

Alberta is entering forest fire season again. As this post goes live, [108 active wildfires blaze across the province, across a burn area exceeding 375,000 hectares.](#) Thirty-one of these fires are considered out of control. This situation is serious for Albertans, with over 29,000 people under evacuation orders. Yesterday, UCP Leader Danielle Smith declared an emergency. Several First Nations and Métis Settlements have declared emergencies or band council resolutions.

In a 2019 interview with CBC, University of Alberta wildland fire Professor Mike Flannigan claimed that "[The Fort McMurray fire was 1 1/2 to six times more likely because of climate change. The 2017 record-breaking B.C. fire season was seven to 11 times more likely because of climate change.](#)"

During a [2016 interview with the National Observer](#), Flannigan also stated that:

“Climate change is here. And we’re seeing more fires and arguably more intense fires because of it. Our area burned in Canada has doubled since the '70s. I and I say that this increase in area burned is related to temperature, which is related to human-caused climate change.”

Financial Impacts

Preventing, responding to and recovering from wildfires is expensive because of the necessary labour, equipment and supplies. According to BNN Bloomberg, including both the direct and indirect costs, the [total financial impact of the 2016 Fort McMurray wildfire was almost \\$10 billion](#). The Conference Board of Canada analyzed the economic impact of the same fire and expected [“...the impact of the wildfires to shave \\$456 million or 0.1 per cent off of real GDP in Alberta in 2016.”](#)

These financial impacts aren't limited to Fort McMurray. [High Level spent \\$10 million during the 2019 Chuckegg Creek wildfire](#). As of January 2022, the provincial government still owed the town \$2.6 million for these expenses.

The provincial government even presented a supplementary supply bill for 2018 and 2019 that requested additional funds to fight wildfires. [The Ministry of Municipal Affairs requested \\$80 million for disaster recovery and municipal wildfire assistance programs, while the Ministry of Agriculture and Forestry asked for \\$193 million to support wildfire management.](#)

Health Impacts

Forest fires are also costly to public health. According to Alberta Health Services, groups who are at higher risk of serious health impacts from the smoke include [those with heart or lung disease, older adults, pregnant people, smokers, children and those who are involved in strenuous outdoor activities or outdoor sports](#). This is a huge percentage of the population who need to limit their outdoor activities during the fire season.

The American Lung Association explains that wildfire smoke contains [a variety of pollutants, including particle pollution](#). This type of pollution is made up of minuscule solid and liquid particles that are suspended in the air. These particles are so small that they can become lodged in the lungs.

Particle pollution can lead to severe health issues such as asthma attacks, heart attacks, and strokes, and can even result in death. Research out of California on children indicates that exposure to smoky air during wildfires can cause increased incidents of [coughing, wheezing, bronchitis, colds, and respiratory problems which require medical attention](#), such as hospitalization or visits to a doctor, particularly for asthma-related issues.

Forest fire smoke also poses a risk of carbon monoxide (CO) exposure, a colourless, odourless gas most prevalent during the smouldering stages of a fire and in its proximity. When inhaled, CO can lower oxygen delivery to the body's organs and tissues, leading to symptoms such as headaches, nausea and dizziness.

The [Ontario Ministry of Health](#) recommends doing the following to minimize the health effects of smoke:

- Remove yourself from smoky areas if possible, either by going indoors or by moving to outdoor areas with more airflow.
- While staying indoors, use air conditioning if available and drink plenty of water to stay hydrated.
- Avoid doing outdoor physical activity.
- Use a HEPA filter if available.
- Use air conditioning inside vehicles and keep the windows shut. However, it is crucial to note that cars should never be run in a confined space like a garage.
- Avoid using appliances that emit smoke, such as wood stoves and candles.
- Do not smoke cigarettes indoors.
- If you have asthma or other respiratory ailments, avoid smoke exposure and take your medication as prescribed.

