

After a Fire - Returning Home

Your home may be impacted by smoke, soot and ash, chemicals, structural damage and water damage. This information is a collection of health and safety considerations and tips for various aspects of cleanup during initial work to restore your home. This document is intended to be broad-serving and not all of the information may apply to your situation.

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Contact Information

Health Link: Call 811

Health Protection Offices – see www.interiorhealth.ca

Protect Yourself and Your Family

Re-enter your home safely

Return to your home only once your local authorities have said it's safe to do so.

Do Not Enter your home if:

- There is any danger of a structural failure or collapse. Check for any visible structural damage to your home that was caused by this fire.
 - > Roofs and floors may be damaged and subject to collapse.
 - The foundation of your home and any brick or cement fireplace chimneys can be severely damaged by the heat from this fire.
 - ➤ The concrete foundation of your home may be cracked and leaning or looking like it will actually fall down. It is a very unsafe place for you to be trying to retrieve any items or even to climb down to try to see what damage may have happened.
 - > Take all appropriate precautions to protect yourself and family.

Use these tips to protect yourself and property once in your home:

- Wear the appropriate personal protective equipment (PPE) including masks, gloves and boots.
- Never try to turn utilities back on until they have been checked first by your local utility provider and they have told you it is safe to do so. It is possible that your local government and utility service providers may have had to turn off the supply of natural gas, electricity and drinking water as a result of this fire.
- Do not try to use any electrical appliances or power in your home or garage that may have come in contact with fire, water or fire retardant until they have been checked and cleared for use by a qualified electrician.
- Visually check the stability of the trees around your property. Look for damage
 on the tree trunk or for visible damage of burned tree roots. Any trees that have
 been damaged by fire may soon become another hazard. They will need to be
 cut down and removed.
- Stay away from damaged or fallen power lines and power poles. Wet down any remaining fire debris to minimize health impacts to you and your family from

breathing soot and ash particles left by the aftermath of this fire. **Do not** wash the fire debris into the street.

- Impacted sites will likely smell very smoky for a number of days, and there may be soot and ash, as well as fire debris all around your home and yard.
- If you or any of your family members have breathing difficulties or asthma, take all appropriate precautions to protect yourself.
 - ➤ Call Health Link at 811 or consult your family physician for any required medications or extra precautions you may need.
 - Lingering smoke and fire ash at your home and yard can temporarily worsen your personal respiratory issues.

Be careful near fire retardants and fire residues.

- Fire retardant contains ammonia which can:
 - > Sting eyes, cuts, scratches or sunburnt skin
 - Irritate intact skin
 - Cause coughing/wheezing
 - Cause gastrointestinal symptoms such as nausea, vomiting and diarrhea if ingested.
- Soot and ash can cause symptoms including:
 - > Eye and skin irritation
 - Respiratory issues

These symptoms may be significant depending on the type of soot/ash, amount of exposure, and underlying respiratory conditions.

 Smoke can irritate the skin, nose, throat, lungs and eyes and can cause coughing and wheezing. For more information on the health effects from wildfire smoke, please see:

 $\frac{https://www.interiorhealth.ca/YourEnvironment/EmergencyPreparedness/Pages}{/Forest-Fires.aspx}$

Fire retardants and your pets

 Ensure animals do not ingest water from puddles containing fire retardants or fire residue. • If your pet appears to be ill from ingesting fire retardants or fire residue, take them to a veterinarian.

Re-enter areas burned by wildfire safely

What Hazards should I watch for?

- Slip, trip and fall hazards from unstable structures, open pits or wet and slippery surfaces.
- Sharp objects such as nails, metal, concrete or wood debris.
- Ash, soot and demolition dust.
- Hazardous materials such as kitchen and bathroom cleaning products, paint,
 batteries, and fuel containers which have been partially damaged or destroyed.
- Confined or poorly ventilated areas where carbon monoxide may be present from the operation of pumps, generators, or pressure washers. Be careful entering tight spaces.
- Pesticides or herbicide containers potentially damaged or destroyed.
- Propane cylinders for heating or from BBQs.

What personal protective equipment (PPE) should I use to enter burned out areas?

 Use PPE when entering your home. In particular, people with Asthma or Respiratory conditions should only spend short periods of time in these areas and wear respiratory protection.

