Wildfire Smoke 101 – Combined Wildfire Smoke and Heat



The 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 more vulnerable to the health effects of heat and air pollution, such as wildfire smoke. Those who may be at greater risk of the effects of wildfire smoke and extreme heat include:

- seniors
- pregnant people
- 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 Symptoms

Mild symptoms include:

- tears
- runny nose
- sore eyes and throat

If you have any of the mild symptoms, find a clean air space to cool off and take a break from the smoke.

Moderate Symptoms

Moderate symptoms include:

- 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 moderate symptoms, move to a cool, smoke-free place and hydrate immediately. Water is best.

Severe Symptoms

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 the severe symptoms, you may be having 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

Wildfire Emergency

If your community is threatened by an approaching wildfire, your local health or emergency authorities will provide direction. Be prepared to evacuate at any time. If told to evacuate, do so.

Keep windows and doors closed and stay cool

During an air quality advisory, keep your windows and doors closed, and seal them properly with weather stripping.

Use your air conditioner. Be sure to turn on “recirculate” (instead of bringing in outdoor air) and to use a HEPA filter in your ventilation system. 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.

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. Please be sure to respect the guidance on physical distancing from the local authorities in that area.

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 air quality and weather forecasts and reschedule your outdoor activities for a time when conditions are better.

Stay hydrated

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

Care for others

Watch out for those in your care who are vulnerable to wildfire smoke and heat. Frequently check in on neighbours, friends, and older family members, especially those who are chronically ill, to make sure that they are cool and hydrated.

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

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.

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