



Wildfire Smoke and Your Health: Frequently Asked Questions

Can wildfire smoke be harmful to my health?

- Yes. Wildfire smoke is a mixture of gases and fine particles that can cause a variety of health effects if inhaled in large enough quantities.
- There are several factors that determine if smoke will affect your health, including how much you breathe in, how long you are exposed to smoke, the degree to which you are engaging in physical exertion, and your individual health status.

Who is most at risk for health effects from wildfire smoke exposure?

- Anyone may experience health effects from wildfire smoke, but those most at risk include:
 - Children less than 18 years old
 - Adults aged 65 years or older
 - Pregnant women
 - People with chronic conditions, such as heart or lung disease, asthma, and diabetes
 - Outdoor workers, including those responding to a wildfire
 - People who have a lower socioeconomic status, including individuals experiencing homelessness or those who have limited access to medical care
 - People who are immunocompromised or taking drugs that suppress the immune system
 - People who currently have or are recovering from viral respiratory infections, such as COVID-19

What are the potential symptoms and health effects of wildfire exposure?

- Wildfire smoke can cause a variety of symptoms, such as chest pain, coughing, congestion, fatigue, headaches, irritated sinuses, rapid heartbeat, runny nose, scratchy throat, shortness of breath, stinging eyes, and wheezing.
- Exposure to wildfire smoke can exacerbate pre-existing respiratory and cardiovascular disease, such as asthma and chronic obstructive pulmonary disease (COPD).
- Wildfire smoke may increase the severity of symptoms from respiratory infections. For example, respiratory infections can make it harder to breathe, and poor air quality caused by wildfire smoke can make breathing even more difficult. It is important to note that dry cough, sore throat, and difficulty breathing are symptoms common to respiratory infections and wildfire smoke exposure. Symptoms like fever or chills, muscle or body aches, and diarrhea are not related to smoke exposure.
- Wildfires can also cause mental health concerns and psychological stress.
- If you are experiencing severe symptoms, such as difficulty breathing or chest pain, you should seek prompt medical attention by calling 911 or calling ahead to the nearest emergency facility.

How can I protect myself and my family from the harmful effects of smoke?

- The best thing you can do to limit your exposure to smoke is to stay indoors with windows and doors closed.
- Create a [cleaner air space at home](#) to protect yourself from wildfire smoke.
- If they are available, use air conditioners, fans, and window shades to keep your cleaner air space cool on hot days.
- Running an air conditioner or air purifier can help [improve your indoor air quality](#), but make sure that your air purifier is able to remove smoke particles. Portable air cleaners work best when run continuously with doors and windows closed.
- A do-it-yourself (DIY) air cleaner that uses a box fan and furnace filter can also be used but should never be left unattended. For instructions on how to make a DIY air cleaner please see: <https://www.youtube.com/watch?v=ukyF2xm8cws&feature=youtu.be>
- Minimize other sources of indoor air pollution by following these recommendations:
 - Do not smoke or burn anything in the house, including tobacco, candles, or incense
 - Do not use wood, gas, or propane stoves
 - Do not fry or broil meat
 - Avoid vacuuming
 - Stock up on food/water/medications to reduce the need to leave your home; buy groceries that do not need to be cooked because cooking can add to indoor air pollution
 - Air out your home to reduce indoor air pollution when outdoor air quality improves
- Follow your health care provider's advice about what to do if you have heart or lung disease. If you have a respiratory or heart condition and your symptoms are becoming worse, contact your healthcare provider or call 911.

What should I do when it is too hot inside to close up my house?

- If you are not able to cool your house and it is too warm to stay inside with the windows closed, you may want to seek shelter elsewhere. Public facilities such as health clinics, senior centers, schools, or tribal offices are equipped with filtration/air purifying systems and air-conditioners and may be good options to seek shelter.
- Persons living in more rural communities may work with the public health center or community health aide to identify a facility.

Can masks and face coverings reduce wildfire smoke exposure?

- For a mask to provide the best protection from smoke, it must be able to filter very small particles (around 0.3 to 0.1 microns) and it must fit in a way that provides a good seal around your face.
- Respirator masks, labeled "R95", "N95", "KN95" or "P95," are helpful in filtering out much of the smoke in the air; however, a good seal on the face is important for these masks to work.
- Dust masks found at hardware stores are not able to provide the necessary level of filtration, because they are designed to trap larger particles (like sawdust).
- In general, cloth face coverings do not provide much protection against harmful air pollutants in wildfire smoke because they do not capture the smallest smoke particles.
- If you have to be outside for extended periods of time in smoky air, a properly fitted respirator mask is the most effective option to reduce exposure; however, they increase resistance to airflow and can make it harder to breathe.
- If you decide to wear a mask, we recommend that you use a respirator mask, if available, and choose the option that provides the best seal on your face.
- The best way to protect yourself is to minimize the need for a mask by staying indoors during a wildfire smoke event.

What should I do if I must go outside or drive?

- Take it easier during smoky times to reduce how much smoke you inhale. If it looks or smells smoky outside, avoid strenuous activities such as mowing the lawn or going for a run.
- Reduce smoke in your vehicle by closing the windows and vents and running the air conditioner in recirculate mode. Slow down when you drive in smoky conditions.
- Monitor [state-issued air quality reports](#) and stay alert to any health warnings related to smoke.
- Consult the Alaska Department of Environmental Conservation Air Quality Index (AQI) for where you live or will be traveling. The AQI tells you about the air quality in your area and gives recommendations to help protect your health: <http://dec.alaska.gov/Applications/Air/airtoolsweb/Advisories>.

What do I bring if I am told to evacuate my home?

- If an evacuation is recommended, carefully follow all instructions. Don't forget to bring medications, important documents (like birth certificates, wills, passports, etc.), and enough food and water to last 5–7 days.
- If you need to go to a community shelter, follow [CDC recommendations](#) for evacuating safely and staying safe and healthy in a public disaster shelter.
- If you are told to evacuate and you are quarantining or isolating due to COVID-19, follow [CDC masking guidelines](#) outside your home, wash your hands regularly or use hand sanitizer, and let officials know that you are in isolation or quarantine so that they can keep you distanced from other evacuees.

What about my pets?

- Your pet can also be affected by smoke in many of the same ways. Smoke can irritate their eyes and respiratory tract and worsen symptoms in animals that are already sick, so it is a good idea to keep them indoors.
- If your pet exhibits coughing, red or watery eyes, difficulty breathing, fatigue, stumbling, decreased appetite/thirst, or disorientation, contact a veterinarian.

For more information:

- AirNow Fire and Smoke Map: <https://fire.airnow.gov/>
- Alaska Department of Environmental Conservation, Wildfire Smoke Information: <https://dec.alaska.gov/air/anpms/wildfire-smoke/>
- CDC Stay Safe During a Wildfire: <https://www.cdc.gov/disasters/wildfires/duringfire.html>
- CDC Wildfire Smoke and COVID-19: <https://www.cdc.gov/coronavirus/2019-ncov/php/smoke-faq.html>
- Environmental Protection Agency Smoke Ready Toolbox for Wildfires: <https://www.epa.gov/smoke-ready-toolbox-wildfires>