Breathing protection:

- Use N95 rated masks to help filter out and reduce exposure to fine dust particles such as ash, soot, and other nuisance-type particles. A mask rated N95, when properly fitted (see section below) will be more effective than a dust mask in blocking particles from ash.
- Look for "NIOSH 95" on the package. N95 means the mask blocks about 95 percent of particles that are 0.3 microns in size or larger.
- Purchase N95 masks at hardware, safety/construction supply businesses and home improvement centres.

- Masks can add physical stress to a person by making it harder to breathe.
 Individuals who have any doubts concerning their ability to wear a mask should consult with their physician.
- If you cannot locate N95 masks, a well-fitting dust mask may provide some protection during cleanup. Many ash particles are larger than found in smoke, and a dust mask can significantly reduce the amount of particles inhaled.

How to Self-Fit N95 Masks

- Always read and follow the manufacturer's directions when using a mask.
- The mask must cover both the nose and mouth to keep you from breathing in dust and ash.
- If the mask does not have a snug fit, it will not work properly. Correct fit of the respirator requires contact with smooth skin. Masks will not work properly for people with beards or facial hair.
- Always use both straps on the respirator to hold it in place to keep air from leaking around the respirator.
- Do a user seal check, including both positive and negative pressure checks, to verify that the respirator is adjusted and fits properly.
 - ➤ Negative pressure check Place both hands completely over the respirator and inhale sharply. Be careful not to disturb the position of the respirator. The respirator should pull into your face. If air leaks around your face or eyes, adjust the nosepiece and straps and repeat the positive pressure check.
 - ➤ Positive pressure check Put your hands over the respirator and breathe out sharply. If your respirator has an exhalation valve be sure to cover the exhalation valve when you exhale. No air should leak out of the respirator if the respirator fits properly. If air leaks out, re-adjust the nosepiece and straps and repeat the negative pressure check.

Protective clothing, gloves and boots:

- Select "head-to-toe" protection based upon the situation and work to be done. Consider durability, including cut, puncture, abrasion and slip resistance.
- At minimum, wear long sleeve shirts, long pants, or coveralls, leather gloves and boots with thick soles to prevent punctures from sharp objects.

Eye, face and head protection:

- Wear safety glasses or goggles which provide wrap-around protection. Regular sunglasses are not sufficient protection.
- Protective helmets or hard-hats are recommended for clean-up of areas where there is a risk of falling debris.

Hearing protection:

• Ear plugs or ear muffs should be used when operating heavy machinery or power tools.

Review your insurance information or other options

If you are insured:

- Contact your insurance company/broker as soon as possible. Try to create an inventory of household items, both inside and outside the buildings, which have been damaged by fire.
- Photograph or videotape the damage as much as possible. Do not throw away any damaged goods until the insurance assessor says to do so.
- Work with your insurance company and their accredited fire restoration companies to restore or rebuild your home.

If you are not insured: Check with your local, private service organizations to see what help you may be eligible for:

- Canadian Red Cross
- Salvation Army
- Local religious organizations
- Provincial or municipal emergency social services
- Non-profit crisis centres
- Your municipal emergency coordinator

Water Quality

Flushing your water system before you use it:

Prior to using your water system for consumption (drinking, cooking or bathing), flush the system to remove all stagnant water from the water lines.

• Run all cold and hot water taps for at least 5 minutes before you use them (even if the water is not hot).

For residents on a community water system:

- Questions about the quality of drinking water should be directed to the local water supplier (e.g. municipality, utility provider, etc.). These suppliers are best able to assess how their systems have been affected and whether there is any impact on the quality of drinking water.
- Where fire retardant was used in a watershed, there will be increased
 monitoring for changes in water quality. Public notifications will be issued if
 there is some level of risk or uncertainty associated with drinking water use.

For residents on individual/private water systems:

- If there is any evidence that the water supply has been affected by fire an alternative source of drinking water should be used until the water source can be assessed or tested.
- Private surface and ground water sources affected by fire retardant application should be tested to ensure compliance with the <u>Canadian Drinking Water Quality</u> <u>Guidelines</u>. Sample bottles can be provided by water testing laboratories. For information on having your private water source tested, please refer to the list of <u>Provincial Health Officer Approved Drinking Water Testing Laboratories</u>. Cost for water testing is the responsibility of individual owners.

Restore Your Home

Discard items impacted by smoke, heat, ash and chemicals

- Food, medicines, cleaners, cosmetics and other toiletries can be damaged by heat, smoke and lingering chemical residues.
- There will be items that, after inspection of your fire-damaged home, need to be properly disposed of. Before disposing items, make sure that you inventory those items as part of your fire insurance claim.

