



# Wildfire Smoke and Our Health

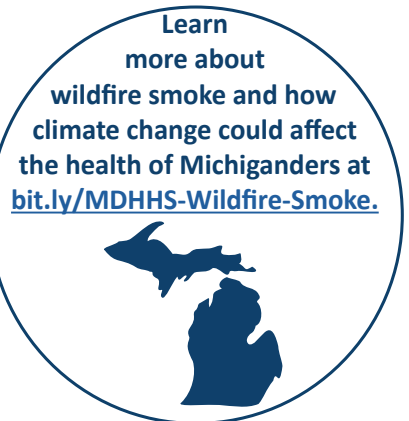
Michiganders could experience more days with poor air quality due to wildfire smoke. This fact sheet will tell you how to prepare and who is most at risk for the negative health effects of wildfire smoke.

Climate change makes wildfires more likely. Hotter and drier conditions in North American forests mean there is more dry wood and underbrush that can easily ignite due to a stray campfire spark or lightning strike. These fires can spread quickly and burn thousands of acres of forests.

The smoke from these fires is a serious health concern. Smoke can move hundreds of miles through the atmosphere and affect the air quality in places far away from where the fire is burning.

## Wildfire smoke is bad for your health

Smoke is made up of gases and fine particles that can harm your health. The fine particles in smoke, which are called particulate matter 2.5 (PM 2.5), can cause difficulty breathing, burning eyes, and illnesses such as bronchitis. Serious health effects include asthma attacks, heart failure and stroke, which can lead to premature death.



## Some people are more likely to be harmed by wildfire smoke



Everyone should avoid breathing wildfire smoke, but some people are more affected than others. The chart on the other side of this document explains when sensitive groups should take action and what they should do.

Sensitive groups include:

- People with heart disease (unusually sensitive).
- People with lung disease, including asthma and Chronic Obstructive Pulmonary Disease (COPD) (unusually sensitive).
- Older adults (60 and older).
- Children and teenagers.
- Pregnant people.
- Outdoor workers.

Additionally, social or economic situations may put some people at greater risk of harm from wildfire smoke. Examples include people without housing; people with limited mobility; people with low income who cannot access protective equipment or air filtering equipment; and people that live in areas with lower air quality.

Visit the MICHAP website at [Michigan.gov/ClimateandHealth](https://Michigan.gov/ClimateandHealth) to learn more about how climate change could affect the health of Michiganders.

## There is a lot you can do to protect your health

- Be aware of outdoor air quality and sign up for alerts. You can get information about current air quality from [AirNow.gov](https://airnow.gov). You can also sign up for Michigan-specific email alerts at [EnviroFlash.info/signup.cfm](https://enviroflash.info/signup.cfm).
- When outdoor air quality is poor, choose indoor activities and avoid strenuous outdoor activities.
- Protect indoor air quality by keeping smoke out of your home and filtering indoor air.
  - Close windows and doors.
  - A heating and cooling system that uses forced air is equipped with an air filter. Prepare for wildfire events by:
    - Knowing if there is a fresh air intake. Close this during a wildfire smoke event. If you have a window air conditioner, close the outdoor air damper.
    - Using air filters with a rating of [MERV-13](https://www.epa.gov/merv) or higher.
  - Try to keep the air clean in at least one room. Use a portable air cleaner that is appropriately sized. If you do not have a portable air cleaner, you can make a temporary do-it-yourself air filter. Learn more at [bit.ly/EPA-DIY-Air-Filter](https://bit.ly/EPA-DIY-Air-Filter).
- When you can't avoid wildfire smoke, the best mask to use is a tight-fitting N95 or P100 respirator marked with "NIOSH." If those are unavailable or do not fit well, KN95 and KF94 respirators are an option. Learn more at [bit.ly/EPA-masks](https://bit.ly/EPA-masks).
- Learn more about protecting indoor air during wildfire smoke events at [bit.ly/Indoor-Air-Wildfires](https://bit.ly/Indoor-Air-Wildfires).

## The Air Quality Index

The Air Quality Index is a tool that shows how clean or polluted your air is and possible health concerns at each level. Learn more at [airnow.gov/aqi/aqi-basics](https://airnow.gov/aqi/aqi-basics).

Levels of Concern	Who Needs to be Concerned?	What Should I Do?
<b>Good</b> (0–50)	No one	It's a great day to be active outside.
<b>Moderate</b> (51–100)	Some people who may be unusually sensitive to particle pollution such as those with heart and lung disease.	<b>Unusually sensitive groups:</b> Consider making outdoor activities shorter and less intense. Watch for new or worsening symptoms such as coughing or shortness of breath. Contact your health care provider if they persist. <b>Everyone else:</b> It's a good day to be active outside.
<b>Unhealthy for Sensitive Groups</b> (101–150)	Sensitive groups include people with heart or lung disease, adults 60 and older, children and teenagers, pregnant people and outdoor workers.	<b>Sensitive groups:</b> Make outdoor activities shorter and less intense. Watch for new or worsening symptoms such as coughing or shortness of breath. Contact your health care provider if they persist. <b>Everyone else:</b> It's okay to be active outside.
<b>Unhealthy</b> (151–200)	Everyone	Watch for new or worsening symptoms such as coughing or shortness of breath. Contact your health care provider if they persist. <b>Sensitive groups:</b> Avoid long or intense outdoor activities. Consider rescheduling or moving activities indoors. <b>Everyone else:</b> Reduce long or intense outdoor activities. Take more breaks during outdoor activities.
<b>Very Unhealthy</b> (201–300)	Everyone	Watch for new or worsening symptoms such as coughing or shortness of breath. Contact your health care provider if they persist. <b>Sensitive groups:</b> Avoid all physical activity outdoors. Reschedule to a time when air quality is better or move activities indoors. <b>Everyone else:</b> Avoid long or intense outdoor activities. Consider rescheduling or moving activities indoors.
<b>Hazardous</b> (301–500)	Everyone	<b>Sensitive groups</b> should remain indoors. <b>Everyone</b> should keep activity levels low and follow tips for keeping particle levels low indoors.

The Michigan Department of Health and Human Services will not exclude from participation in, deny benefits of, or discriminate against any individual or group because of race, sex, religion, age, national origin, color, height, weight, marital status, partisan considerations, or a disability or genetic information that is unrelated to the person's eligibility.

MDHHS-Pub-1769 (Sept 2023)