# Northern Ontario

CLIMATE CHANGE COLLABORATIVE

# CLIMATE CHANGE & HEALTH

## HAPPY EARTH DAY!

Earth Day is an annual event celebrated globally to support environmental protection and promote awareness of environmental issues in an effort to protect our planet.

### **DID YOU KNOW?**

Climate change poses a clear, present and growing threat to human health. However, transitioning to a low-carbon economy and taking action to protect against the impacts of climate change have immediate benefits to health.<sup>1</sup>

The environmental consequences of climate change such as extreme weather, extreme heat, and vector-borne disease will increasingly, directly and indirectly, impact the physical, mental, social and spiritual health of people in the Timiskaming district.<sup>2-5</sup>

Environmental offocts



Increased Precipitation and Flooding



Extreme Temperatures



Vector-Borne Disease

- lealth ffects
- Illness, injury, and death due to drowning and accidents (e.g., unstable winter ice)
- Unsafe housing (e.g., Flooding)
- Infrastructure damage (e.g., road washouts and stormwater management overload)
- Heat stress and heat stroke
- Dehydration
- Cardiovascular health impacts
- Respiratory health impacts (e.g., Asthma)
- Expanded range of disease carriers leading to increased cases of vector-borne disease (e.g., Lyme disease)

These are not the only impacts we are seeing, as many of the health effects of climate change are experienced indirectly, such as:



- Food Security⁵
  - Food distribution is interrupted by extreme weather and the resulting infrastructure damage.
  - Local and global food production is impacted by less predictable weather and increased risk of extreme heat and drought.



- Mental Health<sup>6</sup>
  - Emotional distress over the loss of traditional land, food, and culture as a result of rapid environmental change.
  - Depression, anxiety, and post-traumatic stress disorder following experiences with extreme environmental events.



- Water Contamination<sup>7</sup>
  - Flooding and surface water runoff spread pollutants to waterways, leading to water-borne disease.
  - Warming of nutrient-rich water produces ideal conditions for blue-green algae blooms, which can cause gastrointestinal and respiratory problems if consumed.

#### WHO IS AT RISK?

Even though we are all impacted by climate change, we are not impacted equally. The degree to which an individual or population is impacted by climate change is influenced by three factors: exposure, sensitivity and adaptive capacity. Many people and populations living in the Timiskaming district will experience the health impacts of climate change sooner, more often, and to a greater degree.

#### **EXPOSURE**

The probability of a climate-related health hazard occurring to an individual or population.

E.g., Living in a floodplain increases a person's risk of being exposed to health impacts related to extreme precipitation and flooding.

#### INCREASED EXPOSURE







#### SENSITIVITY

The degree to which an individual or population's health will be impacted by climate change based on their physical or social attributes.

E.g., A person with underlying health conditions will be more sensitive than someone who is considered to be in good health.

#### INCREASED SENSITIVITY







#### ADAPTIVE CAPACITY

The ability of an individual or community to cope with and manage the changing environment due to climate change.

E.g., A person having the financial means to afford an air conditioner to adapt to increasing temperatures.

#### REDUCED ADAPTIVE CAPACITY







No population chooses to be or is inherently vulnerable to the impacts of climate change. Rather, populations are made vulnerable by systemic and structural forces, such as poverty, marginalization, racism, and colonialism, which must be recognized when addressing climate change.

# WHAT CAN WE DO?

The Timiskaming Health Unit is currently:

- Working to better understand the health impacts experienced by those living in the Timiskaming district
  by conducting a climate change and health vulnerability and adaptation assessment.
- Assessing and prioritizing adaptation action within programs and services to lessen the community health impacts, while supporting ongoing community action to address climate change.
- Enhancing existing programming that has co-benefits for climate change and health.

Here's what you can do right now to improve your health and take climate action:

- Learn more about how climate change is impacting your individual and community health, and what steps you can take to protect yourself.
- Take action to reduce your greenhouse gas emissions, by engaging in active transportation and consuming locally produced food.
- Write to and speak with your elected officials, as well as your health care providers, about climate change and the ways it is impacting your health.



A reminder to celebrate Earth Day safely and only with those in your household to protect against Covid-19. Avoid close contact with people outside of your household, stay home and isolate away from others if you have symptoms of Covid-19, avoid non-essential travel, and wear a mask when physical distancing cannot be maintained.

#### **REFERENCES:**

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5 Schnitter& Berry. (2019). The climate change, food security and human health nexus in Canada.

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