WILDFIRES AND YOUR HEALTH

Climate change and wildfires

Climate change is making wildfires worse. Our warming temperatures contribute to both the severity and duration of many wildfires, and this trend is projected to increase in the coming decades.[1, 2]

Wildfires across the country, and especially in the West, are burning more intensely than ever before, and what used to be a four-month wildfire season now stretches into most of the year.[3] Wildfires can have a significant impact on our health.

How does wildfire smoke affect our health?

Wildfires affect people in the immediate area of a fire, but they also send vast amounts of dangerous pollution into communities near and far. Tiny particles of pollution, known as PM2.5, can become embedded in the lungs and bloodstream, making them a threat to our health.

Immediate health impacts of smoke inhalation can include coughing, difficulty breathing, eye irritation, scratchy throat, runny nose, chest pain, headaches, and asthma attacks. Smoke inhalation can also exacerbate preexisting conditions, like heart disease.[4]

Wildfire smoke can contain toxic air pollutants such as polycyclic aromatic hydrocarbons, benzene, and formaldehyde.[5, 6] Wildfire smoke lingers and spreads, causing major health problems. Cleaning up from fires also exposes people to potentially hazardous conditions, such as heavy metals in ash and dust, and risk of injury from unstable buildings and debris.

Wildfires can also take a toll on mental health. Living through a wildfire can make people more vulnerable to depression and post-traumatic stress disorder,[7] and research shows that exposure to the fine particle pollution in wildfire smoke may be associated with anxiety, depression, and even increased risk of suicide.[8]

What's in wildfire smoke?

Wildfire smoke is made up of ash, tiny particles, liquid droplets, and gases. When wildfires reach homes and towns, the smoke also contains toxic chemicals released from burning flame retardants in furniture and fabrics, and other chemicals in building materials.

One of the most harmful components of wildfire smoke is fine particle pollution, or PM2.5—a dangerous air pollutant that also comes from car and truck tailpipes, power plants, and factories. Each individual bit of solid or liquid in PM2.5 is less than 2.5 microns in diameter—smaller than one twentieth the width of a human hair.

In the US, wildfire smoke contributes to 15 to 30% of the emissions of PM2.5 in the air we breathe.[9]

MOMS clean air FORCE

The mission of Moms Clean Air Force is to protect children from air pollution and climate change. We envision a safe, stable, and equitable future where all children breathe clean air. We fight for Justice in Every Breath, recognizing the importance of equitable solutions in addressing air pollution and climate change. www.momscleanairforce.org

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How to stay safe in wildfires

Pay attention to emergency alerts. Have several ways to receive alerts to be sure you don't miss anything important. You can download the **FEMA app** to receive real-time alerts from the National Weather Service,[10] and check **Ready.gov/alerts** to make sure you're receiving emergency alerts from your community.

Make an emergency evacuation plan. Know your community's evacuation plans,[11] and identify buildings in your area (like schools or libraries) that have installed sophisticated air filtration centers.

Pay attention to air quality alerts. Many phones allow you to track air quality in weather apps. You can find air quality and fire information for your area at **AirNow.gov**.

Gather emergency supplies ahead of time. Prepare a basic emergency supply kit before you need it, using a checklist **like this one** from Ready.gov.[12] If you live in an area that is prone to wildfires, make sure your emergency supplies include smoke-protecting face masks. Choose a N95 or N100, NIOSH-approved face mask—with two straps—to get protection from fine particles. (Regular surgical masks, wet bandanas, and single-strap masks won't offer a tight enough seal). These masks are available at drugstores, hardware stores, and online.

Know the warning signs of smoke inhalation. Early signs of trouble include wheezing, stinging in eyeballs and throat, a feeling of mucous membrane "burn," chest tightness, and a chronic need to cough.

Minimize smoke exposure. During a wildfire, make a plan to keep smoke outside. Choose a room that can be closed off from outside air, and if possible, set up a portable air cleaner or filter. (**Here are more tips from EPA on setting up a "clean room" during wildfires.**[13])

Know who's vulnerable. Communities especially vulnerable to the health impacts of wildfire smoke include children, pregnant people, the elderly, fire responders, communities of color, outdoor workers, low-income communities, and people with certain underlying health conditions.[14, 15, 16]

Keep children safe

Children are especially vulnerable to wildfire smoke. They breathe faster than adults, and their small lungs are still developing. Children with allergies, asthma, or chronic health issues may have more trouble breathing during wildfires, and unfortunately, the most effective masks are not manufactured to seal around small faces.

Talk to your child's health care provider to make a plan for keeping them safe during fire season, and read through these **tips from the CDC** on keeping kids safe in wildfires.[17]

What you can do

Use your voice to advocate for strong clean air, clean energy, and climate investments. Everything we do to reduce global greenhouse gas emissions now can help reduce the impact of wildfires in the future.

Visit **www.momscleanairforce.org** to learn more about the health impacts of wildfires and how you can take action.

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Links and sources:
www.momscleanairforce.org/sources-wildfires-health

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