



Returning home after wildfire evacuation

Impacted properties

This information is a collection of health and safety items to think about as you return to your home and property that **have been directly impacted by fire damage**.

After the wildfire, homes and properties may be affected by smoke, soot and ash, chemicals, structural damage, and water damage leading to concerns about the safety of structures, potable drinking water, soil, air quality, and longer-term issues such as increased risk or worsening of chronic diseases.

The following is a list of potential concerns along with potential measures that can be undertaken by property owners to better protect themselves and their family. It is important to note that each situation will be different, and in all cases individual properties will require their own assessment of risks to figure out which potential safety measures apply. **If you are unsure of the potential concerns, be safe and consult a qualified professional, such a fire damage restoration company, to conduct the assessment.** Links to additional resources are provided below for assistance.

Return to your property only once your local authorities have said it's safe to do so. Do not enter your home if you notice or suspect any source of heat or smoke. Call 911.

Cleanup of soils, soot, and ash

- If you will be doing the cleaning it is important that you assess all risks to you and your family before beginning. If you are uncertain what to do, consult a professional cleaning company. Take all measures necessary to protect you and your family from physical, chemical, biological hazards. Ensure prompt first aid management for wounds or other exposures. Seek advice from a medical professional when needed.
- Take special care to monitor children to prevent them from playing in, or potentially ingesting soils, soot, ash, or other materials.
- Watch your pets or other animals closely and keep them under your control at all times which will prevent them from running into potential hazards around your property. Fire debris and chemicals can make them sick.

Potential safety measures

- o Wear the appropriate personal protective equipment. (See below)
- o Use a hose or sprayer on the outside of your home, driveway, walkway, vehicle, patio, deck, play equipment, and outdoor furniture. Rinse off your air intake vents and air conditioner carefully. Do not use air hoses or leaf blowers to clean exterior surfaces

because you could blow more ash and soot into your house. Do not allow this water to flow directly into storm drains as it can lead to nearby lakes and cause environmental damage.

- o Regularly wet down your garden and lawn until the smoke and ash have been diluted or reabsorbed into the soil. Ash and soot on plants will continue to smell smoky for some time.
- o If you choose to fix or put in new lawns, you can re-sod or reseed grassy areas.
- o Consider adding new, clean soil to gardens if you suspect or know the area was damaged by the fire.
- o Wash all surfaces inside your home including children's play materials and equipment with mild detergent or an appropriate cleaning solution and rinse thoroughly. Clean any place where there's ash, dust, or the smell of fire. Wash the inside of closets, cupboards, and drawers. Soft or plush materials can be laundered.
- o Wash the inside of your windows thoroughly.
- o Use wet wiping or mopping. This is safer and better than dry or dust mopping, which can move ash and debris around your house. Change the water if it gets dirty.
- o Only vacuum with a unit that has a HEPA filter that can catch ash particles. Using unfiltered vacuums will just move the ash around your house. Change your HEPA filter often.
- o Wash and clean all ash-contaminated household items with mild detergent. Change the water often.
- o Try to clean as much ash and dust as possible. Ash that isn't cleaned up is broken into smaller particles and becomes harder to remove from carpets and surfaces.
- o Remove soot before you try to clean or deodorize carpets, curtains, and soft furniture like your couch. Soot is oily and can stain these items.
- o Steam clean carpets, drapes, curtains, and furniture. Change the water often.
- o Wash or dry clean all your clothing and household linens that have been affected by the fire. You may have to run many rinse cycles to get out all the ash, soot, and smoke.

Physical hazards (Outdoor)

- Slip, trip, and fall hazards from damaged trees, damaged buildings, open pits, or wet and slippery surfaces.
- Falling debris due to damaged trees, utility lines and damaged buildings.
- Sharp objects such as nails, metal, concrete, or wood debris.

- Fire or structural damage to play equipment, etc.
- Standing or pooled water.

