be dangerous.

Cleaning up after a flood can be a lot of work.

- Work within your limits and take breaks when you need to.
- Ask for help if you need it.

## Use personal protective equipment (PPE)

When you're working with anything contaminated by flood water, it's important to use personal protection equipment (PPE). Use the right type of PPE for all flood clean-up activities, including:

- boots that are waterproof and won't get a hole, especially if there is water in your house
- rubber gloves and strong work gloves for cleaning and removing flood-damaged items
- a shovel or other tool to remove or move any debris – Don't use your hands to remove items that are under water.
- a face mask or a respirator mask (available at hardware stores), if you're cleaning areas that could have mould or asbestos or are very dusty

## Returning to Your Home after a Flood | 2

- a first aid kit, including supplies to clean and cover any cut or wound before you start the clean-up

### Other ways to protect yourself

Remember to regularly wash your hands and any skin that's not covered with soap and warm water. Don't touch your skin with anything contaminated, including your gloves.

Wash your clothes and bath or shower after you finish any cleaning activities.

Cleaning up after a flood can also put you at risk of getting tetanus. Make sure your immunizations are up to date and clean any cuts right away.

## Services that offer help after a flood

### Insurance information or other options

If you have insurance:

- contact your insurance company or broker as soon as possible
- take pictures of all damage
- your local city or town (municipality) office may have more information about making insurance claims after a flood

### Restoration contractors

When you work through your insurance company, they'll have contractors who they approve and work with.

Let your restoration contractor know if anyone in your family is sensitive to chemicals or mould. They'll take precautions to keep you and your family safe.

For information about choosing a private contractor, questions about your contract, or help with getting services, contact the [Alberta Emergency Management Agency](#).

You can also see if other organizations offer help, such as:

- the Canadian Red Cross
- the Salvation Army
- religious organizations
- emergency social services
- non-profit crisis centres

### Food safety

Be safe. If in doubt, throw it out.

#### What to throw away

You **must** throw out the following foods if they had contact with flood water:

- meat, fresh fruits, and vegetables
- boxed foods
- food in jars, including home jam and jelly
- all bottled drinks

The area under the seal of jars and bottles can't be disinfected properly.

Throw out **all** food stored in refrigerators and freezers if the temperature went above 4°C for **any** amount of time. Throw this food out even if it didn't have contact with flood water.

Throw out **all** food in refrigerators if the power is off for more than 4 hours or you don't know how long it was off for.

#### What foods to keep

The only foods that are safe to keep after contact with flood water are those sealed in metal cans. But the cans need to be undamaged and have labels you can read. Throw out any damaged or dented cans.

Before you open a can, clean the outside with warm water, soap, and a firm brush. Rinse the can off and dry it off so it doesn't rust.

### Water safety

During a flood, drinking water systems may get contaminated with bacteria and other harmful contaminants. You may be told to boil all water before you use it when you return to your home. This is called a boil water advisory.

Find out more about [Using Water Safely during a Boil Water Advisory](#).

#### Flush your water system before you use it

Flushing your water system will get out the water that's been sitting in water lines. Flush the water lines even if there's a boil water advisory and you're boiling water before you use it. Flush the water lines again after the boil water advisory is over.

To flush the water lines:

## Returning to Your Home after a Flood | 4

- turn on all cold water taps for at least 5 minutes before you use them
- turn on all hot water taps for at least 5 minutes before you use them (even if the water isn't hot)

### Private wells and cisterns

Inspect your well or cistern for damage before you use it. Your well or cistern may have been damaged because of a loss of pressure. If there's damage, your water supply may be contaminated with harmful germs (bacteria).

Before you use your well again, have the water tested for bacteria. You can get bottles and instructions for testing from an Alberta Health Services (AHS) Environmental Public Health office.

**Don't** drink untreated well or cistern water until you get your test results back. Boil all the water you use from a well or cistern, like you're following a boil water advisory. You'll need to do this until you know the water is safe to drink and use.

Learn more about [water testing](#).

### Personal items

Many materials can't be cleaned and dried properly after being soaked with floodwater. Furniture covered with fabric or leather (upholstery), like couches and chairs, may be hard or impossible to clean if it had contact with human waste (sewage) or other harmful contaminants.

