# Wildfire Smoke Is Dangerous To Your Health

Wildfire smoke contains many air pollutants that are known to contribute to cardiovascular and respiratory outcomes. Children, the elderly, and people with preexisting heart and lung diseases or who are immunocompromised may be more impacted by exposure to smoke.

# Wildfire Smoke Contains

 Particulate matter, especially fine particulate matter that can go very deep into the lungs and may contain other dangerous substances

- Ozone
- · Carbon monoxide
- Polycyclic aromatic compounds
- Nitrogen dioxide

### Minimize Your Exposure to Wildfire Smoke »

#### **Steps You Can Take at Home »**



- Keep windows and doors closed as much as possible.
- If you have to go outside, wear a respirator.
- If you have a heating, ventilation and air conditioning (HVAC) system with a fresh air intake, set the system to recirculate mode, or close the outdoor intake damper to prevent outdoor smoke from getting inside. Use high efficiency filters with a MERV 13 rated filter or higher, and change on a regular basis.
- You can also use a high efficiency portable air cleaner to remove fine particulate matter from the air. Avoid air cleaners that generate ozone, which is a lung irritant.
- Use bottled water until your local water control agency has approved tap water.
- If your home was affected by a wildfire, do not return home until authorities say it is safe.

If you live near homes and other areas that burned, minimize your exposure to wildfire smoke, soot, and ash during clean up activities. Toxic chemicals from smoke and ash can persist in the air and on surfaces (e.g., floors, walls, ceilings) for several weeks following the fire »

- Keep away from ash. Immediately wash any part of your body that touches ash to avoid irritation.
- Remove shoes that may contain smoke and ash before entering your home.
- Use only high efficiency particulate air (HEPA-filter) vacuum cleaners.
- Do not use leaf blowers or do any activities that will push ash into the air.
- Wear a respirator to prevent breathing in wildfire smoke particles.
- Wear gloves, long-sleeved shirts, long pants and shoes to avoid contact with ash and other debris.

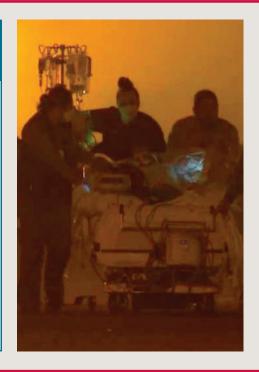




# What You Need to Know Before You Wear a Respirator »



- Wear a NIOSH-approved respirator that fits tightly to your face to filter out wildfire smoke pollutants. See https:// www.cdc.gov/niosh/topics/respirators/default.html for more information.
- Bandanas, paper masks that do not fit tightly on your face, and other masks will not provide protection from the most dangerous parts of smoke.
- Some health conditions like heart or lung disease can make wearing a respirator difficult or dangerous.
- Even if you wear a respirator, spend as little time outdoors as possible. Refrain from physically exerting yourself when you exert yourself, your breathing becomes deeper and quicker which means you breathe in more smoke more deeply into your lungs.



### **Health Effects of Wildfire Smoke Exposure**

## Researchers investigated impacts on health after days with heavy smoke in California and found »

- ED visits increased significantly for all adults when the smoke was denser, especially for older adults.
- Asthma-related hospital visits increased, especially for children aged 0 to 5 years.
- The risk for heart attack increased significantly for adults over 65 years old follow a day with dense smoke.
- The risk for strokes significantly increased for adults over 65 years old even on light and medium smoke days.
- Long-term exposure to wildfire smoke may also increase the risk of dementia, lung cancer, and brain tumors.
- Wildfire smoke can travel long distances and cause health effects hundreds of miles from its source.

Sources: Heany et al., GeoHealth, May 2022; Korsiak, J., L. Pinault, et al., Lancet Planet Health, May 2022; Wettstein et al., Journal of the American Heart Association, April 2018; Zhang, B., J. Weuve, et al., JAMA Internal Medicine, August 2023.

For more information, see the California Department of Public Health's FAQs on wildfire smoke » www.cdph.ca.gov/Programs/EPO/Pages/BP\_Wildfire\_FAQs.aspx

For information regarding air quality in your area, see airnow.gov and www.airnow.gov/aqi/aqi-basics/



