

Climate Change & Housing



Meet Margaret & Friends

Climate change isn't just about rising temperatures or bigger storms. It's about people. The homes we live in, the air we breathe, the water we use, and the communities we call home all shape how we experience climate events. Let's meet some neighbours from across Ontario



Margaret from the 15th Floor

Margaret lives in a shared accommodation on the 15th floor of an older high-rise in Rexdale. The building has no air conditioning, the windows don't open fully, and summer heat turns her unit into an oven. Margaret is a college student on a fixed income, so running a portable AC is too expensive...if she even had one"

Whats is Margaret experiencing?

- *Energy Poverty*: when households can't afford the energy they need to keep safe and healthy and have to choose between energy and other needs



What happened the the Tree's?

Margaret decides to go outside to cool down and read, but her neighbourhood has few trees. The heat feels even worse on the bare pavement. She looks around for a shady area but cannot find one. She decides to go to the library, when she gets there, there is no where to sit. It seems other people had the same idea



Role of **tree canopy** in cooling neighbourhoods:

- shade as passive climate adaptation
- lower temps,
- improved air quality
- stormwater absorption

Key Term: *Urban Heat Island Effect* refers to the phenomenon where cities experience significantly higher temperatures than their surrounding rural areas. This occurs because urban environments absorb and retain more heat than natural landscapes

Jamal from the 11th Floor

At the library, Margaret runs into her neighbour, Jamal lives on the 11th floor and also has asthma. On extreme heat days in the building, poor air quality triggers his breathing problems. He uses the library as a cooling centre to get relief from the heat in the building but even being outside for 15 minutes to get to the library during a heat wave is enough for his asthma to flare up.”

Whats is Jamal experiencing?

- Air Quality & health risks (esp. for respiratory conditions)
- Accessing cooling centres as an emergency adaptation measure

Key Term: Climate Vulnerability the degree to which people are exposed to, sensitive to, and able to adapt to climate hazards.



Its Getting Hot in Here

Jamal's older aunt recently moved in with his family after losing her job and home. Their apartment is already small, and with more people, privacy is limited. On extreme heat days, Jamal's aunt — who is going through menopause — avoids her bedroom because the poor ventilation makes it unbearably hot. She spends the day in the living room wearing minimal clothing to stay cool. The family tries to give her privacy, which means cancelling social visits and limiting activities in their main space.

What is Jamal's family experiencing?:

- **Crowded Housing/Underhousing** -too many people for the size and design of a dwelling leading to reduced options for cooling & privacy
- **Ageing & Health Needs** -menopause symptoms worsened by heat
- **Social Life Impact** -climate events can shrink social spaces in underhoused families leading to reduced visitors & shared activities

Key Terms:

- *Indoor Heat Risk* — when homes trap heat, especially without ventilation or AC



Evan from Rural Ontario

Margaret's cousin Evan lives in their hometown, a rural township in Southern Ontario. This summer, drought conditions dried up her well water. The nearest town's emergency water distribution is 40 km away. Bottled water is often relied on however, Evan is conscious on the impact on the environment as well as Indigenous communities so using them feels like moral injury.

What is Evan experiencing?

- Climate change and water scarcity
- Rural infrastructure gaps
- Moral injury



Aleah From The Convenience Store

Margaret's friend who manages the local convenience store, Aleah, rents a basement apartment from the store owners. After a heavy rainfall, her home floods, damaging her belongings and forcing her to find temporary shelter. She is more upset because when she tried to get tenants insurance, she was denied because she lives in an area that is prone to flooding and was deemed uninsurable

What is Aleah experiencing?

- Flood risk in rental housing
- Basement units and inadequate drainage
- Uninsurable



The Chilly Basement

In winter, Aleah tries to teach her young daughter to read. The cold is so intense that her daughter's fingers become stiff, making it hard to turn the pages. Even with gloves, she struggles, losing focus on the story. The basement's poor insulation and lack of heating make the cold seep in from every wall, floor, and window.


What is Aleah and her daughter experiencing?:

- **Basement Units** → prone to temperature extremes (cold in winter, damp in summer)
- **Learning Environment Impact** → cold limits concentration and physical dexterity
- **Housing Quality** → poor insulation and heating efficiency make adaptation harder
- **Literacy/cognitive impacts**- Heat above 25°C reduces students' ability to process information by up to 13%. Cold temperatures below 18°C impair fine motor skills and concentration.

Key Terms:

- **Energy Inefficiency** — *homes that require more energy to heat or cool, often unaffordable for tenants*





Stories like Margaret's and her friends are being lived by thousands all over Ontario. Climate adaptation is about making sure that *everyone* has the resources, housing, and community infrastructure to stay safe, no matter the weather, but not at the expense of each other or the environment.

Key Considerations:

- Environmental Justice: equitable treatment & involvement of all people in environmental policy
 - Social Vulnerability Mapping: identifying which communities are most at risk
 - Adaptation Measures: implementation of green infrastructure, community cooling strategies
 - Negative Satisfiers assessments- being able to satisfies our needs, however, this happens at the expense of others, ourselves or our communities
 - Extractivism- Solutions that rely on extraction rather than redistribution
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