My Asthma Story

I have asthma and allergies that make me extremely sensitive to forest fire smoke, and I have been hospitalized often because of it. I went through multiple asthma specialists and was on every medication imaginable. Prior to the 2017 wildfires, I didn't take medication and basically never had asthma attacks. Then the wildfires made my asthma so severe that there were periods in my 20s when I had trouble walking even 10 meters.

Sometimes as Canadians, climate change can feel far away because it typically has a greater impact on developing nations. I'm writing this to express that I, a born and raised Calgarian, have suffered serious health consequences because of climate change.

Thankfully, my story has a happy ending, and my asthma symptoms have been drastically reduced since seeing a breathing physiotherapist. But I'm just one of many examples, and I hope we can all breathe better as we phase out fossil fuels.

How Climate Change Causes Forest Fires

The [Climate Atlas of Canada interviewed Mike Flannigan](#) to uncover why climate change causes an increased risk of forest fires. He explains that three main factors cause wildfires: fuel, ignition, and weather.

Flannigan was part of a group of researchers from the Canadian Forest Service that reviewed nearly 50 global studies on the relationship between climate change and wildfires. Their

analysis revealed that climate change impacts all three primary factors – the availability of dry fuel, lightning strikes, and dry, windy conditions. We are facing a more smoke-filled future. Their research concludes that the number of dry, windy days that allow wildfires to ignite and spread will rise by 50% in western Canada, while eastern Canada is likely to experience a much more significant increase of 200% to 300% in such "fire weather" conditions. Other studies have predicted that the annual average area burned by fires in Canada could double by the end of the century, surpassing the amount burnt in recent years.

In Newsweek, [climatologist Michael E. Mann further explains](#) that despite what some critics say, human-caused climate change does play a role in causing forest fires.

“Critics like to point to human land-use practices as the cause. But they cannot explain the devastating infernos of the past decade—these would not be possible without human-driven climate change. Last year’s [National Climate Assessment](#) made clear that climate change played a greater role in the observed increasing extent of these wildfires than land management or fire suppression efforts.”

One thing I’ve noticed living in Calgary is that forest fire smoke blows in from all across Canada and the US. This is why it’s important that Alberta sets an example and works with neighbouring provinces and countries to phase out fossil fuels.

The Case for Phase-Out

It’s important to recognize that forest fires are a direct result of climate change. Not only do these fires come with a hefty financial price tag, but they also pose significant risks to public health, including for people like me. This is why I support phasing out fossil fuels. And I’m not alone.

Alberta will be left behind if we do not start phasing out fossil fuels. Costa Rica and Denmark for example formed the [Beyond Oil and Gas Alliance](#). As part of this initiative, Denmark has already ceased issuing oil and gas exploration licenses and aims to halt production by 2050. Meanwhile, Costa Rica has decided to leave its oil reserves untouched. Other regions such as California and Quebec have also committed to this cause. [Meanwhile, Alberta’s fossil fuels are poised to produce 31.6 to 32.1 billion tonnes of CO₂ between now and 2050.](#)

It’s time Alberta stepped up and does its fair share. I’m tired of hearing that “Climate change isn’t Alberta’s responsibility because China and India burn more fossil fuels.” According to the [CSO Equity Review](#), the climate action proposals of affluent nations such as the UK, US, Europe, and Japan do not align with their carbon output levels, while countries such as China and India have made carbon pledges that exceed their carbon output levels.

There Is Smoke Outside Right Now

As I write these words, the sky over Calgary is shrouded in thick smoke from fires near Edmonton. I made the mistake of venturing out to grab a smoothie earlier today and have struggled to breathe since.

It's time for Alberta to take responsibility for clean air and protecting our infrastructure and forests. So please, educate yourself about the process of phasing out fossil fuels through [Alberta Beyond Fossil Fuels](#).

Start meaningful conversations with your friends and family to spread awareness, and urge our politicians to prioritize this issue. Let's work together to create a healthier and more sustainable future for Alberta so we can all breathe easy.