Why should I pay attention to wildfire smoke?

Wildfire smoke is a complex mixture of different air pollutants and is an important health concern for our region. Wildfire smoke causes episodes of the worst air quality that most people will ever experience in British Columbia. As the climate warms, the number, size and length of wildfires are expected to increase.

Signs of illness from wildfire smoke may include: lung irritation, eye irritation, runny nose, sore throat, wheezing, mild cough, and headaches. More severe signs of sickness needing medical attention include shortness of breath, bad cough, dizziness, chest pain, or the feeling of a fast-beating or fluttering heart.

Older adults and people with pre-existing health conditions are especially sensitive to the health effects of wildfire smoke.

Reducing exposure to wildfire smoke is the best way to protect health.

What can I do to prepare for the wildfire season?

1. Create and/or update your wildfire smoke response plan and provide training to staff to make sure they know what to do to protect the health of residents and themselves during wildfire smoke events.
2. Prepare staff to recognize the signs of illness from wildfire smoke exposure and know when medical care is needed.
3. Subscribe for 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)
4. Ensure that people with chronic health conditions (e.g. asthma) who are prescribed "rescue" medications have these medications easily available.
5. Get ready to keep the air clean inside your facility.
   - Talk to your building provider about installing minimum of a MERV 13 (or ideally higher rated) filter in the existing building ventilation system and making the system HEPA (high efficiency particulate air) filter ready if possible.
   - Consider buying 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 older adults and people with pre-existing health conditions.
     - Arrange a maintenance plan to replace all filters regularly.
What should I do during a wildfire smoke event?

1. 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

2. Monitor residents in your care for signs of illness. Make sure they drink plenty of water and stay cool.

3. 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.
   - If the air quality is better indoors, keep residents inside during times of high outdoor smoke concentrations. 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. Postpone planned major outdoor activities or events if poor air quality at the time.
   - Consider keeping windows and doors closed during high smoke times; however, make sure that indoor temperatures can be maintained at a comfortable level 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

| Vancouver Coastal Health Wildfire Smoke webpage | Information for the public, community partners and health professionals regarding wildfire smoke, including a number of links to public factsheets and resources |
| BCCDC Wildfire Smoke Factsheets | 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 |
| Wildfire Smoke and COVID-19 | Contains information on the interaction between wildfire smoke and COVID-19 |
| Wildfire Smoke and COVID-19 in Long-Term Care and Assisted Living Facilities | Explains different ways to achieve cleaner indoor air |
| Wildfires and your Health | Information and links to resources for before during and after a wildfire (incl. stress and trauma) in multiple languages |
| BC Air Quality Subscription Service | Subscribe to receive emails when Smoky Sky Bulletins (outside of Metro Vancouver) or Air Quality advisories are issued (Metro Vancouver) |
| Metro Vancouver Air Quality Advisories | 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 |
| Air Quality Health Index Canada app | Contains air quality information and maps. For wildfire smoke you would want to look at both the AQHI data and the PM2.5 data |
| BC Particulate Matter (PM2.5) and AQHI data | |
| Metro Vancouver air quality data | |