

How to protect yourself from SMOKE this summer



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

During wildfires, fine particulate matter (PM_{2.5}) from smoke can drive large, rapid changes in air quality. 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.

Check your local AQHI:



1-HOUR PM _{2.5} (µg/m ³)	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"> Use a portable air cleaner or DIY box fan air cleaner to reduce smoke in your home Stay inside with doors and windows closed, but keep cool – heat-related illness is more risky than breathing smoke for most people Visit places with cleaner and cooler air, such as libraries, community centres, and shopping malls Wear a well-fitted respirator (e.g. N95) outdoors.
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 vulnerable 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

Find out more about using a respirator during a wildfire smoke event:



Individual reactions to smoky conditions may vary. That's why it's important to monitor your symptoms and keep an eye on air quality conditions to understand where your personal sensitivity lies. Those living with chronic illness should stock up on at least 5 days worth of critical medications in advance of smoke events.

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.



If you are eligible for Community Health Services, **Island Health’s Community Virtual Care (CVC)** program may be able to support you. Visit the CVC webpage to learn more about the program and eligibility criteria.

How do I know if potentially harmful smoke is coming?

If potentially harmful smoke is on the way, the Province and Island Health will issue a **Smoky Skies Bulletin**. These air quality advisories use pollutant data, visual observations, satellite information, and smoke transport models to determine the likelihood of smoky conditions over the next 24-48 hours in your region.

Another way to keep track of local air quality is to check out your **local community air sensor network**. These networks use low-cost particulate matter sensors, run by private individuals, community organizations or local governments, to create free, real-time maps of outdoor air quality data. Click on the air sensor nearest you to learn:

- The local PM_{2.5} concentration
- The current estimated AQHI
- Suggested actions for at-risk individuals as well as the general population.

How do I reduce my exposure during a smoke event?

- Use common sense regarding outdoor physical activity – if your breathing becomes difficult or uncomfortable, stop or reduce the activity.
- Stay cool and drink plenty of fluids.
- Smoke levels may be lower indoors; however, levels of smoke particles will still increase indoors during times of increased wildfire smoke. Consider a commercially available HEPA (high efficiency particulate air) cleaner that can further reduce poor indoor air quality near the device.
- If necessary, a **home-made box fan air cleaner** can be used to create a cleaner indoor air space, based on instructions and safety advice from the BCCDC.
- **Air cleaning works best when windows and doors are closed**. If you also need air conditioning to keep cool, BC Hydro offers free portable air conditions to people based on income level and home health referrals.
- Reduce indoor pollution sources, such as smoking.
- Pay attention to local air quality reports – air quality may be poor even though smoke may not be visible.
- Respirators can provide some protection from wildfire smoke. However, it is important to be aware of the limitations of mask use in such situations.

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.

Sign up for **Air Quality Advisories**:



Find your local community sensor on the **Air Quality Map**



Learn how to make a **DIY Air Cleaner**:



No AC? Check out the **BC Hydro Free AC Program**

