



Wildfire Smoke & Your Health

What's in smoke from a wildfire?

Smoke is comprised of small particles, gases and water vapor. Water vapor makes up the majority of smoke. The remainder includes carbon monoxide, carbon dioxide, nitrogen oxide, irritant volatile organic compounds, air toxics and very small particles.

Is smoke bad for me?

Yes. It's a good idea to avoid breathing smoke. If you are healthy, smoke usually does not present a major risk. But there are people who are at risk, including people with heart or lung diseases such as congestive heart disease, chronic obstructive pulmonary disease, emphysema or asthma. Children and the elderly also are more susceptible to smoke.

How does smoke harm my health?

A major health concern of smoke comes from particulate matter, solid particles and liquid droplets found in air. In smoke, these particles often are very tiny, smaller than 2.5 microns in diameter. These particles can build up in your respiratory system, causing a number of health problems including burning eyes, runny noses and illnesses such as bronchitis. The particles also can aggravate heart and lung diseases such as congestive heart failure, chronic obstructive pulmonary disease, emphysema and asthma.

How do I know if I'm being affected?

You may have a scratchy throat, cough, irritated sinuses, headaches, runny nose and stinging eyes. Children and people with lung diseases such as asthma may find it difficult to breathe deeply or vigorously and they may cough or feel short of breath. People with diseases such as asthma or chronic bronchitis may find their symptoms worsening.

What can I do to protect myself from wildfire smoke?

- Use common sense. If it's smoky outside, it's probably not a good time to go jogging. And it's probably a good time for your children to remain indoors.
- If you're advised to stay indoors, keep your windows and doors closed. Run your air conditioner if you have one. Keep the fresh air intake closed and the filter clean.
- Help keep particle levels lower indoors by not using anything that burns such as wood stoves, gas stoves, and even candles. And don't smoke. That puts even more pollution in your lungs – and those of the people around you.
- Drink plenty of fluids (not alcohol) to moisten the respiratory tract.
- If you have asthma, be vigilant about taking your medications as prescribed by your doctor. If you're supposed to measure your peak flows, make sure you do so. Call your doctor if symptoms worsen.

Do air filters help?

Air filters can be helpful. Indoor air filtration devices with HEPA filters can reduce the number of particles indoors. Make sure to change the filters regularly. Don't use an air cleaner that works by generating ozone. That puts more pollution in your home.

Do dust masks help?

Paper "comfort" or "nuisance" masks are designed to trap large dust particles, not the tiny particles found in smoke. These masks will reduce your total smoke exposure but will not protect your lungs from the fine particles present in wildfire smoke.

Are the effects of smoke permanent?

Healthy adults generally find their symptoms (runny noses, coughing, etc.) disappear after the smoke is gone.