

Update Wildfire Smoke Response Strategy

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2023 - An unprecedented wildfire smoke season

Canadian wildfire smoke reaches Europe as Canada reports its worst fire season on record

CNN, June 27, 2023

Canada wildfires: what are the causes and when will it end?

Reuters, August 19, 2023

**August 2023
TPH Wildfire Smoke Response
Development**

2023 Wildfire Smoke Season

Canada wildfire smoke leaves millions under air quality advisory

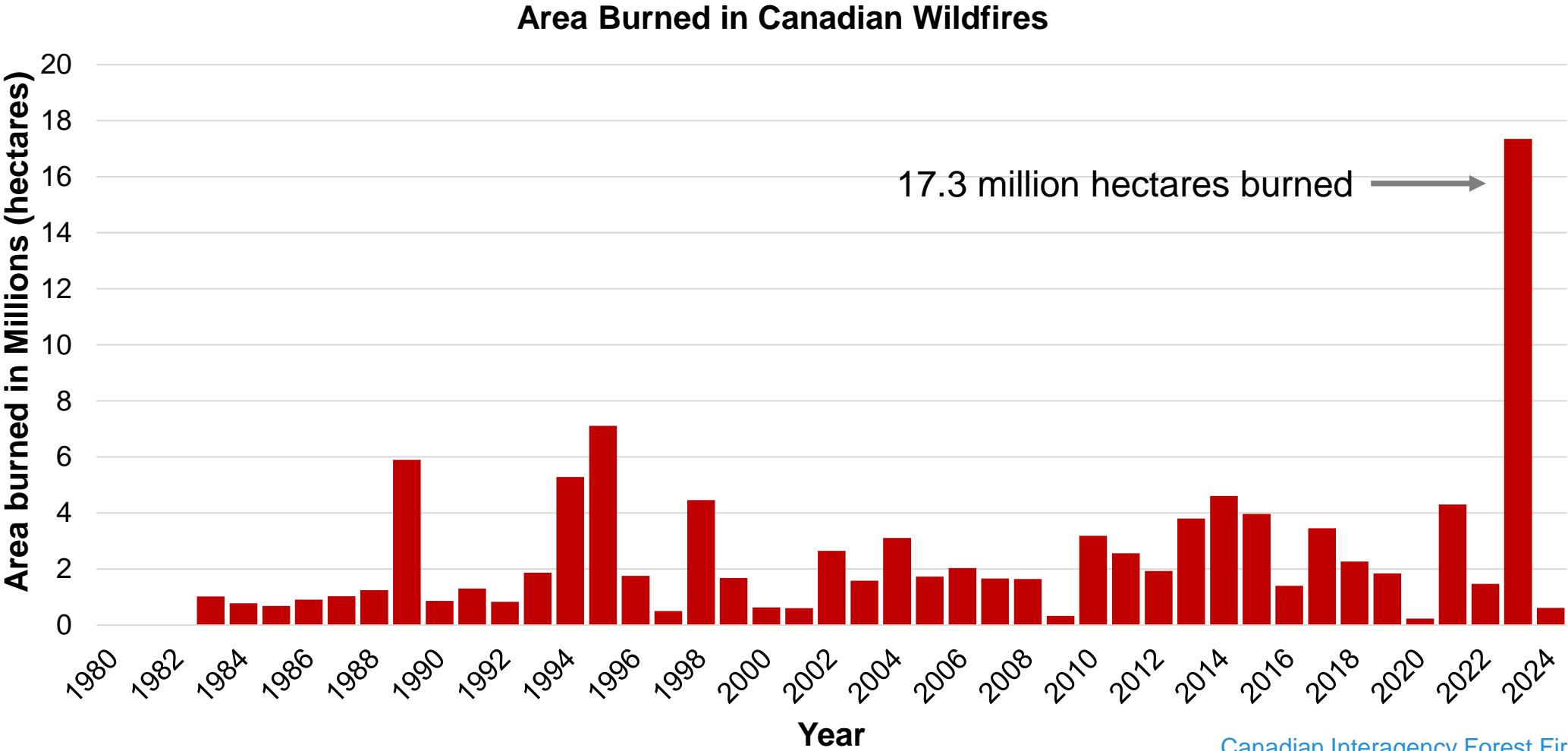
BBC News, July 18, 2023

World on Fire: 2023 is Canada's worst wildfire season on record — and it's not over yet

Fires have scorched more than 15 million hectares across Canada this year

CBC Radio, September 4, 2023

2023 - Unprecedented area burned in Canada



[Canadian Interagency Forest Fire Centre Inc.](#)

Wildfire smoke impacts health

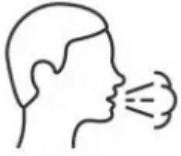
- Wildfire smoke is a complex and highly variable mixture of pollutants heavily influenced by the material being burned.
- PM_{2.5} particles are a significant make up of wildfire smoke, making it different from other types of air pollution and posing the greatest health risk of all its components.
 - PM_{2.5} particles are tiny particles that can penetrate deep into the lungs and enter the blood stream.
 - PM_{2.5} particles from wildfire smoke may be more harmful to health than particulate matter from other pollution sources.
- Short-term impacts of wildfires smoke exposure are understood better than longer-term exposure risks. Scientific research of the impacts of both short-term and long-term exposure is ongoing.

