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# Safely Managing Ash and Debris from Burned Buildings

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The State of Oregon is working with federal, state and local partners to safely address ash and debris from the 2020 Oregon wildfires. Removing fire debris is a two-step cleanup process. Step 1 is clearing properties of household hazardous waste to minimize exposure of hazardous materials to the public. Step 2 is removal of ash, debris and burned-out structures.

The process to cleanup household hazardous waste is beginning, and is being provided at no cost to property owners through the county- and state-led process. Household hazardous waste includes items such as fuel, car batteries, fertilizers, pesticides, propane tanks, aerosols, paint, bleach and more. Removal of household hazardous waste and fire debris is required before property owners can rebuild from the fires.

- Visit the state wildfire debris cleanup page to learn how to sign up for free hazardous waste removal through your county (https://wildfire.oregon.gov/cleanup)
- More information about wildfire debris removal (/deq/wildfires/Pages/Wildfire-Debris-Removal.aspx)

# After the Fire: How to Safely Manage Ash and Debris from Burned Buildings

#### If your home was burned by a wildfire

Losing a home to fire can be extremely traumatic, both physically and emotionally. There is sometimes physical injury and loss of human life in some fires, or the loss of pets. Then there is the loss of property, and items of financial or sentimental value.

With all these things to deal with, the last thing many people think about after a crisis is the hazardous nature of ash and fire debris on their property. But there are some basic things you should understand about ash to fully protect yourself, your family and in some cases, your neighbors.

Some property owners may return to the site in the immediate aftermath of the fire, if only to assess the damage. The first thing to understand before doing this is that ash and debris from burned houses, sheds and other structures can be hazardous, particularly when particles are inhaled. This ash and partially burned debris may contain asbestos, mercury, lead, cadmium, chromium and a variety of other dangerous chemicals.

#### Before you return to your property

After contacting your insurance company, property owners should develop a plan before returning to the area that was burned. Check tips from the CDC on how to stay safe after a wildfire (https://www.cdc.gov/disasters/wildfires/afterfire.html).

#### Use caution around debris

- **Be aware of all electrical hazards** including those from downed power lines or other electrical sources as well as hazards from unstable walking surfaces and sharp objects buried in the ash. Use extreme caution at all times when near the debris.
- Wear sturdy footwear, eye goggles, a properly fitted N95 or KN95 respirator and heavy duty
  work gloves. If possible, wear disposable coveralls and dispose of them after use. If you do not wear
  disposable coveralls, make sure to have a clean set of clothes to change into after working or rummaging in
  debris and ashes.
- Cloth face coverings, paper masks or bandanas are not effective at filtering out fine airborne ash, dust or asbestos fibers. N95 and KN95 respirators, if properly fit tested and worn, can offer some protection from airborne particles. See more about masks in next section.
- **Don't use a leaf blower to clean up ash.** It will create more airborne particles. Ash must be adequately wetted to control dust that can become airborne. Water may not always be available, but it is one of the most important means to control ash and asbestos. When cleaning with water, please ensure water containing ash is not washed into the stormwater system or into surface waters. Water containing ash can cause water quality issues.
- **Children should not be involved in cleanup activities**. Do not let children near the debris or in an area where they might breathe airborne particles left from the fire.
- Wash any recovered personal items with water or wipe with a damp cloth to remove potentially toxic dust
  ensuring water containing ash is not washed into the stormwater system or into surface waters. Water
  containing ash can cause water quality issues.
- Before cleaning up ash and other debris, get the material tested to determine if it contains asbestos. Many homes and buildings have materials with asbestos. Asbestos use has decreased significantly over the years, but asbestos still exists in some building materials produced today. If it contains asbestos, hire a licensed asbestos abatement contractor.
- Clean recyclable materials such as metals and concrete with water prior to transport, if possible. This is to reduce the spread of asbestos or other contaminants in the ash. When cleaning with water, please ensure water containing ash is not washed into the stormwater system or into surface waters. Water containing ash can cause water quality issues.
- Household chemicals may be dangerous to handle, so take care before handling paints, bleaches, oils or
  other household hazardous wastes that may be partially burned.
- Call your local garbage hauler or transfer station with questions about waste disposal.