Potential safety measures:

- o Conduct a preliminary survey of the property, noting potential hazards. If you see anything of concern, consult with appropriate professionals and consider blocking access to the area of concern.
- o Do not enter any fire-damaged structure until it's determined to be safe to enter.
- o Block access to outdoor play areas until damaged equipment is repaired or replaced.
- o Sand, gravel, or other loose materials placed under playground equipment should be removed and replaced, especially if you can see ash, soot, and small debris.
- o Look to see how stable the trees are around your property. Check for damage on the tree trunk or for visible damage of burned tree roots. Any trees that have been damaged by fire can fall and injure you. They will need to be cut down and taken out. If you are in doubt about tree safety and in need for removal, it is recommended to contact a qualified professional (e.g., arborist).
- o Don't touch damaged or fallen power lines and power poles. There may be electrical dangers that you can't see. If you see anything of concern, call an electrician or NS Power immediately.
- o Remove puddles and standing water where possible.
- o Wear appropriate personal protective equipment when cleaning up or working on your property. ([See below](#)).

Physical hazards (Indoor)

- Slip, trip and fall hazards from unstable structures, collapsing roofs, open pits, or wet and slippery surfaces.
- Falling debris due to unstable structures and collapsing roofs.
- Sharp objects such as nails, metal, concrete or wood debris.
- Impacted/damaged electrical service or fixtures.
- Standing water, or flooded areas.

Potential safety measures

- o Wear appropriate personal protective equipment, when cleaning up or working within the home. ([See below](#)). Return to your property only during daylight hours if possible.

- o If your electrical system has been impacted, don't try to use any light switches in the house until it has been checked by an electrician.
- o Before turning on any electricity, gas, or water, wait until your utility company or a qualified technician has checked and says it's safe. For additional information on power safety visit <https://www.nspower.ca/about-us/safety>
- o Check all electrical appliances and power sources in your home or garage to see if they've been in contact with fire, or water. If they have, or you are unsure, don't use any of these until they've been cleared for use by a qualified electrician.
- o Remove standing water, and water from flooded areas.

Potentially hazardous materials

- Damaged or leaking household hazardous materials such as kitchen and bathroom cleaning products, paint, batteries, pesticides, or herbicide containers (like ant or weed killer), and fuel containers. Exposure to these items can have potential for immediate and long-term health effects.
- Soils containing potentially hazardous materials.
- Damaged and leaking home heating oil tanks.
- Propane cylinders such as those used for BBQ's or heating. Contact local authorities on how to manage these items after a fire.
- Structures built before the early 1990s could contain asbestos in materials like stucco, siding, plaster, drywall mud, flooring materials, ceiling tiles, insulation, roofing materials, etc.
- Wildfires deposit large amounts of ash on indoor and outdoor surfaces in nearby areas, which may cause irritation of the skin, nose, and throat.
- Ash and dust (particularly from burned buildings) may contain toxic chemicals, including asbestos, arsenic, lead, and other heavy metals. Exposure to these chemicals can cause immediate health effect, or a chronic health effect that is seen over time.

Potential safety measures

- o Conduct a preliminary survey noting potentially hazardous materials. If you are uncertain what to do, consult a professional cleaning company.
- o Wear appropriate personal protective equipment. ([See below](#)) Contact licensed or certified companies to handle hazardous items. If your home was constructed before 1990, hire a professional to assess for asbestos remaining in the home so that it can be safely managed before you start any renovation activities.
- o Follow the guidance from your local authorities on how to properly dispose of these items.

- o Entering the burn area may result in the soiling of your clothes and skin with ash or other chemicals. Remove exposed clothing and wash separately. Take or shower as soon as possible.
- o Take special care not to remove soiled items, clothing, personal protective equipment such as safety shoes or boots, etc. from the area without first thoroughly cleaning. Without doing so you may be taking contaminants from the site and potentially further exposing yourself or your family.
- o If you have concerns about potential safety hazards, contract the services of a qualified professional to assess prior to entry.
- o Practice good personal hand hygiene, washing hands frequently, to prevent accidental ingestion of potential contaminants.

Air quality

- Fire impacted properties can pose a number of poor air quality concerns. These can include things such as poor air circulation, and/or presence of soot, ash, smoke and chemicals in the air.

