

CHILD CARE FACILITIES & WILDFIRE SMOKE

Why should I pay attention to wildfire smoke?

Wildfire smoke is a form of air pollution that can **impact your health**. Wildfire smoke contains very small particles that travel deep into your lungs when you inhale. These particles can cause irritation and inflammation.

Infants and young children are especially sensitive to the health effects of wildfire smoke.

Wildfire smoke and extreme heat events can often **occur at the same time**. Overheating is more dangerous than smoke exposure for most people at risk. **Cool and clean indoor air** is the best way to protect yourself from negative health impacts.



Symptoms from wildfire smoke may include:

- Sore throat
- Eye irritation
- Runny nose
- Mild cough
- Phlegm production
- Wheezy breathing
- Headaches



More severe symptoms include:

- Shortness of breath
- Severe cough
- Dizziness
- Chest pain
- Heart palpitations

Anyone with these symptoms needs medical attention.



What can I do to **prepare for the wildfire season?**

- It is recommended that child care facilities expand their emergency plan to include a **plan to respond to wildfire smoke**.
- Prepare staff** to recognize the signs of illness from wildfire smoke exposure and know when medical care is needed.
- Subscribe** to air quality advisories and alerts in your region and **download** the Air Quality Health Index app.
 - [Air Quality Health Index Canada app](#) (set up push notifications for your region)
 - [BC Air Quality Subscription Service](#) (for areas outside of Metro Vancouver)
 - [Metro Vancouver Air Quality Advisories](#) (for Metro Vancouver)
- Ensure that children with chronic health conditions (e.g. asthma) who are prescribed "rescue" medications have these **medications easily available**.
- Get ready** to keep the air clean inside your facility.
 - Talk to your building provider about **installing a MERV 13 filter** (or ideally higher rated) in the existing building ventilation system and making the system HEPA (high efficiency particulate air) **filter ready** if possible.
 - **Buy portable air cleaners with HEPA filtration**, to use during wildfire events. Different units treat different sized rooms, so do your research and make sure the one you buy is sized for your space. Some portable air cleaners also have activated carbon filters that can address the other pollutants in wildfire smoke. **Avoid air cleaners that produce ozone**.
 - Read [this BCCDC document](#) before choosing a portable air cleaner.
 - Note that air cleaners work best when windows and doors are closed, so **heat may become an issue** on days that are also hot. Energy efficient active cooling (e.g. ductless heat pump or air conditioner) may also be needed in addition to air cleaners to create a **cool space** with clean air. **Heat can be especially dangerous** for Infants and young children.
 - Arrange a **maintenance plan** to replace all filters regularly.
- Homemade air cleaners**, such as portable box fans, are a cheaper alternative to **protect against wildfire smoke while also allowing for ventilation** of the indoor space.



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What should I do during a wildfire smoke event?

- Check your **local air quality readings** and air quality health index **regularly**.
 - Air Quality Health Index Canada app
 - BC Particulate Matter (PM2.5) and AQHI data
- Monitor children** in your care for signs of illness.
- Make sure children **drink plenty of water** to reduce inflammation.
- Reduce everyone's exposure to wildfire smoke as much as possible.**
 - **Filter indoor air** using portable air cleaners with HEPA filtration and/or HEPA filters (or minimum MERV13 if not possible) in the building air mechanical system for the duration of the wildfire smoke event. Consider running ventilation systems in recirculation mode during smoke events (in addition to upgrading filter efficiency)
 - If the air quality is better indoors, **keep children inside** during times of high outdoor smoke concentrations. Postpone planned outdoor activities or events if there is poor air quality at the time.
 - **Reduce outdoor activity** during poor air quality episodes and during the hottest time of the day. Understand that the harder a person breathes the more smoke they inhale.
 - Consider **keeping windows and doors** closed during high smoke times; however, it is recommended that indoor temperatures can be maintained below 26°C indoors to **prevent heat-related illnesses**. Remember that closing windows and doors can be **dangerous** on hot days if you don't have air conditioning. Take advantage of times when the smoke has decreased to open windows and doors.
 - If appropriate and you don't have filtered indoor air, go on outings to neighborhood **libraries, community centres or other public spaces** where there is central air conditioning and cleaner air.

Wildfire Smoke Resources

<u>Vancouver Coastal Health Wildfire Smoke webpage</u>	Information for the public, community partners and health professionals regarding wildfire smoke, including a number of links to public factsheets and resources
<u>BCCDC Wildfire Smoke Factsheets</u>	Link to various useful public facing factsheets about the health effects of wildfire smoke, how to prepare for the wildfire season, portable air cleaners, and using the AQHI
<u>HealthLinkBC Wildfires and your Health</u>	Information and links to resources for before during and after a wildfire (incl. stress and trauma) in multiple languages
<u>BC Air Quality Subscription Service</u> <u>Metro Vancouver Air Quality Advisories</u>	Subscribe to receive emails when Smoky Sky Bulletins (outside of Metro Vancouver) or Air Quality advisories are issued (Metro Vancouver)
<u>Air Quality Health Index Canada app</u>	The Air Quality Health Index (AQHI) Canada app informs users of the level of health risk associated with local outdoor air quality. It includes user defined push notifications based on the AQHI level at stations you choose
<u>BC Particulate Matter and AQHI Data by Monitoring Station</u> <u>Metro Vancouver Air Quality Data</u>	Contains air quality information and maps. For wildfire smoke you would want to look at both the AQHI data and the PM2.5 data