#### Masks and respirators

Cloth face coverings, paper masks or bandanas are not very effective at filtering out fine airborne ash, dust or asbestos fibers. This is because they typically do not have a tight fit around the face. However, they are good for minimizing the release of droplets that help spread COVID-19.

N95 respirators, if properly fit tested and worn, can offer some protection from airborne particles. Otherwise they may create a false sense of security. N95 respirators, are currently in short supply and being reserved for health care workers due to COVID-19.

KN95s are similar to N95s. Some are NIOSH approved, but do not meet health care standards. Like N95s, KN95s need to fit well enough to form a seal and be properly worn. Some individuals may have more difficulty getting them to fit properly and seal as well as an N95. Learn how to get a proper fit in this short instructional N95 respirator video from Oregon OSHA (https://www.youtube.com/watch?v=ucmx\_hjiSW8&feature) . If you use a KN95 respirator, then it needs to be on the FDA-approved list. To check the list, visit FDA's Personal Protective Equipment EUAs page (https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/personal-protective-equipment-euas#appendixa) and scroll to "Appendix A: Authorized Imported, Non-NIOSH Approved Respirators Manufactured in China."

If N95 and KN95 respirators are not available, and you must go to a place with ash and debris, use a face covering that covers the nose and mouth and fits snugly against the sides of the face. Face coverings made of two to three layers are better than those made of one. With any respirator or face covering, make sure that you can breathe comfortably and take breaks away from debris and ash as needed.

### Before you rebuild or begin demolition

State rules govern various aspects of managing and removing asbestos, and these rules are in place to protect public health. Refer to guidance on **DEQ's asbestos webpage (https://ordeq.org/asbestos)** or contact DEQ prior to starting any demolition activities.

Generally, ash and debris can be presumed to contain asbestos and must be abated properly. Otherwise, Oregon requires that an **accredited asbestos inspector (/deq/Hazards-and-**

Cleanup/Documents/asbAccredInspector2020.pdf) perform an asbestos survey (/deq/FilterDocs/asb-SurveyFS.pdf) of the materials to determine next steps. Depending on the results, DEQ can help you determine the appropriate next steps. A survey isn't required for single family homes constructed after Jan. 1, 2004.

Any fire damaged asbestos containing material is considered friable and must be removed by a **DEQ licensed asbestos abatement contractor (/deg/FilterDocs/asb-contr.pdf)** .

## DEQ can help

#### Contact DEQ for help if you:

- Have concerns about asbestos on your property, or if you find evidence of asbestos fibers and want to know more about how to ensure safe disposal.
- Need advice on how to properly dispose of household hazardous wastes such as bleaches, cleaners, paints or oils.
- Need assistance with the inspection or replacement of septic systems.

#### Find more information about managing:

- Asbestos (http://ordeq.org/asbestos)
- Household hazardous waste (http://ordeq.org/hhw)
- Septic systems (http://ordeq.org/septic)

#### **DEQ** asbestos and solid waste contacts

Office	Phone	<b>Counties Served</b>

Medford	(mailto:Craig.FILIP@deq.state.or.us) 541-686-7868  Solid waste: David Esch (mailto:David.ESCH@deq.state.or.us) 541-776-6148	Douglas, Jackson, and , Josephine
	(mailto:Craig.FILIP@deq.state.or.us)	
Eugene	Asbestos (Lane Regional Air Protection Agency): 541-736-1056 Solid Waste: <b>Craig Filip</b>	Lane, Lincoln, Linn, or Mario
Pendleton	Asbestos: 541-278-4626 or 800-304-3513 Solid Waste: 541-298-7255, Ext. 225	Baker, Gilliam, Grant, Malheu Morrow, Umatilla, Union, Wallowa, Wheeler
Bend	Asbestos: 541-633-2019 or 866-863-6668 Solid Waste: 541-298-7255, Ext. 225	Crook, Deschutes, Harney, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco
Coos Bay	Asbestos: 541-269-2721, Ext. 222 Solid Waste: 541-686-7868	Coos, Curry, Douglas, Jackson, Josephine
Salem	Asbestos: 503-378-5086 or 800-349-7677 Solid Waste: 541-686-7868	Benton, Lincoln, Linn, Marion Polk, Yamhill
Portland	Asbestos: 503-229-6351 or 800-452-4011 Solid Waste: 503-970-4890	Clackamas, Clatsop, Columbia Multnomah, Tillamook, Washington