Put the following items in sealed plastic bags and throw them out if they had contact with floodwater:

- furniture made of particleboard (fibreboard)
- mattresses and box springs
- linens (towels, washcloths, napkins) and bedding (duvets, comforters and pillows), unless you can wash and dry them
- electrical equipment
- clothing
- papers and paper products that aren't important to you
- medicines, cosmetics, and other toiletries

You may be able to safely keep some items from your home if they can be cleaned or repaired, including:

- items that didn't touch flood water
- items that didn't absorb water

## Returning to Your Home after a Flood | 5

- fabrics that can be washed with bleach and hot water and dried in a hot dryer

### Furniture

You can keep good quality wood furniture if:

- it only had contact with flood water for a short time
- there's no swelling of the wood

Clean the furniture with warm water and soap, then sanitize it with a mild bleach solution (1 tablespoon of bleach in 4 litres of water). Dry the furniture quickly, but don't put it in the sun or dry it with direct heat (like a heater or blow dryer). Open any drawers to speed up drying, but don't take them out. You may not be able to get the drawers back in after all parts are dry.

If you have antique furniture, you may want to contact a professional furniture restorer about a treatment to repair flood water damage. These treatments can be expensive.

If you want to restore your furniture, contact a professional furniture restorer soon after the flood and follow their exact instructions.

### Linens, bedding and clothing

Scrape off dirt and rinse fabrics to remove as much as you can before you wash them in a washing machine. Wash them in the hottest water safe for the fabrics. Take delicate fabrics (like silk and wool) to a professional dry cleaner if you're not supposed to wash them in a washing machine.

### Paper and paper items

Flood water may have damaged books and important papers, such as legal, financial, and other official documents. You can try to save them yourself or you can hire a professional service that cleans and restores damaged books and other important paper items.

To help save books, papers, and other paper items:

- Open books to the air and put them in the sun to speed up drying. Be careful that they don't dry too quickly in the sun or the bindings may get damaged.
- Close books and use weight to keep them closed at night. This helps prevent the pages from getting wrinkles.
- Use blank paper or napkins to help absorb water.
- Sprinkle a small amount of baking soda on the paper to help prevent mould.

## Returning to Your Home after a Flood | 6

Using baking soda could change the look of the ink and paper. Test a small spot first before you use it all over the paper or paper goods.

If you can't begin drying paper items within a day, wrap and freeze them.

- Rinse off as much dirt as possible and use a towel to blot them dry. Don't rub.
- Wrap paper items carefully in freezer bags and clean off the outside of the bags before freezing.

To prevent contamination, don't use a freezer that's used to store food. If a freezer is used only for wet papers, it may be best to leave paper items unwrapped or lightly wrapped, to help them dry.

- Remove items 1 or 2 at a time. Carefully thaw and air dry in a space with good air flow. Clean and sanitize the freezer that was used to dry flood damaged papers.

If paper items came in contact with human waste or other things that are toxic, they may not be safe to try to clean and keep.

### Repairing your home

Repairing your home after a flood is often a lot of work. But it's important to follow proper clean-up, cleaning, sanitizing, and drying guidelines to prevent mould from growing, damage to structures, or other problems.

To speed up drying in your house, use fans or dehumidifiers. You may need a large and powerful dehumidifier (called a commercial dehumidifier) to dry out things more quickly. Talk to a professional about restoring your home before you begin any work.

### Floors

Flooring and floor coverings will be very dirty after a flood. Remove as much standing water as you can. Move furniture and other things off wet floors and carpet.

Clean all floors in your house, even those above the water line. It's important to clean all floors as the house will have extra moisture in the air (humidity) which could cause mould to grow.

## Returning to Your Home after a Flood | 7

Before you clean and sanitize floors:

- Move furniture and all removable floor coverings outside.
- Remove wet carpet and carpet under pads (called underlay).

To clean and sanitize floors:

- Wash floors with warm water and soap.
- Sanitize floors with a mild bleach solution (1 tablespoon of bleach in 4 litres water).
- Dry floors well.

