

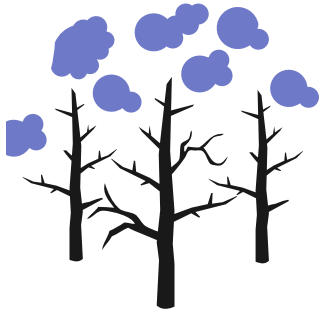
After a Wildfire

Debris and Ash – Handling and Disposal Issues

The ash from forest fires is relatively nontoxic and similar to ash that might be found in your fireplace. However, ash may contain unknown substances, including chemicals. In particular, ash and debris from burned structures may contain more toxic substances than forest fire ash, because of synthetic and other materials present in homes and buildings. Care should be taken when handling any materials from buildings that are either partially damaged by the fire (i.e., salvageable building materials remaining) or completely destroyed by the fire (i.e., only ash and debris remain). Fire ash may also irritate the skin, especially those with sensitive skin. If ash is inhaled, it can be irritating to the nose and throat and may cause coughing. Exposure to ash in the air can also trigger asthmatic attacks.

- Protective clothing and equipment should be worn to avoid skin contact and inhalation of ash and other disturbed material.
- Wear gloves, long-sleeved shirts, and long pants when cleaning ash, and avoid skin contact. If ash does get on your skin, wash it off as soon as possible.
- Well-fitting dust masks may provide some protection during cleanup. Masks rated N-95 or P-100 are more effective than simpler dust or surgical masks in blocking particles from ash. In general, many ash particles are larger than those found in smoke; thus, wearing a dust mask can significantly reduce (but not eliminate) the number of particles that are inhaled.
- Persons with heart or lung disease should consult with their physicians before using a mask during post fire cleanup.
- Soil under the area where the ash/debris was deposited should be scraped to ensure that all ash and building debris has been removed from the site.
- Materials must be thoroughly wetted to minimize dust, then packaged inside a 6-mil plastic sheeting liner and placed in an end-dump roll-off with the top of the roll-off sealed with the plastic sheeting to secure the contents during transport once the roll-off is loaded.
- If asbestos-containing material is known or suspected to be present in ash or debris, please contact a certified contractor to perform abatement or clean up.
- Metal debris must be washed clean of ash/debris prior to recycling.
- Do not allow children to play in the ash.
- Wash ash from toys before allowing children to play with them.
- Wash ash off household pets.

- Avoid circulating ash into the air as much as possible. Do not use shop vacuums and other non-HEPA filter vacuums, as they do not filter out small particles and can blow particles into the air where they can be breathed in.
- In most cases, gently sweeping indoor and outdoor hard surfaces followed by wet mopping is the best way to clean up ash residue. A damp cloth or wet mop may be all that is needed on lightly dusted areas. • Avoid washing ash into storm drains whenever possible.
- If you wet down ash, use as little water as possible.



After a Wildfire

Food Safety

After a Fire Food exposed to fire can be compromised by heat of the fire, smoke fumes, chemicals used to fight the fire, and power outage as a result of the fire. Food in cans or jars may appear to be fine, but if they have been close to the heat of a fire, they may not be edible. Heat from a fire can activate food spoilage bacteria. If the heat is severe, the cans or jars can split or rupture, resulting in unsafe food. Toxic fumes, which may be released from burning materials, are one of the most dangerous elements of a fire. The fumes can be hazardous, and they can also contaminate food. Chemicals used to fight fires contain toxic materials that can contaminate food and cookware.

While some of the chemicals may be listed as non-toxic to humans, they can be harmful if swallowed. These chemicals cannot be washed off of the food.

- Throw away any food stored in permeable packaging, such as cardboard or plastic wrap. Toxic fumes can permeate the packaging and contaminate the food.
- Throw any raw foods stored outside the refrigerator, such as potatoes or fruit, as they could also be contaminated by fumes. Even food stored in the refrigerator or freezer can become contaminated by fumes, as the seals are not necessarily airtight.
- If food from your refrigerator or freezer has an off-flavor or odor when it is prepared, it should be discarded and not eaten.
- Discard foods that have been exposed to chemicals, including:

- o Food stored at room temperature, such as fruit and vegetables

- o Food stored in permeable containers, like cardboard and screw-topped jars and bottles

- o Canned goods and cookware exposed to chemicals can be decontaminated if they have not been subjected to severe heat.

- o Wash canned goods and cookware that have been exposed to chemicals with soap and hot water. Then dip them in a bleach solution (1 teaspoon of bleach per quart of water) for 15 minutes, rinse, and let air dry.

- The main concern with perishables stored in the refrigerator and freezer is the availability of electrical power. Refrigerated items should be safe, provided that the power is off for no more than about two hours. If the power has been off for more than two hours:
 - o Keep the refrigerator and freezer doors closed.

