

WILDFIRE SMOKE INFORMATION FOR COMMUNITY HEALTH PARTNERS AND LOCAL GOVERNMENTS

[Health Emergency Management BC](#), [First Nations Health Authority](#) and [Island Health](#) have joined together to provide this resource to support communities coping with increasing wildfire smoke exposure. Because wildfire smoke is a [complex mixture of different air pollutants](#), it can impact people of all ages in various ways. Reducing exposure to wildfire smoke is the best way to protect population health.

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 physically demanding jobs and those who work outdoors
People with heart disease, diabetes or other chronic health conditions	Infants and young children
Older adults	Pregnant people

[SIGNS, 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:

- **Maintain situational awareness** among your team by monitoring the [Air Quality Health Index \(AQHI\)](#) or other real-time air quality data such as the [Smoky Skies Bulletin](#), interactive [smoke forecast](#) mapping or [AQHI maps](#). The [WeatherCAN](#) app can also send customized notifications.

In addition, your local PM_{2.5} sensor network can provide extremely localized, timely information on changing air quality. The [Air Quality Map](#), created by the University of Northern British Columbia and Environment and Climate Change Canada, corrects the data available from public sensors and provides information on AQHI and what actions to take.

- **Consider developing a community [wildfire smoke response plan](#)** and provide training to staff and volunteers to ensure they know what to do to protect their 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. Asthma action plans for [children aged 1 to 5](#) and for [children aged 6 to 18](#) have been developed to help families (and care providers) respond to sudden asthma symptoms with the appropriate medication while help is on the way.

- **Improve the indoor air quality of your facilities.** Consider developing [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 considered [the minimum acceptable](#) for removing 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, such that standard filters can be swapped out for HEPA filters during smoke events.
 - [Filtration in institutional settings](#) should be considered to support clients in community.
 - If central filtration with MERV-13 filters is not possible, portable air cleaners with HEPA filtration may be an option. Ensure the unit's clean air delivery rate is [suitable for the room's size](#) and avoid air cleaners that produce ozone.
 - If necessary, home-made box fan air cleaners can be used to create a clean air space, based on [instructions and safety advice](#) from the BCCDC.
 - Air cleaning works best when windows and doors are closed, so energy-efficient cooling systems (e.g. ductless heat pumps or air conditioners) may also be necessary on hot days. **BC Hydro's [Free AC Program](#)** offers free portable air conditioning units to low-income households and those who are medically vulnerable.
 - PM_{2.5} monitoring using a low-cost sensor can show whether filtration has been effective compared to [the nearest outdoor sensor](#).
 - Health Canada has guidance on creating [cleaner air spaces](#) during wildfire smoke events.

- **Encourage community members** to engage in personal preparedness, as outlined in Get Prepared BC's [Wildfire Preparedness Guide](#). Key activities for smoke include monitoring air quality changes, implementing air cleaning in the home, reducing outdoor activity and stocking up on at least five days of important medications.

WHAT DO TO DURING A WILDFIRE SMOKE EVENT

- Monitor rapidly changing air quality conditions through [your local AQHI](#) or the [WeatherCAN app](#).
- Monitor clients / students for signs of illness and ensure everyone drinks water and stays cool.
- Ensure clients / students with chronic health conditions (e.g., asthma) follow their care plan, have any necessary medications on hand and seek additional advice from their physician if needed.

- Reduce outdoor activity during periods of poor air quality, especially [outdoor exercise](#). Use [this AQHI table](#) to guide actions for the general public vs. people at higher risk.
- Activate measures to improve or maintain indoor air quality, as above.
- While [respirators and multilayer face masks](#) can provide some protection if well-fitted, simple one-layer cloth masks, bandanas or gaiters, etc., offer no protection whether wet or dry.

DUAL WILDFIRE SMOKE AND EXTREME HEAT EVENT

Overheating is generally a bigger risk to health than smoke inhalation during wildfires. Many people are at risk of potential severe injury or death if they overheat, while a much smaller proportion are at risk of severe acute respiratory or cardiovascular health consequences. Individuals most at risk from smoke are also at risk from heat, and older adults may begin to experience heat impacts at temperatures above 26°C. Therefore, 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, such as a shopping mall or a community cooling or clean air centre.

Working together to protect the public’s health,



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ADDITIONAL RESOURCES

- Island Health webpage on [Wildfires](#)
- BCCDC [Wildfire Smoke](#) resources, translated into 10 languages
- Province of BC’s [Wildfire Preparedness Social Media Package](#)

CONTACT US

Island Health’s [Health Protection and Environmental Services Locations](#) Or email Health Emergency Management BC at hembc@islandhealth.ca