

# How to protect yourself from SMOKE



## What is the Air Quality Health Index (AQHI) and how do I use it?

Fine particulate matter (PM<sub>2.5</sub>) from wildfires and woodstove smoke can drive large, rapid changes in air quality that impact our health. The **Air Quality Health Index (AQHI)** is a colour scale that is designed to help people understand what normal air quality looks like, and how to adjust their activities when air quality worsens.

1-HOUR PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PROVINCIAL AQHI	AQHI RISK CATEGORY	HEALTH MESSAGE FOR PEOPLE AT HIGHER RISK	HEALTH MESSAGE FOR GENERAL POPULATION	ACTIONS TO REDUCE WILDFIRE SMOKE EXPOSURE
0 – 10	1	LOW	Enjoy your usual outdoor activities.	Ideal air quality for outdoor activities.	Normal air quality in British Columbia
11 – 20	2				
21 – 30	3				
31 – 40	4	MODERATE	Consider reducing or rescheduling strenuous activities outdoors if you experience symptoms.	No need to modify your usual outdoor activities unless you experience symptoms.	<ul style="list-style-type: none"> <li>Use a portable air cleaner or DIY box fan air cleaner to reduce smoke in your home</li> <li>Stay inside with doors and windows closed, but keep cool – heat-related illness is more risky than breathing smoke for most people</li> <li>Visit places with cleaner and cooler air, such as libraries, community centres, and shopping malls</li> <li>Wear a well-fitted respirator (e.g. N95) outdoors.</li> </ul>
41 – 50	5				
51 – 60	6				
61 – 70	7	HIGH	Reduce or reschedule strenuous activity outdoors.	Consider reducing or rescheduling strenuous activities outdoors if you experience symptoms.	
71 – 80	8				
81 – 90	9				
91 – 100	10				
101+	10+	VERY HIGH	Avoid strenuous activity outdoors.	Reduce or reschedule strenuous activity outdoors, especially if you experience symptoms.	

From: *Wildfire smoke and the Air Quality Health Index (AQHI)*. <http://www.bccdc.ca/health-info/prevention-public-health/wildfire-smoke>

## Who is most susceptible to smoke?

- People with chronic respiratory conditions (e.g., asthma or COPD)
- People with heart disease, diabetes or other chronic health conditions
- Pregnant people, young children and older adults
- People with physically demanding jobs and those who work outdoors

**Individual reactions to smoky conditions may vary!** That’s why it’s important to monitor your symptoms and keep an eye on local air quality to understand where your personal sensitivity lies.

Find out more about using a respirator:



## What are the signs of smoke exposure and what should I do?

Mild	More Severe
Eye irritation, runny nose, sore throat, wheezing, mild cough, headaches	Shortness of breath, bad cough, dizziness, chest pain, fast beating/fluttering heart
Reduce exposure by reducing outdoor activity and implementing indoor air cleaning.	Call HealthLink BC (8-1-1), visit your health-care provider, or go to a walk-in clinic or emergency department, depending on severity of symptoms.



During wildfire smoke events, **Island Health’s Community Virtual Care (CVC)** program may be able to support you if you are eligible for Community Health Services. Visit the [CVC webpage](#) to learn more about the program.

## How can I keep track of my local air quality?

Many communities now have access to free, up-to-the-minute air quality information from a **community air sensor network**. These networks rely on low-cost particulate matter sensors that provide more localized air quality data. Environment and Climate Change Canada then reviews and posts this information on a free interactive map, the **AQMap**. Click on the air sensor nearest you to learn:

- The local PM<sub>2.5</sub> concentration;
- The current estimated AQHI;
- Suggested actions for at-risk individuals as well as the general population.

During wildfire season, the Province and Island Health may also issue a **Smoky Skies Bulletin** if extremely poor air quality is expected over a prolonged period (24-48 hours). You can sign up for Smoky Skies Bulletins in advance using the QR code.

Find your local sensor on the AQMap



Sign up for Air Quality Advisories:



## How do I reduce my exposure to smoke?

- **Listen to your body** regarding outdoor physical activity – if your breathing becomes difficult or uncomfortable, stop or reduce the activity.
- Outdoor **smoke will infiltrate** indoor spaces. Consider using an air cleaner with a high efficiency particulate air (HEPA) filter to lower indoor PM. If necessary, you can make your own **DIY air cleaner** based on instructions and safety advice from the BCCDC.
- When outdoor air quality deteriorates, use your air cleaner(s) to create a **cleaner air space** in your home (e.g., a bedroom). Air cleaning works best when windows and doors are closed.
- **Stay cool** and drink plenty of fluids.
- **Reduce indoor pollution sources**, such as smoking and indoor wood burning. If you rely on a **woodstove** for heat, choose a low-emission, CSA-certified stove, clean your chimney regularly, use your dampers, and burn only properly conditioned wood (seasoned and cut into smaller pieces).
- **Respirators** can provide some protection from outdoor smoke. However, it is important to be aware of the limitations of mask use in such situations.
- **Stock up** on at least 5 days worth of medications to prepare for smoke events.

Learn how to choose a HEPA air cleaner:



Learn how to make a DIY Air Cleaner:



## What if it’s hot and smoky?

Heat generally causes more deaths on a hot day than smoke causes on a smoky day. However, many people impacted by heat are also impacted by smoke. If you belong to an at-risk group, **prioritize staying cool**. If you can’t create a cooler, cleaner air space in your home, try visiting an air-conditioned public space or a cooling center.