



# Wildfire Smoke and Air Quality Reference Guide for Indigenous Communities (2024)

## Symptoms From Exposure to Smoke



Most common results are mild symptoms such as:

- eye irritation
- cough
- throat irritation
- runny nose
- headaches

More severe symptoms include:

- dizziness
- difficulty breathing
- chest pains
- wheezing
- heart palpitation

## Mental Health Impacts

Individuals living close to an active wildfire or within a smoke event may experience worsening mental health impacts such as:

- ANXIETY
- DEPRESSION
- POST-TRAUMATIC STRESS DISORDER
- GENERAL DISTRESS CAUSED BY NATURAL DISASTERS AND CLIMATE CHANGE

Don't be afraid to reach out if you need help:

[Hope for Wellness Helpline for Indigenous Peoples](#)  
[Health 811](#) | [Kids Help Phone](#) | [Mental Health Support](#)



Exposure to wildfire smoke can make existing diseases worse such as:



CONGESTIVE HEART FAILURE



ASTHMA  
CHRONIC OBSTRUCTIVE PULMONARY DISEASE

## Air Quality Health Index (AQHI) Explained

- A tool to show the level of risk to your health of short-term exposure to air pollution in your area.
- It measures all air pollution, not just air pollution from fire smoke.
- It provides a scale of 1 to 10+ showing air quality levels from low, moderate, high, to very high health risk. As the number on the air quality scale goes up; the greater the risk to your health.

### Air Quality Health Index Categories, Values and Associated Colours



## Health Risk According to AQHI Levels

### Low

AQHI 1-3



Enjoy your usual outdoor activities.

### Moderate

AQHI 4-6



**Consider reducing** or rescheduling strenuous activities outdoors if you are experiencing symptoms.

### High

AQHI 7-10



**Reduce** or reschedule strenuous activities outdoors. Children and the elderly should also take it easy.

### Very High

10+



**Avoid** strenuous activities outdoors. Children and the elderly should also avoid physical exertion.

## How to Prepare for Smoke Impact:



- Monitor changes in weather conditions with the [WeatherCAN app](#).
- Sign up to receive emails when a Special Air Quality or Air Quality Advisory has been issued for certain region(s).
- Visit the [Air Quality Ontario](#) website that includes local readings and maximum forecast values for today, tonight and tomorrow.



**Other helpful tools:** These forecasts can offer information to predict how long wildfire smoke is expected to remain in an area.

### [FireSmoke Canada](#)

Provides forecasts up to 48 hours in advance during wildfire season from April to September.



### [Government of Canada's FireWork System](#)

From April to October (morning and evening), see how smoke from wildfire is expected to move across North America over the next 3 days.



## Protect Yourself with a Respirator



**When:** If you must spend time outdoors.

**What:** NIOSH-certified N95 or equivalent respirator that does not allow air to pass through small openings between the mask and face.

**Why:** May help reduce your exposure to the fine particles in smoke, which pose the greatest risk to health. However, respirators do not reduce exposure to the gases in wildfire smoke.

## Respirators should not be used by:

- Children under 2 years of age.
- Individuals who have trouble breathing while wearing the respirator.
- Someone who may need help to remove the respirator.

### Where to get a respirator:

Your local Chief and Council, nursing station or health centre is able to access free respirators for community distribution.



Sioux Lookout  
First Nations  
Health Authority

**FNRA** FIRST NATIONS EMERGENCY  
RESPONSE ASSOCIATION