### Carpets

Remove and throw out all carpets and carpet underlay damaged by the flood. Do this as soon as possible so the floor doesn't start to change shape or come apart.

You may need to dry the carpets slightly to move them more easily. Carpet underlay may fall apart when you remove it. But be sure to remove all pieces of carpet and underlay.

Drag carpets out on a plastic sheet. Don't carry them out. Wet carpets are very heavy and may hurt your back.

To save expensive carpets and area rugs, have them cleaned by a professional carpet cleaner. Contact a cleaning company quickly to lessen damage to these carpets.

### Vinyl, linoleum, and other sheet floor coverings

Vinyl, linoleum, and other floor coverings can trap dirt and water. Remove these types of flooring if:

- the wooden subfloor underneath is wet
- dirt and water is trapped underneath

Removing the flooring will allow the wooden subfloor to dry quickly. If the subfloor stays wet, mould may start to grow which can damage the structure and flooring above.

### Inside Floor Cavities

Once the flood water is gone, check the space between the floor and ceiling to see if it's wet. If anything inside this space is wet, open it up so you can clean and dry it out.

- Take out any insulation, debris, or dirt.
- Throw away wet insulation.
- Dry out the cavity.
- Clean and sanitize the surfaces.

## Returning to Your Home after a Flood | 8

If any wood is wet, it may take days or weeks to dry. Keep these spaces open and make sure they're completely dry before you close them.

### Walls and ceilings

Before you start any work or construction on your home, be sure you know which are the load-bearing walls. It's always best to talk to a contractor about structural safety before you begin work on your home.

The more quickly you open hidden spaces in your home, the less time water will have to soak through materials and the quicker they will dry.

As soon as possible:

- Open up walls to see if the drywall is wet.
- Remove drywall that is soaked or absorbed water.
- Wash any drywall that you're not removing with warm water and soap.
- Sanitize the drywall with a mild bleach solution (1 tablespoon of bleach in 4 litres of water).
- Clean all walls in your house, including the walls on floors above the water line. This will help prevent mould from growing after you've had higher humidity in your home.

### Insulation and structural materials

If you find anything wet inside your walls, open the walls up.

Insulation can soak quickly. This could be up to half a metre (1 to 2 feet) above the level of flooding within a few days, under some conditions.

- Remove and take out any wet fibrous or board insulation.
- Clean and sanitize the surfaces.
- Use dehumidifiers to speed up drying.

If any of the wood is soaked with water, it may take days or weeks to dry completely before you can close the cavity.

Once the area is dry, replace it with new insulation.

### Ceilings

Ceilings above the water line may look dry and undamaged. But you'll still need to check and clean them. When walls absorb moisture, ceiling materials can get wet.

If ceilings come in contact with flood water:



## Returning to Your Home after a Flood | 9

- Replace the ceiling drywall or plaster that was under water.
- Replace any ceiling materials that are wet, even if they are above the water line.

If ceilings aren't damaged and haven't come in contact with flood water:

- Clean with warm water and soap.
- Sanitize the ceiling using a mild bleach solution (1 tablespoon of bleach in 4 litres of water).
- Dry the ceiling within 24 hours.

### Asbestos

If your home was built before 1980, it may have asbestos. Damage to items in your home may release asbestos particles in the air while they dry. Asbestos is dangerous to your health so it's important to know what to do if you think you have asbestos in your home.

Find out more about [asbestos](#).

### Electricity

Electrical equipment, lighting, and appliances use electricity. Flood water can damage these items and make them dangerous if electricity runs through them.

It's best to contact your electrical utility company, electrician, or an appliance repair company before you use anything with electricity. They can inspect your home and appliances to make sure it's safe to use electricity.

Make sure the power is **off** and that all electrical wiring, equipment, lighting, and appliances are clean and dry before you turn the power on.

### Electrical equipment

Do not use any type of electrical equipment (such as outlets, switch boxes, or fuse or breaker panels) until they're properly inspected by your electrical utility company or an electrician approved by the company.

Electrical equipment is **not** safe to use when it is wet and dirty. Wet dirt is an excellent conductor of electricity. This means electricity passes through it easily. If your electrical equipment is wet and dirty, it can cause the power to shut off suddenly (short out) or make it dangerous to touch.