Foods

- Take stock of the foods in your home.
- Your fridge and freezer may have been without power for some time. For insurance purposes, take plenty of photos and write down an inventory of the contents
- Check the food in your home and discard:
 - Food stored in the refrigerators, coolers and freezers **IF** the temperature was greater than 4°C **at any time**. Please note that the temperature may have exceeded 4°C when the power was disrupted and then returned to 4°C.
 - Any food that has spoiled, even if the temperature remained at 4°C at all times.
 - Fire or smoke damaged foods like dry goods (i.e. Flour, sugar, spices, etc.) even if the package isn't open.
 - Unrefrigerated raw vegetables or fruits.
 - Foods that were stored in porous containers (i.e. cardboard, foam containers, etc.).
 - Canned food where the can is bulging, rusted or dented.
 - ➤ Jarred foods, including home canned items, as the heat from the fire likely compromised the safety seal.

Be Safe. If in Doubt, Throw it Out!

Clean up smoke damage and soot

There may be smoke damage and soot in your home after the fire. With the use of Personal Protective Equipment, such as masks, rubber gloves, rubber boots, long sleeved shirt and pants, you can do the following things on your own, if you don't hire a fire restoration company:

Exterior

- Use a hose, sprayer or pressure washer on the exterior of your home, driveways, walkways, vehicles, patios, decks and outdoor furniture. Rinse off air intakes and air conditioners. Be sure NOT to use air hoses or leaf blowers – you do not want to drive more contaminants into your house.
- Be careful when using pumps, pressure washers or generators in enclosed spaces. Carbon monoxide may be present in confined or poorly ventilated areas from the operation of pumps, generators, or pressure washers.
- Attic insulation can retain smoke odours, and you may consider replacing it.
- If you have a private septic system, see section 8 below.

Air Circulation

- Get the air moving inside your house by using a fan and opening your windows, providing there is no smoke or air quality advisory for your neighborhood**.
 - **NOTE: When demolition activities are more likely to produce airborne ash:
 - > Stay indoors,
 - Close all external doors and windows, and
 - Turn off the ventilation as much as possible for air conditioners and furnaces.
- Replace your furnace and/ or air conditioner filter.
- Use a humidifier to reduce how much ash becomes air-borne.
- Have a professional do clean your ducts and air conditioning system.
- Ozone generators do not function as "air cleaners" despite advertising claims.

Interior Surfaces

 Wash all interior surfaces with mild detergent or appropriate cleaning solution and rinse thoroughly.

- Include the inside of closets, cupboards, drawers and other locations if there is ash, dust or odour.
- Vinegar helps remove odour and residue from smoke damage.
- Wet wiping or mopping is safer and more effective than dry or dust mopping.
 Change the water if it gets dirty and dispose of the solution out of the house.
- Only vacuum with a unit which has a "HEPA" filter which can catch ash particles.
 Using unfiltered vacuums will just move the ash around the house. Change your HEPA filter frequently.
- Ash left in place is reduced to smaller particles and becomes harder to remove from carpets and surfaces.
- Wash and clean all ash-contaminated household items with mild detergent, changing the water frequently.

Fabric, carpets and clothing

- Soot is oily and can stain carpets, curtains and soft furnishings. Remove soot before you clean or deodorize those items.
- Steam clean carpets, drapes, curtains and furniture, changing the water frequently.
- Launder or dry clean all affected clothing and materials. You may have to run numerous rinse cycles to extract the dirt. Consider doing this laundering off-site using a machine tagged for heavy contaminants at a laundromat. These are usually marked as "oilers." Washable textiles may benefit from adding one to two cups of vinegar to each wash load.

Electronics

• Take electronic equipment outside and "blow out" the components with an air hose, before using. Ash can cause static charges.

Repair water damage

If your home was damaged by water, you will need to get rid of excess water to prevent mold growth.

 Before starting any work, ensure proper Personal Protective Equipment is worn, such as a mask and rubber gloves.

