Wildfire Smoke and Your Health



Wildfire season typically runs from early April to late October. As wildfire burns through forests and grasslands, it produces dense smoke that can be a major source of toxic air pollutants. This pollution contains fine particles (that are not visible to the human eye) that penetrate deep into our lungs and bloodstream, sometimes leading to serious health effects. Those at greater risk of these effects are:

- small children
- pregnant women
- elderly
- people with lung or heart conditions
- people involved in strenuous outdoor work or sports

During heavy smoke conditions, everyone at risk regardless of their age or health.

Symptoms of smoke exposure

Milder and more common symptoms of smoke exposure include:

- sore and watery eyes
- runny nose and sinus irritation
- scratchy throat and mild coughing
- headache

The following symptoms are less common, but are more serious:

- shortness of breath
- wheezing (including asthma attacks)
- severe cough
- dizziness
- chest pains
- heart palpitations

If you experience any of these more severe symptoms, talk to a health professional, or seek urgent medical attention. If you think you could be having a heart attack, a stroke or another medical emergency, dial 911 and seek immediate medical assistance.

Protect your health during a wildfire

- **Limit outdoor activity** and strenuous physical activities as much as possible. If you have difficulty breathing, reduce your activities or stop altogether. During prolonged smoke exposure, it’s important to stay active when you can. Pay attention to the Air Quality Health Index (AQHI) or other indicators of smoke levels in your community and watch for opportunities to get outside and be active if conditions improve.
- **Drink lots of water** to help your body cope with the smoke.
- At home:
- Reduce sources of indoor air pollution. Sources include:
    - smoking
    - vacuuming, unless your vacuum cleaner is equipped with a high efficiency particulate air (HEPA) filter (settled dust can be removed by wiping and wet mopping during a wildfire event).
    - burning incense and candles.
    - using wood stoves (consider choosing a low emission stove).
    - using cleaning products that can emit high levels of volatile organic compounds (VOCs) improperly.
- Prevent infiltration of outside air, by:
    - properly sealing windows and doors and keeping them closed.
    - installing a high-quality air filter to remove particulate matter from the incoming air, in homes with forced air ventilation.
    - setting the HVAC system to recirculation mode.
    - limiting the use of exhaust fans, when not cooking.
- Other strategies include:
    - using portable HEPA filters, which may reduce indoor particulate levels. The frequency of filter changes and/or replacements depends on use and conditions. Look for certified air cleaners when possible.
    - having air conditioning and humidification/dehumidification capabilities present (try to maintain humidity levels between 35 and 50%).
    - installing and maintaining at least one CO alarm in the home.
    - learn more tips on improving indoor air quality.
- **Keep vehicle windows closed** and set the ventilation system to recirculate.
- **Check in on others** who are in your care or live nearby who may be more vulnerable to smoke. Please respect the guidance on physical distancing from your local authorities.
- **If possible, leave the area:** If you are vulnerable to the health effects of wildfire smoke and smoke levels in your community are high, evaluate whether or not it is possible to temporarily re-locate to an area with cleaner air. Please be sure to respect the guidance on physical distancing from the local authorities in that area.
- **It is important to take care of your mental health** during a wildfire smoke event. It’s not unusual to feel anxious, stressed out, sad or isolated during a smoke event. Eating well, getting enough sleep, exercising indoors and staying in contact with friends can help. Please be sure to respect the guidance on physical distancing from the local authorities in that area. Anyone who is having trouble coping with symptoms of stress, anxiety or depression should seek help from a health professional. Remember: a smoke event may last a long time, but it will eventually end. Sharing positive outlooks and attitudes will help you get through it.
- **Consult your physician** or local health authority for additional advice.

Most provinces and territories also offer health advice remotely.

Staying cool during a smoke and heat event

Most wildfires burn during the summer and the most intense fires often occur when the weather is the hottest. This means that people may at times be exposed to both smoke and extreme heat, both of which may be harmful to health.

If you do not have air conditioning at home and it is hot outside, it may not be safe to keep doors and windows closed. If you are vulnerable to the health effects of smoke and/or heat and you cannot keep your home cool and relatively smoke-free, find out if there are options available to you through your local authorities, such as a safe facility in the community where you can find cleaner, cooler air.

If you cannot spend time in cooler and cleaner air, try these three protective measures:

- Drink lots of water, even if you do not feel thirsty.
- Stay out of the sun, take cool showers, spray yourself with a water bottle, or wear an article of damp clothing to cool your body.
- Take it easy, and limit exercise and exertion that makes you sweat or breathe hard.

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