



Wildfires and Air Quality

Smoke from wildfires is a mixture of gases and fine particles from burning trees and other plant materials. Smoke can irritate your eyes and respiratory system and worsen chronic heart and lung diseases.

How to tell if smoke could be affecting you

Smoke can cause coughing, scratchy throat, irritated or runny nose or sinuses, shortness of breath, chest pain, headaches, runny nose, or worsening of asthma symptoms.

If you have heart or lung disease, smoke might make your symptoms worse. People who have heart disease might experience chest pain, rapid heartbeat, or shortness of breath.

Smoke may worsen symptoms for people who have pre-existing respiratory conditions, such as asthma, and chronic obstructive pulmonary disease (COPD), in the following ways:

- Inability to breathe normally, cough with or without mucus, chest discomfort, wheezing and shortness of breath.
- When smoke levels are high enough, even healthy people may experience some of these symptoms.

Know whether you are at risk

During heavy smoke and wildfire conditions, everyone is at risk regardless of their age or health, so it is important to limit your exposure whenever possible. The risk of health effects or symptoms increases when people are exposed more frequently to high levels of wildfire smoke.

People at highest risk to poor outdoor air quality include older adults; pregnant people; infants and young children; people who work or exercise strenuously outdoors; people who smoke; and those with pre-existing (diagnosed or un-diagnosed) health conditions including, cancer, diabetes, mental illness, and lung or heart conditions.

Protect yourself

Limit your exposure to smoke. The following are ways to protect your health:

Pay attention to local air quality reports. Listen and watch for news or health warnings about smoke. Check for special air quality statements. Also pay attention to public health messages about taking additional safety measures. Monitor for [special air quality statements and the Air Quality Health Index \(AQHI\)](#) for the area nearest you, if available.

Consider reducing time outdoors when outdoor air pollution levels are high. It is recommended to avoid strenuous outdoor work, exercise, and playtime during times that there are special air quality statements issued for the area nearest you. If at any time you experience symptoms such as tightness in your chest, wheezing, or shortness of breath, seek medical attention.

If you are advised to stay indoors, keep indoor air as clean as possible. Keep windows and doors closed unless it is extremely hot outside. Run an air conditioner if you have one, but keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside. If you do not have an air conditioner and it is too warm to stay inside with the windows closed, seek shelter elsewhere. Heat pumps remain safe to use as they do not bring outdoor air into the home.

Follow a health care provider's advice about medicines and about your respiratory management plan if you have asthma or another lung disease. Call a health care provider if your symptoms worsen.

Wearing masks - while it plays an important role in reducing exposure to harmful particles, it should only be prioritized when other preventive actions are not feasible or sufficient. Respirator style masks, such as N95, or KN95, P100 or higher-rated masks, can be used as an extra measure when exposure to smoke is unavoidable. They are designed to filter out fine particles present in the smoke, offering an added layer of protection for the respiratory system. However, it's important to note that masks should be used correctly, with a proper fit, and replaced when necessary to maintain their effectiveness. Do not rely on dust masks for protection. Paper "comfort" or "dust" masks commonly found at hardware stores are designed to trap large particles, such as sawdust. These masks will not protect your lungs from smoke.

In the event that you are unable to take sufficient action to decrease the smoke impact, and provided it is safe to do so, you should consider temporarily relocating to an alternate location with improved air quality.

During an event special consideration should be given to food safety, safe drinking water, carbon monoxide poisoning, and power line hazards.

Protecting your Health during Wildfires - Resources

Health Canada Factsheets on Wildfire Smoke and Heat

- [Wildfire smoke 101: How to prepare for wildfire smoke](#)
- [Wildfire smoke 101: Combined wildfire smoke and heat](#)
- [Wildfire smoke 101: Wildfire smoke and your health](#)
- [Wildfire smoke 101: Using an air purifier to filter wildfire smoke](#)

Food Safety and Power Outages

- <https://novascotia.ca/nse/food-protection/docs/factsheet-poweroff.pdf>

Well Water after a Wildfire

- <https://novascotia.ca/nse/water/docs/FACT.SHEET.Well-Water-After-a-Wildfire.pdf>

Environment Canada Wildfire Resource Page

- <https://www.canada.ca/en/environment-climate-change/services/air-quality-health-index/wildfire-smoke.html>

Additional Tools

- [Download the WeatherCAN app](#), available for free on iOS and Android devices, and receive notifications about weather events, extreme heat, and special air quality statements.
- [Protect your indoor air from outdoor pollutants](#) – ensuring good indoor air quality is especially important during periods of poor outdoor air quality.
- If you are responsible for creating or managing community-based cleaner air spaces for wildfire smoke events, find advice and a simple checklist within the [Cleaner Air Spaces Guidance](#).