

Wildfire Smoke and Health Impacts - FAQs

Why are we concerned with wildfire smoke?

Smoke is a complex mixture of water vapor, fine particles and many different chemicals. The fine particles from wildfire smoke create the biggest health concern. Due to climate change, wildfires throughout the western states are becoming more frequent causing more days with poor air quality in Flathead County.

What are some of the health effects of wildfire smoke?

Wildfire smoke contains fine particles which are respiratory irritants, and when inhaled deeply, can affect the lungs and the heart. Exposure to high concentrations of fine particles can cause persistent cough, runny nose, phlegm, wheezing, and difficulty breathing. Individuals with respiratory conditions, compromised immune systems or other significant health issues can be particularly susceptible to fine particles.

However, exposure to wildfire smoke can affect healthy people, too, causing respiratory symptoms and reductions in lung function. The body's ability to remove foreign materials from the lungs, such as pollen and bacteria, can be affected, too. Even short-term exposure (i.e., days to weeks) to fine particles can aggravate pre-existing heart and lung disease.

Are some people more affected than others?

Age, lung disease such as asthma, Chronic obstructive pulmonary disease (COPD) or heart disease, and other respiratory illness put people at risk of health problems from wildfire smoke. Specific groups, including children, pregnant women, elderly individuals, and people who are sensitive to air pollution should take precautions to limit exposure to wildfire smoke.

What if I have asthma, another lung disease or heart disease?

If you have asthma or another lung disease, make sure you follow your healthcare provider's directions about taking your medicines and following your asthma action plan. Have at least a five-day supply of medication on hand and call your healthcare provider if your symptoms worsen. For individual concerns from specific smoke events, consult a medical professional.

If you have cardiovascular disease, follow your healthcare provider's directions and call if your symptoms worsen. If you think you are having a heart attack or stroke, dial 9-1-1.

See CDC website for additional tips: <https://www.cdc.gov/disasters/wildfires/duringfire.html>

How can I tell if the air is unhealthy?

The following websites have information on current levels of air quality:

- US EPA – Air Quality Index
<https://www.airnow.gov/>
- Montana Department of Environmental Quality:
<http://svc.mt.gov/deq/todaysair/>
- Flathead County Health Department
<https://flatheadhealth.org/environmental-health/air-quality/>

How can I reduce exposure to wildfire smoke?

If you can't evacuate the area, staying inside in a safe place with the doors and windows closed can usually reduce exposure to air pollution by at least a third or more. Reduce other sources of indoor air pollution: smoking cigarettes, using gas, propane and wood-burning stoves and furnaces, spraying aerosol products, frying or broiling meat, burning candles and incense, and vacuuming can all increase particle levels in a home and should be avoided when wildfire smoke is present.

If you have a central air conditioning system in your home, set it to re-circulate or close outdoor air intakes to avoid drawing in smoky outdoor air. Be sure to change your air filter on a regular basis. If you do not have central air conditioning, consider buying a portable HEPA air cleaner. (See: <https://www.missoulacclimate.org/wildfire-smoke.html> for more information)

What is a HEPA Portable Air Cleaner and how does this help?

HEPA Portable Air Cleaners are appliances that filter out tiny particulate matter in wildfire smoke. HEPA Portable Air Cleaners typically come with a replaceable carbon filter that removes compounds in wildfire smoke as well as pollen. Because the units blow out filtered air, they double as fans! HEPA filters are available for central heating and cooling systems but for homes without central air, the portable units with small HEPA filters can plug into a standard wall outlet. The size of the units varies depending on the size of the room to be filtered.

Where can I get a HEPA Portable Air Cleaner?

HEPA filters can be purchased on-line and from major retail chains that sell home goods. (i.e. Walmart, Target, Home Depot). Since 2020 Climate Smart Glacier Country has worked with various community partners to distribute units to at-risk low income households. For more info:

[CSGC HEPA Filter Program Flyer](#)

[CSGC HEPA Filter Fact Sheet](#)



<https://climatesmartglaciercountry.org/>

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Logan Health Foundation/Logan Health <https://www.logan.org/foundation/> (current partner)

Flathead City-County Health Department <https://flatheadhealth.org/> (past partner)

Whitefish Community Foundation <https://whitefishcommunityfoundation.org/>

Flathead Electric Cooperative Roundup for Safety
<https://www.flatheadelectric.com/our-community/roundup-for-safety/>

FireSafe Flathead <https://www.firesafeflathead.com/>

Fire Adapted Communities Learning Network Safety <https://fireadaptednetwork.org/>

The Watershed Center <https://watershed.center/>