

# Climate, Health & Sustainable Care 2025 Annual Symposium



## Panel Session: Care in a Changing Climate

Edward Xie



Panel Moderator

Franca Ursitti



Peel heat vulnerability index: Understanding area-level vulnerability to heat in Peel region

Jessica Cuppage



Older adult care in a changing climate

Samantha Green



Collaborating with community organizations to increase heat resilience

Lidia Ferreira



# Peel Public Health's Heat Vulnerability Index

Franca Ursitti, Manager, Health Hazard Investigation  
and Vector Borne Disease  
Peel Public Health

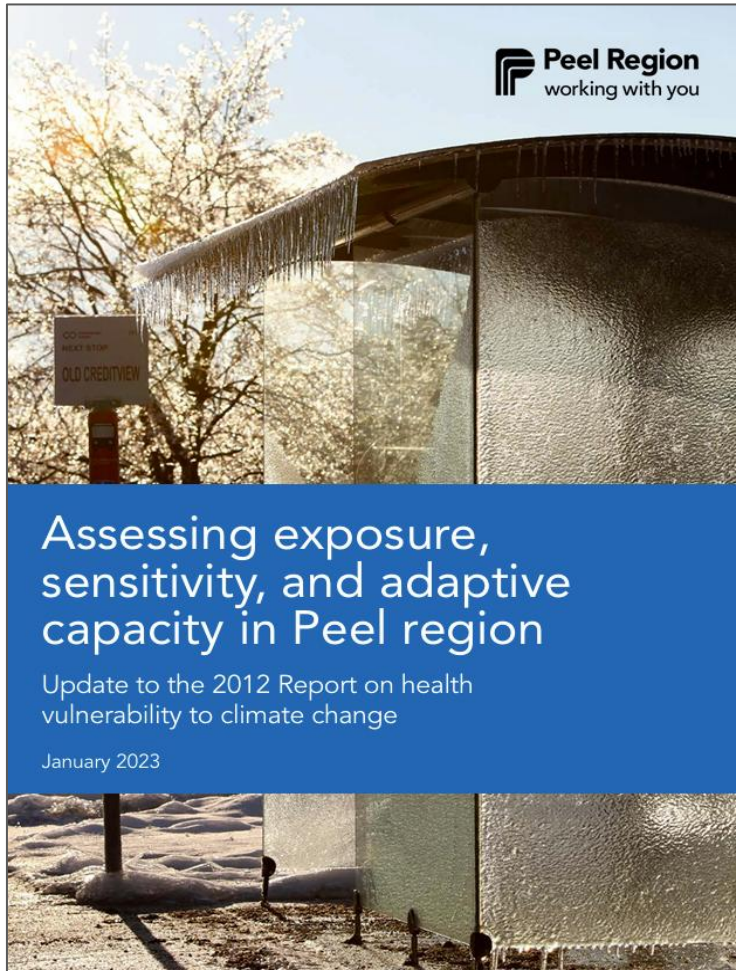


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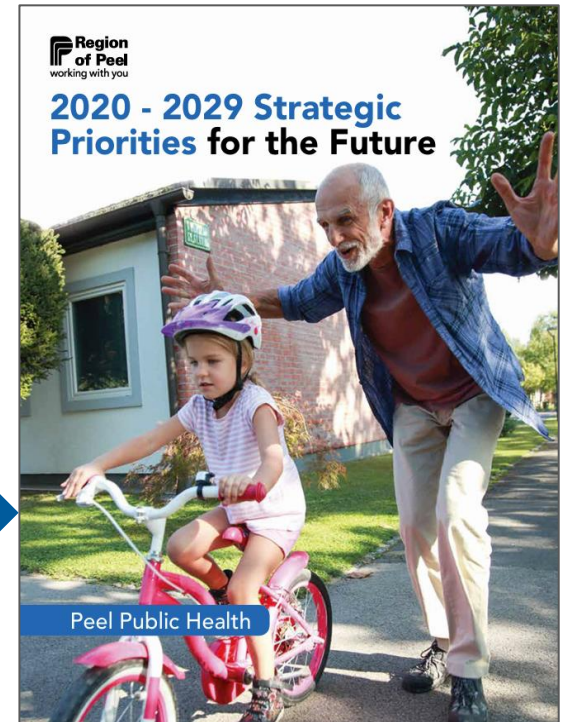