- To help prevent mold growth, any water-damaged or water-stained surfaces and appliances should be checked for damage. Clean the affected areas using warm water and soap.
- Dry wet items as soon as possible.
- Dry wet or waterlogged carpeting as quickly as possible and any underlay should be removed. Steam cleaning carpets with a disinfectant.
- Remove excess moisture from the air inside your home using a dehumidifier.
- Let your insurance company and restoration contractor know as soon as possible if you find any visible mold growth or smell mold inside your home.
- If you discover a small amount of mold and you wish to complete the work yourself, more information is available here:

https://www.healthlinkbc.ca/healthlinkbc-files/air-quality-mould

Clean your yards and outdoor play areas

Your yard and surrounding areas may be impacted by fire, ash and soot. These materials may contain polycyclic aromatic hydrocarbons (PAH), as well as heavy metals. A fire restoration contractor can provide clean-up services.

If you decide to manage this yourself:

- Use Personal Protective Equipment as appropriate, such as masks, rubber gloves, rubber boots, long sleeved shirt and pants.
- Wet down remaining fire debris. **Do not** wash the fire debris into the street.
- Scrape up fire ash and soot remaining on your property as much as possible, place it in plastic bags or other containers that will prevent it from being disturbed, and take it to a landfill.
 - ➤ If your home/property was totally destroyed by fire then the restoration company will look after this for you as they begin the demolition and recovery process.
- If you choose to remediate lawns, you can re-sod or re-seed grassy areas.
- Consider adding new, clean soil to gardens if you suspect or know the area was impacted.
- For children's play areas and equipment, clear away any debris and ensure water that may have been used in the fire is gone.

- If there is fire or structural damage to play equipment, consider blocking access to the area until play equipment is repaired or replaced.
- Use mild detergent and clean water to wash children's outside toys, play equipment, and recreational equipment.
- Sand, gravel or other loose materials placed beneath playground equipment should be removed and replaced whenever there is visible presence of ash, silt and small debris.
- If you suspect or know a sand box was impacted by fire or firefighting materials, the sand should be replaced.

Residential Pools

Wildfires may impact residential pools and make them unsafe to use. There may be structural damage to the pool basin or equipment. Ash, soot, and chemicals used to fight the fire may have impacted the quality of water. If the pool water was not circulating or was not treated, harmful bacteria may have grown in the stagnant water. Work with a pool service company to restore your swimming pool and ensure it is safe to use.

Small whirlpools (hot tubs) should be drained, scrubbed clean, and re-filled. Balance the water prior to using the whirlpool.

Clean up fire retardant and residue

Some fire retardants can make people and pets sick if ingested. Fire retardants can cause eye irritation, dry skin, and stinging to cuts and scrapes on your skin. Consult your family physician as soon as possible if you experience any reaction to these products.

If your home was sprayed with fire retardants or was impacted by windblown fire retardant, these products need to be removed from the outside siding and roof of your house, your vehicles, and any outside toys, furniture, tools etc. A fire restoration contractor will be able to help you with this.

If you decide to manage this yourself:

- Wash your home's roof and siding, vehicles, and outdoor patio furniture with clean water.
- Rinse retardant off vegetation.

- **Never use bleach**, as the reaction between bleach and the fire retardants will produce harmful and explosive gases.
- Use mild detergent and clean water to wash children's outside toys, play equipment, and recreational equipment to remove any residual fire retardant.
- Keep your pets and children away from any water pooling from these cleaning activities.

Fruit and Vegetable Gardens

It may not be safe to eat fruits or vegetables that were growing above ground during the fire, especially if they came into contact with fire retardants. Please follow the link below for more information:

https://www.interiorhealth.ca/YourEnvironment/EmergencyPreparedness/Documents/forest%20fire%20-%20Precautions%20for%20Water%20and%20Food.pdf

- Regularly wet down your garden and lawn until the smoke and ash have been diluted and/or reabsorbed into the air. Ash and soot on vegetation will continue to emit smoke odours for some time.
- Rinse fire retardant off vegetation such as trees, shrubs and plants, if possible.
- It is not recommended that you eat vegetables growing below soil that was affected by the fire.

Septic Systems

During fires, some components of septic systems may be damaged. If your property was directly impacted by fire your septic system should be assessed by a <u>Registered Onsite Wastewater Practitioner</u> (ROWP) in your area. See our website at https://www.interiorhealth.ca/YourEnvironment/HBE/Pages/Onsite-Sewerage-Systems.aspx

For additional information on wildfire recovery please go to the following Environmental Public Health website:

https://www.interiorhealth.ca/YourEnvironment/EmergencyPreparedness/Pages/Forest -Fires.aspx

For more information, please contact your nearest **Environmental Health Office**.