### Lighting

## Returning to Your Home after a Flood | 10

While the power is off, take apart lighting fixtures and lamps to check if they're wet or dirty. Clean and dry all lighting before you use it.

Some light bulbs may be burnt out, cracked, or broken. Even though a light bulb may look normal after you clean it, it may still shatter the first time you use it. Make sure the shade is between you and the light bulb when you turn the light on.

### Appliances

Do not use large appliances, like washing machines and dryers, if any part of the appliance was in contact with flood water. There may be dirt in motors and switches that could cause severe damage and electrical shock.

Contact a repair company to inspect and repair appliances before you use them. You may want to start with having your washer and dryer inspected and repaired first so you can clean clothes and other fabrics.

It may be best to replace small appliances that were in contact with flood water. Old appliances may cost more to repair than to buy a new one. Before you decide to keep any small appliances, find out how much it will cost to repair them.

### Furnaces and Water Heaters

Don't use furnaces and water heaters until they're inspected and serviced by a heating and ventilation (HVAC) specialist or a plumber.

Flood and sewage water have harmful microorganisms that can grow on surfaces inside your HVAC systems. This can happen even if the main units or ducting weren't in contact with flood water.

### Restoring your yard

Flood water has harmful microorganisms, chemicals, and debris that may get into yards, gardens, outdoor play equipment, sand boxes, and other places you use or are in contact with outside. These contaminants can stay in your yard and other areas outside your home even after the flood water is gone.

### Lawn and Soil

Harmful microorganisms can last hours to days on lawns or in soil. Sunlight and wind will dry out

lawns and soil which helps to destroy and remove the harmful microorganisms over time. But you may choose to restore the lawn or soil yourself or remove or cover it with another material.

To restore or cover the lawn or soil:

- Resod or reseed grassy areas.
- Add new soil on top of the soil that was flooded.
- Cover areas of your lawn or soil with solid paving material, like stone, asphalt, or brick.

To keep your children safe:

- Remove any debris like broken glass, branches, and garbage before children play in the yard.
- Make sure your children wash their hands well after playing outside.
- Tell your children not to put their hands or toys in their mouths while they're playing outside.

### Gardens

The harmful microorganisms in flood water can get into garden vegetables and berries, making them unsafe to eat. If you're not sure if they're safe to eat, **throw them away**.

- Throw away or compost any ready-to-harvest vegetables.
- Throw away or compost any vegetables or berries that grow above ground, including peas, beans, and lettuce.
- Throw away any vegetables that grow below ground and don't have a thick peel, like radishes, onions, and green onions.

You can keep root vegetables, like potatoes and turnips, if you:

- wait 4 to 6 weeks after the flood water goes away before you harvest them
- wash them well with cool running water and a scrub brush
- peel and cook them before eating

You don't need to replace your garden soil unless you think the chemicals in the soil have changed.

Before you use your garden again:

- Use a rotary tiller regularly or equipment like it to bring underlying soil to the surface to get sunlight.
- Replant your crops after you till.

### Outdoor Play Equipment

Make sure outdoor play equipment is safe, clean, and sanitized before children use it.

- Flood water must be gone from the play area. If it isn't, block the area off so children don't use it.
- Clear away any debris in the play area.
- Check the playground equipment to see if it's damaged. Damaged play equipment needs to be repaired or replaced before children use it.
- Clean mud and sewage off playground equipment.
- Sanitize playground equipment with a mild bleach solution (1 tablespoon of bleach in 4 litres of water).
- Remove and replace any loose surfacing materials that may have sand and small debris.
- See the manufacturer's instructions for how to clean solid playground surfacing.

### Sandboxes

There are several ways to lower the risk of harmful microorganisms from sandboxes.

- Remove and replace the sand.
- Turn sand over often with a shovel so the underlying sand gets sunlight and is dried by the wind. Dig about 7.5 inches (17 centimetres) deep.
- Disinfect sand by applying a very strong bleach solution (1/3 cup of bleach in 4 litres of water) to wet the sand. Water the sand with clear water so the bleach solution goes deeper into the sand.