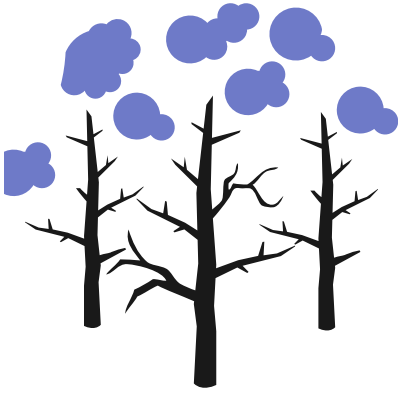
- o Open the refrigerator as little as possible.

o Throw away any perishable food that has been held at temperatures above 41°F for more than 4 hours.

o Throw away any food that has an unusual odor, color, or texture.

o Throw away food in your refrigerator and freezer that looks suspicious, such as the presence of liquid or refrozen meat juices, soft or melted and refrozen ice cream, or unusual odors.

o Never taste food to determine its safety. Food unfit for human consumption is also unfit for pets. If in doubt, throw it out.



After a Wildfire

Disposal Of Household Chemicals

Everyday items, such as household cleaners, fertilizers, and pesticides, contain dangerous chemicals that may have spilled in or near your home during the fire response. Be alert for leaking or damaged containers and household chemicals, such as caustic drain cleaners and chlorine bleach. Take these steps to prevent injury or damage:

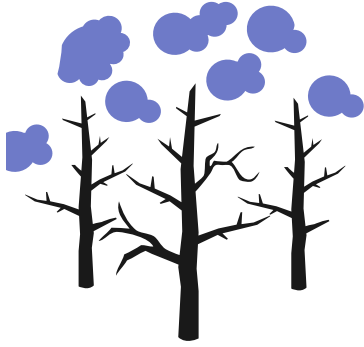
- Keep children and pets away from leaking or spilled chemicals.
- Do not combine chemicals from leaking or damaged containers; doing so might produce dangerous reactions.
- Do not pour chemicals down drains, storm sewers, or toilets.
- Do not try to burn household chemicals.
- Clearly mark and set aside unbroken containers until they can be properly disposed.
- Leave damaged or unlabeled chemical containers undisturbed whenever possible.
- Do not put household chemicals in the trash. When discarding these products, they become household hazardous waste requiring proper disposal.
- Do not put chemicals in a trash bag. Use boxes or plastic tubs to transport.
- Transport chemicals in the trunk of your vehicle.
- Contact Spokane County Solid Waste at [\(509\) 477-6800](tel:5094776800) for advice on where to dispose or store the chemicals.

Propane Tanks

If you have a propane tank system, contact a propane supplier, turn off the valves on the system, and leave the valves closed until the supplier inspects your system. Tanks, brass, and copper fittings, and lines may have been damaged from the heat and can be unsafe. If fire burned the tank, the pressure relief valve likely opened and released the contents.

Heating Oil Tanks

If you have a heating oil tank system, contact a heating oil supplier for an inspection of your system before using it. The tank may have shifted or fallen from the stand, and the fuel lines may have kinked or weakened. Heat from the fire may have caused the tank to warp or bulge. Non-vented tanks are more likely to bulge or show signs of stress. The fire may have loosened or damaged fittings and filters.



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Private Wells

Your well or septic system could be adversely affected by fire, power outages, equipment failure, or contamination of water supplies. Perform a visual inspection of your well and other components which are part of your water supply system, including:

- Damage to electrical wires and wire connectors which supply power to your well
- Damage to above ground PVC plastic pipes used with the well to bring water to your house
- Damage to well houses and special equipment (chlorinators, filters, electronic controls)
- Damage to pressure tanks which could have been caused by exposure to excessive heat
- Damage to storage tanks, vents and over-flow pipes
- If you find damage to your well or water system, contact an appropriate contractor to repair the damage.
- If your water tastes or smells earthy, smoky or burnt, you may need to thoroughly flush your water lines.
- If your system has been damaged or if you are in doubt about the safety of your water, you may want to have your water tested.
- If you suspect that your well or water system has been contaminated, or if sampling indicates that bacterial contaminants are present, disinfection of your well is recommended.
- Each person in a household will need at least one gallon of water per day for drinking, cooking and general hygiene. If you suspect that your water supply may have been compromised during the fire, bring plenty of bottled water with you when returning to your home.

Water Disinfection

If you do not have water that you know is safe, it is possible to purify the water for drinking purposes. Start with the cleanest water you can find and treat it by one of the following methods:

- **Chemical Disinfection:** Treat the water with household-strength liquid chlorine bleach (do not use scented bleach products). Add bleach according to the table below, stir or shake; allow water to stand for 30 minutes before drinking.
- **Boiling Water as Disinfection:** Boil the water for 10 minutes. Once the water has cooled, it can be consumed, or stored in clean containers to use later.

Septic Systems

If you are connected to an onsite wastewater treatment system (septic system), inspect your septic system for damage:

- Damage to plastic piping above ground that may have been damaged by heat
- Raised systems scorched or damaged by fire
- Damage to piping where pipes enter the home/structure
- Disturbance of the soil treatment area by large vehicles such as firefighting equipment
- If your septic system has been damaged, backing up, or malfunctioning, discontinue use and contact a septic system installer or designer for guidance and instruction.