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. As the climate warms, the number, size and length of wildfires have increased and seriously impacted air quality in British Columbia. Wildfire smoke causes episodes of the worst air quality that most people will ever experience in British Columbia.

Common 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 illness 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 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. Know where to get real-time air quality readings:
   - (For Metro Vancouver and the Lower Fraser Valley communities): Air quality and weather map: AirMap.ca
   - (For elsewhere in BC): http://www.env.gov.bc.ca/epd/bcairquality/readings/find-stations-map.html
4. Stay informed by signing up for air quality advisories and alerts:
   - (Metro Vancouver and the Lower Fraser Valley): http://www.metrovancouver.org/services/air-quality/mailing-list/Pages/default.aspx
   - (Elsewhere in BC): https://aqss.nrs.gov.bc.ca/subscription.html
   - Wildfire alerts and forecasts are available by downloading “the BC Wildfire Service App (for Android or Apple): http://bcfireinfo.for.gov.bc.ca/hprScripts/wildfirenews/DisplayArticle.asp?ID=3186&WT.cg_n=HootSuite
   - You can also use the BC Ministry of Environment interactive wildfire smoke forecast map: http://firesmoke.ca/forecasts/current/
5. Make sure you can keep the air clean inside your facility.
   - Talk to your building provider about making existing building ventilation system HEPA (high efficiency particulate air) filter ready (or the highest rated minimum efficiency reporting value (MERV) filter possible). Then during a wildfire smoke event, the existing building ventilation filters could be switched to the upgraded filter for the length of the event.
   - Consider buying portable air cleaners with HEPA filtration, which are mobile units that can be plugged into a regular wall socket and used during wildfire events. Different units treat different sized rooms, so do your research and make sure the one you buy is good 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. More information on choosing portable air cleaners can be found here:

- Note that air cleaners work best when windows and doors are closed, so heat may become an issue on days that are also hot outdoors. 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.
- Arrange a maintenance plan to replace all filters regularly.

6. Ensure that people with chronic health conditions (e.g. asthma) who are prescribed "rescue" medications have these medications easily available.

What should I do during a wildfire smoke event?

1. Check your local air quality readings and health advisories regularly.
2. Monitor residents in your care for signs of illness. Make sure residents drink water and stay cool.
3. Reduce exposures to wildfire smoke as much as possible.
   - Filter indoor air using upgraded filters in the building air mechanical system and/or portable air cleaners with HEPA filtration.
   - 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 the air quality is better indoors, think about suggesting that residents stay inside during times of high outdoor smoke concentrations.
   - 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.
4. 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 needed if poor air quality at the time.

Wildfire Smoke Resources

- (BC Centre for Disease Control): Factsheets on the health effects, how to prepare, and how to choose a portable air cleaner for wildfire smoke, Air Quality Health Index, and more can be found here http://www.bccdc.ca/health-info/prevention-public-health/wildfire-smoke