

How to Protect Yourself From Wildfire Smoke

Smoke is not good for you

Smoke is a complex mixture of gases and fine particles produced when wood and other organic matter burn. The biggest health threat from smoke is from fine particles that can get into your eyes and respiratory system. Fine particles cause burning eyes, runny nose, and bronchitis. Fine particles also aggravate chronic heart and lung diseases.

Some people are more susceptible to health problems from smoke

If you have heart or lung disease such as congestive heart failure, angina, COPD, emphysema or asthma, you may experience health effects sooner or at lower smoke levels than others.

Older adults are more likely to be affected by smoke. Children are also highly susceptible. Their respiratory systems are still developing, they breathe more air per pound of body weight than adults, and they are more likely to be active outdoors.

Outdoor workers are more susceptible because of their increased exposure.



How to tell if smoke is affecting you

Smoke irritates the eyes and airway. It causes stinging eyes, runny nose, coughing, scratchy throat, irritated sinuses, and headaches.

People with heart disease might experience chest pain, palpitations, shortness of breath, or fatigue. Those with lung disease may not be able to breathe as deeply and have symptoms like coughing, phlegm, chest discomfort, wheezing and shortness of breath.

In high smoke levels during and after a wildfire, everyone may have some of these symptoms.

How to protect yourself from smoke

Limit your exposure to smoke. Here are some ways to protect yourself from smoke from fires:

- Follow recommendations in the Air Quality Index (see table on reverse side)
- If it looks smoky outside, stay in and keep children and pets inside
- Keep indoor air as clean as possible. Close windows, doors, and fireplace dampers unless it's extremely hot
- Run air conditioners and air cleaners on the recirculation setting. It is not recommended to use whole house fans because they can bring in outside air
- Avoid burning anything wood fireplaces, gas logs, gas stoves, candles, or cigarettes
- Don't vacuum, it stirs up the particles in your home
- In the car, keep windows and vents closed, use the air conditioner in recirculate mode
- Wear an N95 or P1000 Disposable Particulate Respirator, placing the 2 straps above and below the ears. Replace it daily. These can be difficult for those with lung disease to use, so check with your doctor. Dust masks from the hardware store do not protect against particles in smoke and are not enough
- If you have asthma or lung disease, take your medications and follow your doctor's directions. Call your doctor if your symptoms get worse
- Only your doctor can advise you about your specific health situation

Protect yourself during cleanup

- When cleaning up debris from fire, first thoroughly wet down dust and soot
- Wear a N95 or P1000 mask and replace it daily. Avoid areas where asbestos or other hazardous materials are suspected
- Hazards from the fire smoke are considered greater than from the re-suspended dust and ash

Where to learn more:

Washington Smoke Information www.wasmoke.blogspot.com

Protect Yourself from Lethal Wildfire Smoke, American Lung Association http://www.lung.org/about-us/our-impact/top-stories/protect-yourself-wildfire-smoke.html

Wildfire Smoke: A Guide for Public Health

Officials

http://www.arb.ca.gov/carpa/toolkit/data-to-mes/wildfire-smoke-guide.pdf

Source:

How Smoke from Fires Can Affect Your Health, US EPA

http://www.epa.gov/airnow/smoke/Smoke2003 final.pdf



Air Quality Index http://airnow.gov/index.cfm?action=aqibasics.aqi

Air Quality Index	Air Quality	Protect your health by:
0 - 50	Good	None needed
51-100	Moderate	Those with heart or lung disease, older adults and kids should consider reducing prolonged or heavy exposure
101-150	Unhealthy for sensitive groups	Those with heart or lung disease, older adults and kids, reduce prolonged or heavy exertion
151-200	Unhealthy	Everyone should reduce prolonged or heavy exertion
201-300	Very Unhealthy	Those with heart or lung disease, older adults and kids, avoid all physical activity outdoors. Everyone else avoid pronged or heavy exertion
301-500	Hazardous	Those with heart or lung disease, older adults and kids remain indoors and keep activity level low. Everyone should avoid all physical activity outdoors

Soul Catcher logo University of Washington School of Public Health



UW Center for Ecogenetics & Environmental Health http://depts.washington.edu/ceeh/ NIEHS Grant #ESO7033

Twitter: @ecogenetix Contact: marhair@uw.edu