Short-term negative health impacts of wildfire smoke

Common Symptoms



Sore throat



Cough



Runny
nose



Headache



Eye
irritation

More Severe Symptoms



Wheezing
Shortness of
breath



Chest pain
Heart
palpitations



Dizziness

Exacerbation of Chronic Conditions



Asthma
Chronic Obstructive
Pulmonary Disease



Congestive heart failure

Other Impacts



Mental health

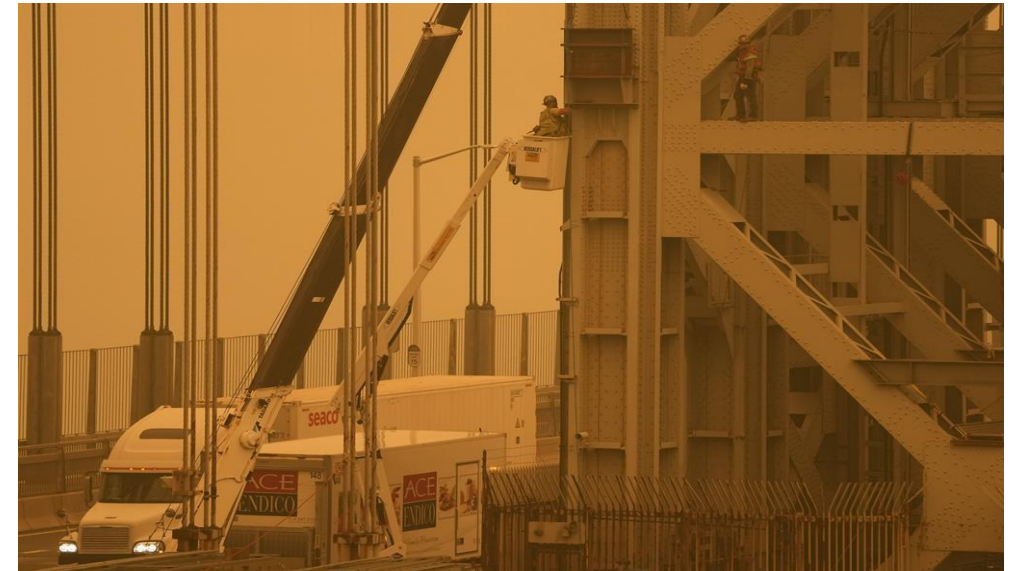
Some groups are at higher risk of negative health impacts from wildfire smoke

More susceptible

- Seniors
- People with chronic respiratory or cardiovascular conditions
- People with cancer, diabetes or other chronic conditions
- Pregnant people
- Children
- People experiencing lower socio-economic status

More likely to be exposed

- People who work outdoors
- People experiencing homelessness



Preparations for air quality events due to wildfire smoke

The TPH Wildfire Smoke Response Strategy:

- Designates roles and responsibilities.
- Describes collaborations with other City divisions and stakeholders.
- Outlines the communications supports for City Divisions and stakeholders such as long-term care and schools
- Fulfills requirements of the:
 - Provincial Hazard Response Protocol (2019)
 - Emergency Management Standard of the Ontario Public Health Standards

To update the Wildfire Smoke Response Strategy for 2024, TPH:

- Consulted with jurisdictions with more wildfire smoke experience,
- Analyzed epidemiological data,
- Scanned information sources including scientific studies and the media, and
- Used guidance from the provincial 2024 Ontario Wildfire Smoke and Air Quality Reference Document and Public Health Agency of Canada.

TPH is ready to respond to wildfire smoke

| Condition | Response | Key TPH Actions |
|--|----------|--|
| Throughout the season | Monitor | <ol style="list-style-type: none">1. Monitor for AQHI/PM_{2.5} changes and issuance of SAQS/AQAs for wildfire smoke.2. Monitor baseline health system impacts.3. Work with stakeholders to ensure communications are aligned with wider strategy.4. Promote messaging on ways residents can be ready for wildfire smoke impacts. |
| Wildfire smoke Special Air Quality Statement issued by MECP/ECCC | Activate | <ol style="list-style-type: none">1. Amplify AQHI-associated health messages and provincial and federal guidance through social media and other channels.2. Engage with Toronto Emergency Management and other City Divisions to ensure they have appropriate messages for their audiences.3. Use social media messaging to remind people how to protect themselves and availability of Cleaner Air Spaces Network.4. Communicate with Councillors, Board of Health, and the public including consideration of news release highlighting the increasing health risks.5. Amplify City occupational health advice for safe outdoor work. |
| Wildfire smoke Air Quality Advisory issued for >1 day | Enhance | <ol style="list-style-type: none">1. Reinforce ways of avoiding exposure to outdoor air through communications channels.2. Initiate actions from the Activate level if not already complete or continue actions from the Activate level as appropriate. |

Cleaner Air Spaces Network launched for the 2024 wildfire season

The [Cleaner Air Spaces Network](#) has been developed with TEM and CREM to provide spaces for people who face barriers accessing clean air or who do not have air filtration systems available at home.

2024 participating locations that are available when they are open:

1. City Hall
2. Metro Hall
3. North York Civic Centre
4. Scarborough Civic Centre
5. York Civic Centre
6. East York Civic Centre

The network will be evaluated for ways to improve each year.

How to Protect Yourself from Wildfire Smoke

- Follow health messages associated with the current AQHI level.
- Protect your indoor air by eliminating sources of indoor air pollution and considering air filtration options (e.g., furnace filter, portable air filter, DIY air filter).
- If possible, reduce energy use, avoid vehicle use, and reduce industrial emissions.
- For those who must be outside, respirator masks (e.g., N95) may provide protection.

Next steps

TPH will:

- Continue to evaluate the impacts of wildfire smoke on health and the health system.
- Incorporate wildfire smoke impact surveillance into the overall climate change surveillance framework that TPH is developing.
- Continue monitoring emerging evidence about health impacts and best practices and use this information to update the Strategy as appropriate.
- Survey residents about their experience during the 2023 wildfire smoke season.