Potential safety measures

- o Wear appropriate personal protective equipment (See below). While working at your property, if you start to have difficulty breathing you should move away from the area and seek medical attention. Those who have lung conditions such as asthma may be more sensitive to air quality issues.
- o Do not enter tight or poorly ventilated space, be careful when using pumps, pressure washers, or generators. Keep doors and windows open. You are at risk for carbon monoxide poisoning if there isn't enough air flow. **Never** use gas powered tools or appliances such as generators in an indoor space.
- o Get the air moving inside your house by using a fan and opening your windows. Only do this if there's no smoke or air quality advisory for your area.
- o Replace your furnace filter. You may need to do this more often than usual due to construction and cleaning activities in your home or neighbourhood. Check your filter often.
- o Upgrade furnace filters to the highest efficiency your ventilation system can handle. They may help lower the levels of particles in the air in your home.
- o Have your ducts and air conditioning system cleaned by a professional.
- o Use a portable air cleaner, if you have one, with a high-efficiency particulate air (HEPA) filter to remove small particles. For air cleaners, follow all the manufacturer's instructions for changing the filter, where to place the device, and the size of the room it's meant to be used in.

- o Demolition activities are more likely to produce airborne ash. When these activities are happening:
 - Stay indoors.
 - Close all outer doors and windows.
 - Turn off the ventilation for air conditioners and furnaces as much as possible. The use of heat pumps is ok as they do not bring outside air to the indoor space.

Food and medication items

- Food, medicines, cleaning products, cosmetics, and other personal care products can be damaged by heat, smoke, ash, water and fire suppressants.

Potential safety measures

- o Assess the need to dispose of medications, cleaning products, and personal care products. You may need to properly dispose of these items after your fire-damaged home has been inspected. Unusable or expired medications can typically be returned to a local pharmacy.
- o Throw away perishable food stored in your refrigerator, cooler, or freezer if the temperature inside the appliance went above 4C (40F) for longer than two hours. If you do not know how long your home was without power, you should dispose of all perishable food in those appliances. If your appliance lost power, the temperature may have gone above 4C (40F) when the power was off and then returned to temperature when the power came back on.
- o There are foods you may store in your fridge and freezer that are safe to consume if the temperature was above 4C (40F). Please refer to the detailed list of frozen and refrigerated foods that you do not have to discard if power was off, at [factsheet-poweroff.pdf \(novascotia.ca\)](https://www.novascotia.ca/factsheet-poweroff.pdf)
- o Throw away raw vegetables or fruits.
- o Clean and disinfect all canned foods before opening them to make sure you don't contaminate the food.
- o Don't eat fruits and vegetables that were growing in your garden during the fire.
- o Check the rest of the food in your home, including canned goods and dry goods like flour, sugar, and spices, and throw it out if it:
 - has spoiled, even if your fridge
 - was open
 - got damaged by fire or smoke, even if the package isn't open

- was stored in containers with tiny holes (porous), such as boxed cardboard or foam containers
- is in can that is bulging, rusted, or dented
- was stored in a glass jar (the heat from the fire likely compromised the safety seal)
- if you are in doubt, throw it out.

Water damage

- If your home was damaged by water, you will need to take steps to limit the potential for mould to grow.

Potential safety measures

- o When cleaning water damage, wear appropriate personal protective equipment. ([See below](#))
- o Check any water-damaged or water-stained surfaces and appliances. Clean the affected areas using warm water and soap first. Then disinfect the surfaces with a household bleach and water. The sanitizer solution will help disinfect the water used for cleaning and kill any leftover mould that may have grown.
- o Dry all wet items as soon as possible.
- o You may need to use a dehumidifier to help to remove extra moisture from the air inside your home.

Fuel oil tanks

- There are several ways oil can escape your tank during a fire, even if you can't see any damage to your tank.
- Signs of damage include dents, swelling, discoloration, peeling paint.
- It's a good idea to have a licensed burner technician check your tank, lines, appliances and supports.
- More information is available on the factsheet on Fuel Oil Tanks and Wildfires. <https://novascotia.ca/alerts/docs/fuel-oil-tanks-wildfires.pdf>

Damaged septic system

- Your private septic system may have been damaged by fire, water, or firefighting activities.

