

Frequently Asked Questions: Wildfire Smoke and Health Impacts

August 2023

Why has the air quality in Wisconsin been affected recently?

Several times in recent months, drifting smoke from wildfires in Canada has worsened the air quality in Wisconsin and across the U.S.

Why is wildfire smoke harmful to human health?

Smoke from fires is a mixture of gases and very small particles that can carry chemicals. When someone breathes in smoke, those small particles are the biggest threat to their health. You may not be able to see particles in the air.

The particles can get into your eyes and respiratory system and can cause **burning eyes, runny nose**, and illnesses like **bronchitis**. These small particles can also make chronic heart or lung diseases worse.

If you're healthy, you're usually not at significant risk from short-term exposures to smoke – but it's still a good idea to avoid breathing it in, both indoors and outdoors.

Who's most at risk of negative health effects from breathing smoke in the air?

- People who have [heart disease](#) or lung diseases like [COPD](#) or [asthma](#) are at higher risk from smoke in the air.
- Older adults are more likely to be affected by smoke. This might be due to their increased risk of heart and lung diseases.
- [Children](#) are more likely to be affected by smoke in the air. Children's airways are still developing, and they breathe more air per pound of body weight than adults. Also, children often spend more time playing or participating in activities outdoors.
- Pregnant people are more likely to be affected by smoke. This may be because of physical changes during pregnancy, like increased breathing rates. Pregnant people affected by smoke may also be at risk for preterm birth and babies born with low birth weight.

What are the symptoms of breathing smoky air?

Symptoms can include irritated eyes, nose, or throat; coughing; phlegm; chest tightness; and shortness of breath.

People with heart or lung disease, older adults, and children have higher risk of symptoms if they're exposed to smoke in the air. Even if you're healthy, you might experience temporary symptoms if you're exposed to high levels of particles in the air.

If you have asthma or other lung disease, follow your doctor's directions about taking your medications and following your asthma management plan. Call your doctor if your symptoms worsen.

How can I know if the air in my area is unhealthy?

You can check your area's current air quality at [AirNow.gov](https://airnow.gov).

Click [here](#) to get a forecast of air quality over the next several days.

When air quality decreases, the Wisconsin Department of Health Services may announce an [air quality health advisory](#). Want to get email or text alerts about future air quality advisories? Click [here](#).

- If an air quality advisory is issued at the **orange level**, higher-risk people are recommended to stay indoors and cut back or postpone strenuous outside activity. Find out if you're at higher risk [here](#).
- If an air quality advisory is issued at the **red level**, everyone should cut back or postpone strenuous outside activity.

If the air quality in my area worsens, how can I keep the air in my home clean?

When air quality worsens or an air quality advisory is in place, try to limit your exposure to smoke, especially if [you have a higher risk of negative health effects](#).

There are several things you can do to improve your indoor air:

- Stay indoors with windows and doors closed.
- Run your air conditioner if you have one. Keep the fresh air intake closed and make sure the filter is clean.
- Use a portable air purifier equipped with a HEPA filter. Get more information about air purifiers [here](#).
- Ensure that the filters in your HVAC system are maintained and replaced per the manufacturer's recommendations. Consider upgrading your furnace filter to one with a higher Minimum Efficiency Reporting Value (MERV) rating. Find out more about MERV ratings [here](#).
- Reduce or avoid activities that create smoke or other particles indoors, like smoking, using gas or wood-burning stoves, frying or broiling food, or burning candles or incense.
- Avoid vacuuming, unless you use a vacuum with a HEPA filter.
- When inside a vehicle, keep the windows closed and set your air conditioning to 'recirculate'.

If there is an air quality advisory in place, is it safe to be outdoors? Should I eat or exercise outside?

It depends. Check your area's air quality at [AirNow.gov](https://airnow.gov). Each air quality level has specific recommendations about what is safe to do outdoors.

If the state Department of Health Services issues an air quality advisory, follow [their recommendations for spending time outdoors](#).

When outdoors, if you experience coughing, chest pain, or shortness of breath, take those symptoms as a sign to take a break or go indoors.

If you must be outside for long periods of time in smoky air, you may benefit from wearing a tight-fitting N95 or P100 respirator to filter out particles in the air. (People with heart or lung problems should consult their health care provider before using a respirator.) For more information about respirators and where to obtain them, click [here](#).

To protect kids' health, schools and child care organizations should refer to [EPA guidance on air quality and outdoor activity](#).

Children who have asthma should have an action plan for treating symptoms **and** keep rescue medications (like an inhaler) on hand.

Where can I find more information?

- More about fires and your health: [Fires and Your Health | AirNow.gov](#)
- Details about air quality health advisories and recommendations: [Air: Air Quality Health Advisories | Wisconsin Department of Health Services](#)
- How to protect yourself from unhealthy air: [10 Tips to Protect Yourself from Unhealthy Air | American Lung Association](#)