

SUMMARY

Leeds, Grenville and Lanark Municipal - Public Health Networking Call Friday, June 14, 2024, 10:00 am to 10:30 am

Recording: https://us06web.zoom.us/rec/share/QtmdFzxxXI_RAqcjP9iq28D7bebS6A6bqwxFqQTnedB3Jdo4_xsRh2aM0uRx5v24.U1HZAFFfYEKBznAo

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- 1.0 Welcome/Introductions Peter McKenna, LGL Board of Health Chair/Dr. Linna Li, LGL Medical Officer of Health & CEO
 - Welcome to the June call our topic of air quality alerts and response comes at an opportune time.
- 2.0 **Air Quality Alerts and Response Presentation** Zahra Yousuf, Health Promotion Consultant/ Kim McCann, Population Health Manager **If the Air is Thick, It's Time to Be Quick!**
 - Discussing the increasing severity of Canada's wildfire seasons, particularly in Ontario, and their impact on air quality. It's crucial to stay updated on this topic, due to its evolving nature.

What is wildfire smoke?

• It is a mixture of particles and gases, including carbon monoxide (CO), carbon dioxide (CO2), nitrogen oxides (NOx), polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs).

Health impacts of wildfire smoke

- **Short-term Effects**: Exposure to wildfire smoke can cause eye and throat irritation, cough, runny nose, headaches, dizziness, chest pains, difficulty breathing, wheezing, and heart palpitations.
- Long-term Effects: Prolonged exposure to wildfire smoke increases the risk of developing cardiovascular diseases and chronic respiratory conditions.

Vulnerable populations

• Children and infants, elderly individuals, people with pre-existing respiratory or cardiovascular conditions, pregnant women, and outdoor workers are especially vulnerable to the effects of wildfire smoke.

Encourage Community Support

• Municipalities may want to consider adding a feature on their website for emailing or contacting vulnerable members of the community to ensure their well-being.

Monitoring Air Quality

• The Air Quality Index (AQI) categorizes pollution levels into different risk levels. Low risk (1-3) is ideal for outdoor activities, moderate risk (4-6) suggests reducing activities if experiencing symptoms, high risk (7-10) advises reducing or rescheduling activities, and very high risk (10+) recommends avoiding outdoor activities altogether.

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- Tools that provide real-time data and smoke forecasts:
 - PurpleAir and Air Quality Egg Sensors
 - Fire Smoke Canada
 - o Real-time weather updates WeatherCAN App and AQHI updates

Pros of using sensors

Provides real-time PM2.5 data, accessible and affordable, encourages community engagement.

Cons of using sensors

May not be as accurate and has limited functionality.

Protective Measures

- <u>During poor air quality</u>:
 - Stay indoors with windows closed and use air conditioning.
 - Use air filters for cleaner indoor air.
- At-risk individuals:
 - Keep medications ready.
 - o Plan with healthcare providers.
- For vulnerable populations:
 - Municipalities encourage community support.
- **Considerations for Municipalities**
 - Public communications
 - Cleaner air spaces

- o Limit outdoor activities and wear an N95 mask if necessary.
- Most importantly, stay hydrated.
- Consider temporary relocation for better air quality.

- Emergency services coordination
- Air quality monitoring collaboration

Surveillance and Assessment

- Effective surveillance and assessment are crucial for managing air quality and protecting public health.
- The Air Quality Health Index (AQHI) guides public actions based on ozone (O3), particulate matter (PM2.5), and nitrogen dioxide (NO2) levels.
- Resources include MECP's 38 air monitoring stations and guidance for cleaner air spaces during wildfire smoke events, along with a checklist.
- AQMap (Air Quality Map).

3.0 Heat Alert

Next week: Be cautious of the temperatures and humidex!

• Ministry of Health is quite concerned about the heat next week — with 42-43 humidex, there is opportunity for some heat related illness. We are sending out a media release to take precautions this coming week during the hot and humid weather. If you decide to open any cooling centres or alternate shelters, we are happy to advertise the hours and locations.

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4.0 Questions/Answers and Comments

- Q: If air quality went into ≥ 10 for more than one day, what would be the advantages of a municipality declaring a state of emergency?
 - o A: There would be different approaches and likely variable involvement:
 - a) Dependent on the given situation at that particular municipality;
 - And b) the goal or outcomes for this type of declaration.
 - For long-term situations (several days) in general the intervention we recommend is to stay indoors, especially in buildings with air filtration to decrease the risk of these pollutants. In those circumstances the Health Unit would provide public communication and recommendations for partners.
 - Three at-risk groups:
 - Group 1 living in an indoor space with inadequate protection from poor air quality (no air filtration, leaky building)
 - Group 2 people who must stay outdoors (work outdoors, people who are unhoused, vulnerably housed)
 - ➤ Group 3 planned outdoor event(s) (sporting event for example)
 - o Municipalities can provide messaging, provide access to and/or suggest an alternate building or shelter (municipal building, friends, community centres, etc.) similar to a heat alert.
 - o Have participants at an outdoor event move indoors; cancel / reschedule the event
 - Allow outdoor workers to move indoors or provide alternate work
 - Have an indoor space for people who are unhoused
 - o Municipalities may declare an emergency if federal or provincial interventions and resources are needed oftentimes this may be done in collaboration with other agencies (Ministry of Environment, Health Unit, etc.)
- Q: Confirmation that there are no air quality sensors in the area? North Grenville has a masters student working on an environmental project using 100 air quality sensors would be very interesting to see if they are measuring similarly.
 - Ontario's Ministry of the Environment, Conservation and Parks (MECP) has 38 air quality monitoring stations visit their website to learn more they have a series of sensors that look at a number of substances and various particulates to guide public actions; essentially real-time monitors displayed on the provincial website. None of these stations are in the Leeds, Grenville and Lanark region. Currently we use the surrounding monitoring stations located in Cornwall, Ottawa, and Kingston (see map here).
 - Other air quality sensors are available on the market, and they provide a narrower range of air quality data. These can be used by
 individuals or organizations for use locally or for research. The critical component is communication regarding pros and cons and how
 one can use these sensors.
- 3.0 **Next Call:** Meetings will resume in September. If anyone has a preference for an earlier meeting, please let us know.