

WILDFIRE SMOKE INFORMATION FOR FIRST NATIONS AND COMMUNITY PARTNERS

Health Emergency Management BC, First Nations Health Authority and Vancouver Coastal Health have joined together to provide this resource to support communities coping with increasing wildfire smoke exposure. Wildfire smoke is a [complex mixture of different air pollutants](#), and it can impact people of all ages, causing both [short-term](#) and potentially [long-term health impacts](#). Reducing exposure to wildfire smoke is the best way to protect population health from this hazard.

Over the last decade, the [BC Health and Smoke Exposure Coordination Committee](#) has coordinated planning and response efforts related to public health impacts for significant wildfire smoke events.

THOSE MOST VULNERABLE TO WILDFIRE SMOKE INCLUDE:

People with chronic respiratory conditions (e.g., asthma or COPD)	People with heart disease, diabetes or other chronic health conditions
Infants and young children	Pregnant people
Older adults	People who work outdoors or are unhoused

SYMPTOMS AND RECOMMENDED ACTIONS FOR WILDFIRE SMOKE-RELATED ILLNESS:

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	SEEK MEDICAL ATTENTION

Wildfire smoke may also impact [mental health](#), in some cases leading to increased anxiety, depression and feelings of stress or frustration.

HOW TO PREPARE FOR WILDFIRE SEASON

- Subscribe to Air Quality Alerts through the [WeatherCAN app](#) (shares the Air Quality Warnings from both Metro Vancouver and Ministry of Environment). For communities within the Metro Vancouver Region, sign up for [Air Quality Updates](#) (early warnings) from Metro Vancouver. Communities outside urban areas may be further away from government air quality monitoring stations used by mainstream weather services. Check AQMap.ca to see if there are low-cost air quality sensors that provide more accurate local information. Please contact the [VCH Healthy Environments & Climate Change team](#) if you would like more information about setting up a low-cost air quality monitor for your community.

- Consider developing a community [wildfire smoke response plan](#). Train staff and volunteers on ways to protect clients, students, the public and themselves during wildfire smoke events.
 - Prepare staff and volunteers to [recognize the signs of illness from wildfire smoke](#) exposure and to know when to seek medical care.
 - Communicate your response plan with community members ahead of time to build confidence and enhance implementation when needed.
 - Consider encouraging the families of vulnerable children (i.e., those with asthma) to complete [an asthma action plan](#), which can also be shared with their care provider.
- Improve the indoor air quality of your facilities. Consider developing building [wildfire smoke readiness plans](#) for each of your facilities, which should include the following:
 - Ensure the buildings' heating, ventilation and air conditioning (HVAC) systems are well-maintained and functioning. For filtration, MERV-13 filters are [recommended](#) to remove wildfire smoke particles. Ensure all filters are replaced as needed. If HVAC upgrades are possible, consider making ventilation systems High Efficiency Particulate Air (HEPA) filter-ready, so standard filters can be swapped out for HEPA filters during smoke events.
 - Air filtration in institutional settings should be considered to support clients in community. VCH has resources for [community care](#) facilities, [schools and childcare](#) facilities.
 - Portable air cleaners with HEPA filtration are recommended to keep indoor air cleaner. Ensure the unit's clean air delivery rate (CADR) is [suitable for the room's size](#) and avoid air cleaners that produce ozone.
 - If necessary, do-it-yourself air cleaners can be used to create a cleaner air space, based on [instructions and safety considerations](#) from BREATHE.
 - Air cleaning works best when windows and doors are closed, so energy-efficient cooling systems (e.g. ductless heat pumps or air conditioners) may be necessary on hot days.
 - PM_{2.5} air quality monitoring indoors using a low-cost sensor can help to confirm whether building filtration is effectively cleaning wildfire smoke from indoor air.
 - Health Canada has guidance on creating [cleaner air spaces](#) during wildfire smoke events.
 - ASHRAE Guideline 44-2024, [Protecting Building Occupants From Smoke During Wildfire and Prescribed Burn Events](#) should be used by building operators.
- Share the resources from this document and encourage community members to engage in personal preparedness. Key activities during wildfire smoke include monitoring air quality changes, implementing air cleaning in the home, and reducing outdoor activity. Recommend people with chronic health conditions (e.g., asthma) have a care plan, keep necessary medications on hand and check-in with their healthcare provider ahead of the season.

WHAT DO TO DURING A WILDFIRE SMOKE EVENT

- Monitor rapidly changing air quality conditions through the [WeatherCAN app](#) (Metro Vancouver communities) or [AQMap.ca](#) (outside Metro Vancouver). Monitor wildfires on the [BC Wildfire Service map](#) and wildfire smoke forecasts on the Environment Canada [Firework map](#)
- Activate your community wildfire smoke response plan, including measures to improve or maintain indoor air quality, as above. Publicize the location of community cleaner air spaces via various media sources, including print and public signage.
- Staff, volunteers, and those caring for children or other people at higher risk should monitor them for signs of illness, support them to drink water, stay cool, and limit physical activity.

- Encourage local services, sports teams, clubs and organizations to monitor the air quality and consider rescheduling outdoor services or events using the [AQHI table](#). [WorkSafe BC](#) has wildfire smoke guidance for employers.
- While [respirators](#) can provide some protection if well-fitted, simple one-layer cloth masks, bandanas, etc., offer no protection whether wet or dry.

COMBINED WILDFIRE SMOKE AND EXTREME HEAT EVENT

Overheating is usually a bigger health risk than smoke inhalation. People are at risk of potential injury and death if they overheat. Individuals most at risk from smoke are also at risk from heat, and these risks may add to one another. Most people should prioritize staying as cool as possible in very hot weather.

Seek cooler, cleaner indoor air – at home if possible, and elsewhere if not. The public can check for nearby cooling shelters by contacting or checking the social media account for their Nation, municipality, or regional district. Some communities also use the [EmergencyInfo BC map](#).

Working together to protect the public's health,



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ADDITIONAL RESOURCES

- Vancouver Coastal Health's [wildfire smoke webpage](#)
- BCCDC [Wildfire Smoke](#) resources, translated into 10 languages

CONTACT US

Please reach out to any of the three organizations using the email addresses below.

- First Nations Health Authority:
 - Emma Lee Emma.Lee@fnha.ca – Manager, Regional Health Emergency Management
 - Azreer Gill Azreer.Gill@fnha.ca – Manager, Regional Environmental Health
- Vancouver Coastal Health's Healthy Environments and Climate Change team: healthy.environments@vch.ca
- Health Emergency Management BC: hembc.lm@phsa.ca