Potential safety measures

- o Contact a sewage disposal professional if you find damage to your septic system.
- o Watch for danger of potential tank collapse. Depressions in the ground may be an indication of this.
- o Do not use a damaged system.
- o Do not come into contact with waste that has made its way to the ground surface.

Well water impacts

- After a wildfire, your well water may have been impacted by the fire, chemicals, or bacteria. This contamination can come from the fire itself, or from products that seep into the water supply when things such as oil tanks are damaged.
- Your well may have been damaged by fire or firefighting activities.

Potential safety measures

- o Drink water from an alternate safe source (bottled water) until you have confirmed your water is safe. If you notice an odd appearance or odour, you should use an alternate water source for bathing or showering. You can use water for flushing toilets and cleaning.
- o If there are obvious signs of well construction issues, such as burnt or cracked well caps or casing, obtain the services of a licensed well driller to conduct repairs.
- o Flush and disinfect your well following the steps in the link below.
- o Test for bacteria and chemistry. (See 'Well water safety after a wildfire' document in the resource section below).
- o If, after completing the disinfection process and waiting 5 days, your water has unusual odours or colour, or your testing results show that you have bacteria or unsafe concentrations of chemicals, continue to drink bottled water and contact your local Environment and Climate Change office for advice.
- o If you are aware of damage to your septic system or a chemical spill near your home (e.g. from a fuel oil tank), you may want to do additional testing for contaminants. You can get advice from your local Environment and Climate Change office.

Deceased pets/animals

In the very unfortunate circumstance where a family pet or animals (wildlife/domestic farm, etc.) have been lost, the risk to humans from animal contact is low if proper precautions are taken.

- Practice proper hand washing and utilize personal protective equipment such as latex gloves when handling the remains.
- Secure and remove the remains to avoid attracting other animals or pests.
- Contact your veterinarian or municipality for proper handling of the remains.

Mental Health

Fires can lead to significant emotional and physical distress, even after safety is reached. Individuals and families may go through several stages of emotions with daily life disruptions. For assistance and information with respect to mental health please see the resource links below.

Personal Protective Equipment

Personal protective equipment includes any equipment that can be used to help prevent exposure to physical, biological, or chemical hazards. It includes items such as the following:

- Protective clothing – ex. Tyvek™ suits, long sleeve shirts, long pants, coveralls
- Protective footwear – steel toe, puncture resistant shoes or boots
- Protective gloves – depending upon need these can be cut resistant, puncture resistant, waterproof, or chemical resistant, etc.
- Eye protection - safety glasses or safety goggles
- Respirator mask – such as N95, KN95, P100, or higher and should be selected based on need. If unsure, consult with a qualified professional on respirator mask choice and fit
- Head protection – such as a hard hat

Resources:

Nova Scotia Health Authority – Mental Health Services

<https://www.nshealth.ca/news/nova-scotia-health-mental-health-and-addictions-supports-residents>

Nova Scotia Wildfires – how to talk to children and youth

<https://www.iwk.nshealth.ca/wildfires>

NS Smoke and Air Quality:

<https://novascotia.ca/alerts/docs/wildfires-air-quality-en.pdf>

Air Quality Health Index and Advisories:

https://www.weather.gc.ca/airquality/pages/provincial_summary/ns_e.html

NS Saving foods when the power is off:

<https://www.novascotia.ca/nse/food-protection/docs/factsheet-poweroff.pdf>

Using well water after a wildfire:

<https://novascotia.ca/alerts/docs/using-well-water-after-wildfire.pdf>

A list of certified well contractors

<https://novascotia.ca/nse/water/wellcontractors.asp>

How to disinfect your well

<https://novascotia.ca/nse/water/docs/DisinfectWaterWell.pdf>

How to interpret your well testing results

<https://novascotia.ca/nse/dwit/>

Well water safety after a wildfire:

<https://www.healthlinkbc.ca/healthlinkbc-files/wildfire-its-effects-drinking-water-quality>

Alberta wildfire resources:

<https://www.albertahealthservices.ca/news/Page14070.aspx>

Fuel oil spills:

<https://novascotia.ca/nse/contaminatedsites/domestic.asp>
[fuel-oil-tanks-wildfires.pdf \(novascotia.ca\)](#)