Protect Yourself from Ash

Returning to your home can expose you to ash and other products of the fire that may irritate your eyes, nose, skin, or respiratory tract and may cause coughing, difficulty breathing, and asthma attacks.

Ash is made up of large and tiny particles (dust, dirt, and soot). Ash deposited on surfaces both indoors and outdoors can be inhaled if it becomes airborne. Ash from burned structures in the wildland–urban interface generally contains more harmful chemicals than forest ash.

Avoid Ash Exposure

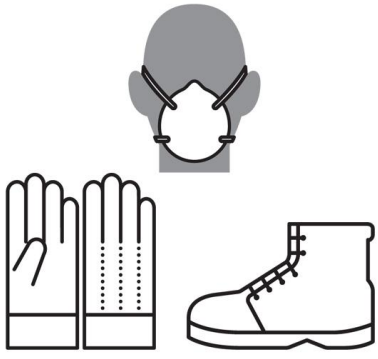
When authorities say it is safe to return to your property, you should be careful to protect yourself and your family from ash. The recommended actions in this fact sheet are for everyone going to sites contaminated by ash. People with heart or lung disease, older adults, and pregnant women should not participate in ash cleanup efforts.

Children should not be near ash or sites contaminated with ash. Children should be permitted to return only after affected areas have been cleaned up. Thoroughly clean ash off all children's toys before use. Clean ash off pets and other animals and keep them away from contaminated sites.

Avoid direct contact with ash. Follow the recommended actions below to reduce your exposure to ash. If you get ash on your skin, in your eyes, or in your mouth, wash it off as soon as you can.

Avoid breathing ash. Wear a NIOSH Approved® respirator.

Do not bring ash back. Avoid tracking ash offsite, into your car, or places where others can be exposed. Wash your hands and change into clean clothes and shoes before you get into your car. Place clothing and shoes contaminated with ash in a plastic bag and seal it completely before putting it in the trunk of the car to keep ash out of the riding compartment. Consider disposable shoe coverings and coveralls to reduce tracking.



Use an N95® respirator and avoid skin contact with ash.

Recommended Actions

Clothing: Wear work gloves, long-sleeved shirts, long pants, socks, and sturdy, thick-soled shoes to avoid skin contact.

Wear goggles and head coverings to keep ash out of your eyes and hair. Contact with wet ash can cause chemical burns or skin irritation.

Protect your lungs: Wear a close-fitting respirator that filters ash particles from the air you breathe to help protect your lungs. Select a respirator that is NIOSH Approved® and has the words "NIOSH" and either "N95" or "P100" printed on it. These have two straps and are available online and at many hardware stores and pharmacies. Buy respirators in a size that can be tightened over your mouth and nose with a snug seal to your face.

Surgical masks and one-strap dust masks will not protect your lungs. They are not designed to seal tightly to the face. If you have heart or lung disease talk to your health provider before using a respirator or working around ash.

Cleanup: Ask local authorities if it is safe for you to clean up your property and find out about any important recommendations or restrictions that they may have. If it is not feasible or safe for you to clean up your property, **check with local authorities for recommendations about selecting reputable specialists.**

When cleaning up indoors, open windows and doors to air out the building, if conditions permit. Use fans to circulate air and exhaust contaminants to the outdoors. Use an air cleaner to capture lingering fine particles. If your HVAC system is safe to use, you can also run it with a high-efficiency filter. See the Indoor Air Filtration fact sheet for more information.

If you go to your property to recover possessions or clean up, avoid stirring up or sifting through ash as much as you can. For example:

- Avoid dry sweeping or dusting. Never use a leaf blower. Before sweeping indoor and outdoor hard surfaces, mist them with water to keep dust down. Follow with wet mopping. Use a damp cloth or wet mop on lightly dusted areas. When you wet down ash, use as little water as you can.
- Dry cleaning methods, like vacuuming or using sticky rollers or "soot" or "chem" sponges, may work well for thick deposits or materials that absorb water. Wet methods, like damp wiping or mopping, may work well for light deposits or materials that do not absorb water.

Vacuum: Use a HEPA vacuum, if available, to clean dusty surfaces. If you must use a typical household vacuum or shop vacuum, wear a respirator, air out the space, and use an air cleaner or HVAC filter while vacuuming to avoid breathing in any contaminants that the vacuum releases back into the air.

Possessions: Decide which possessions can safely be cleaned and saved and which should be discarded. In general:

- **Furnishings** with hard surfaces (e.g., ceramics, glass, wood, metal) and items that can be thoroughly washed (e.g., clothing, bedding, draperies) can be safely cleaned.
- **Upholstered furniture** that is lightly soiled may be able to be cleaned.
- **Consider seeking professional assistance** if you find structural damage or hazardous materials, the HVAC system is impacted, or the scale of cleanup is more than you can manage on your own. Local authorities can recommend reputable specialists.

Food and water: Wash any fruits or vegetables from trees or gardens where ash has fallen. Avoid bringing food or eating at the affected site unless you keep the food in a sealed container. Wash your hands well before

eating. Check with your drinking water provider to be sure your water is safe to drink.

Disposal: Collected ash may be disposed of in the regular trash. Ash should be stored in plastic bags or other containers to prevent it from being stirred up. If you suspect hazardous waste, including asbestos, is present, contact your local hazardous waste authorities regarding appropriate disposal. Avoid washing ash into storm drains.

Other dangers: Other dangers may be present, so pay attention to local advisories. These may include:

- **Lithium-ion batteries:** See After a Wildfire: Lithium-Ion Battery Safety, such as those in electric vehicles, cameras, cell phones, power tool batteries, and game controllers.
- **Mold:** Mold may be present if water was used to put out a structure fire. See Mold Cleanup in Your Home for tips and techniques.
- **Asbestos, heavy metals, and cancer-causing chemicals:** These include metals (lead, arsenic, cadmium, chromium [total and hexavalent], copper, nickel, zinc), polycyclic aromatic hydrocarbons (or PAHs), dioxins, and furans. Check ToxFAQs™ for more information.

Avoid using products that add chemicals to the air to remove or neutralize smoke odors, such as ozone and hydroxyl generators, or other oxidizers.

Resources

Scan the QR code to the right to access an online version of this fact sheet and the additional resources below.

Information on Air Quality

Check out the AirNow Fire and Smoke Map, your state air quality website, or your local news for air quality information. Access these resources using the links below.

- **AirNow Fire and Smoke Map**
  - **IOS App**
  - **Android App**
- **Wildfire Guide Fact Sheets**
- **Resources and Information on Wildland Fires and Smoke**
- **Infographics on Staying Safe Before, During and After Fires**

Additional Resources

- **FEMA's Homeowner's Guide to Risk Reduction and Remediation of Residential Smoke Damage**
- **Learn How to Use an N95 Respirator Mask**
- **Agency for Toxic Substances and Disease Registry's ToxFAQs**