

# WILDFIRE SMOKE 101

## Combined wildfire smoke and heat

In Canada, wildfire season occurs between April and October each year and can coincide with periods of extreme heat. It is important to know how to protect your health when experiencing wildfire smoke and extreme heat together.

### People at risk

Some people may be at higher risk to the health effects of heat and air pollution, such as wildfire smoke. Those who may be at greater risk of the effects of both wildfire smoke and/or extreme heat include:

- seniors
- pregnant people
- people who smoke
- infants and young children
- people who work outdoors
- people involved in strenuous outdoor exercise
- people with an existing illness or chronic health conditions, such as:
  - cancer
  - diabetes
  - mental illness
  - lung or heart conditions

## Symptoms of combined wildfire and heat exposure

### Mild to moderate symptoms include:



- tears
- runny nose
- sore eyes and throat
- skin rash
- headache
- extreme thirst
- muscle cramps
- heavy sweating
- nausea or vomiting
- coughing or wheezing
- rapid breathing and heartbeat
- dark urine or decreased urination

If you have any of the mild to moderate symptoms, move to a cool, smoke-free place and hydrate immediately. Drinking water is best for hydration.

### Severe symptoms include:



- chest pain
- difficulty breathing
- dizziness or fainting
- high body temperature
- confusion and lack of coordination
- no sweating, but very hot, red skin

If you have any of these severe symptoms, you may be experiencing a heart attack, heat stroke or other medical emergency. Call 9-1-1 and seek immediate medical care. While waiting for help, try to cool down by moving to a cool place and apply cold water to large areas of your skin.





## How to reduce your risk

### Keep windows and doors closed and stay cool

If there is an air quality advisory and an extreme heat event, use your air conditioner. If you don't have an air conditioner, it may not be safe to stay inside with doors and windows closed when it's hot outside. When there is an extreme heat event occurring with poor air quality, cooling should be prioritized.

Use the best quality air filter that your ventilation system can handle based on the manufacturers' recommendations or use a portable air purifier to filter particles from wildfire smoke. For more information on selecting a portable air purifier that is appropriate for your needs, refer to the ["Using an air purifier to filter wildfire smoke"](#) factsheet.

### Find clean cool air

To get a break from the heat and smoke, go to a community centre or other building that offers clean cool air if:

- the air quality is poor
- the temperature is increasing
- you do not have an air conditioner in your residence

Contact your local health or emergency authorities to find the most up-to-date information about publicly accessible clean, cool air shelters.

### Limit outdoor and strenuous activity

To reduce your exposure to wildfire smoke and extreme heat, you should limit the time you spend outdoors. Pay attention to special air quality statements and weather forecasts, and reschedule your outdoor activities for a time when conditions are better.

If you must spend time outdoors, a well-fitted respirator type mask (such as a NIOSH certified N95 or equivalent respirator) that does not allow air to pass through small openings between the mask and face, can help reduce your exposure to the fine particles in smoke. These fine particles generally pose the greatest risk to health. However, respirators do not reduce exposure to the gases in wildfire smoke. It is important to listen to your body and reduce or stop activities if you are experiencing symptoms.

### Stay hydrated

Drink plenty of liquids, especially water, before you feel thirsty to decrease your risk of dehydration.

### Care for others

Frequently check in on those who are in your care, neighbours, friends and older family members, especially those who are chronically ill, to make sure that they are cool and hydrated.

### How to prepare for the heat

Regularly check local weather forecasts and heat alerts so you know when to protect yourself from the heat. For more information about extreme heat and heat, please visit [Health Canada's extreme heat website](#).

### Keep indoor air clean

When indoors, minimize other sources of air pollution. For tips on improving indoor air quality, visit:

- [Improve indoor air quality in your home](#)
- [Factsheet: Protecting your indoor air from outdoor pollutants](#)

**For more information on topics related to what to do in a wildfire emergency and wildfire smoke and health, please visit [Wildfire smoke, air quality and your health](#).**

### The Air Quality Health Index (AQHI) is here to help

Check the [AQHI for air quality conditions in your community](#) and advice on how to reduce your exposure to air pollution. If poor air quality is due to the presence of wildfire smoke, visit the [wildfire smoke and air quality web page](#) for more information on how to protect your health.