# Context



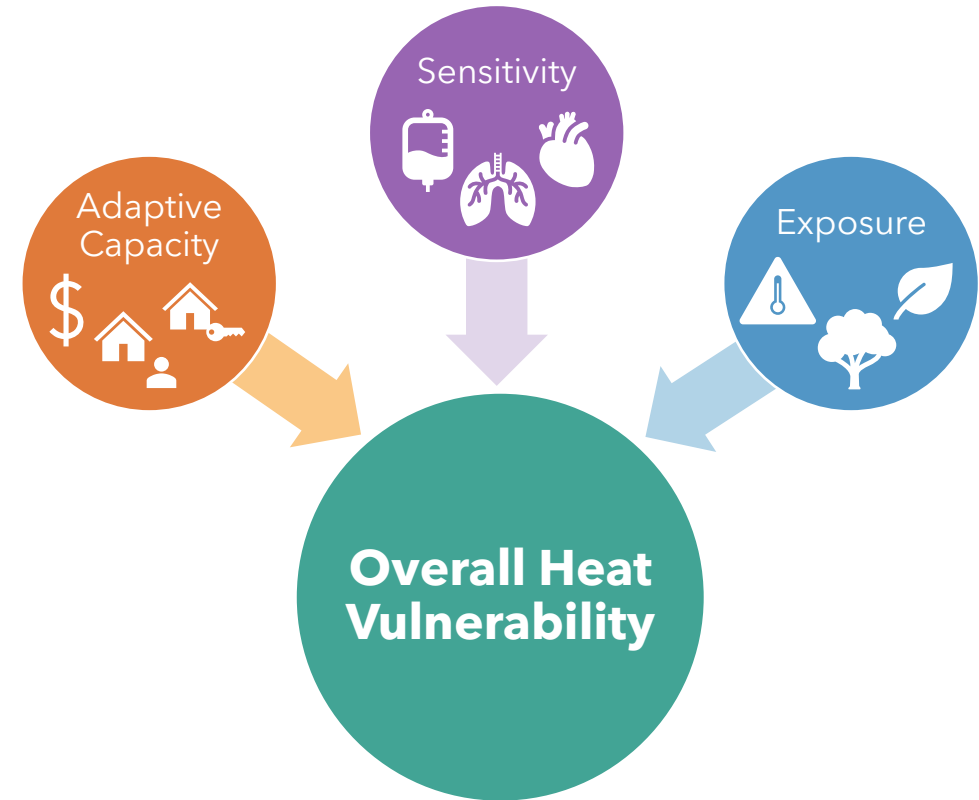
- Heat is one of the top five climate-related health hazards.
- Recommendations included mapping at-risk communities.
- Temperatures projected to continue rising, increasing heat-related illness risk.

Integration of VA results into PPH's Strategic Priorities.



# Project Objectives

- 1** Identify, assess, and map communities in Peel at-risk of heat-related illness.
- 2** Begin discussions and strengthen understanding of how these communities are impacted by heat.
- 3** Ensure effective and equitable programs and policies are explored to mitigate the risk of heat on health.

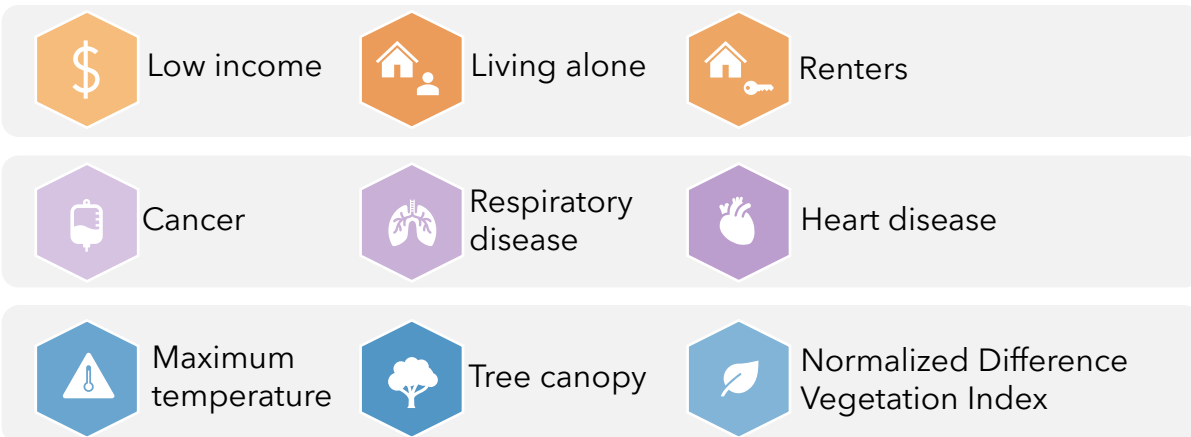


# Principal component analysis (PCA)

## 1. Variables associated with heat vulnerability

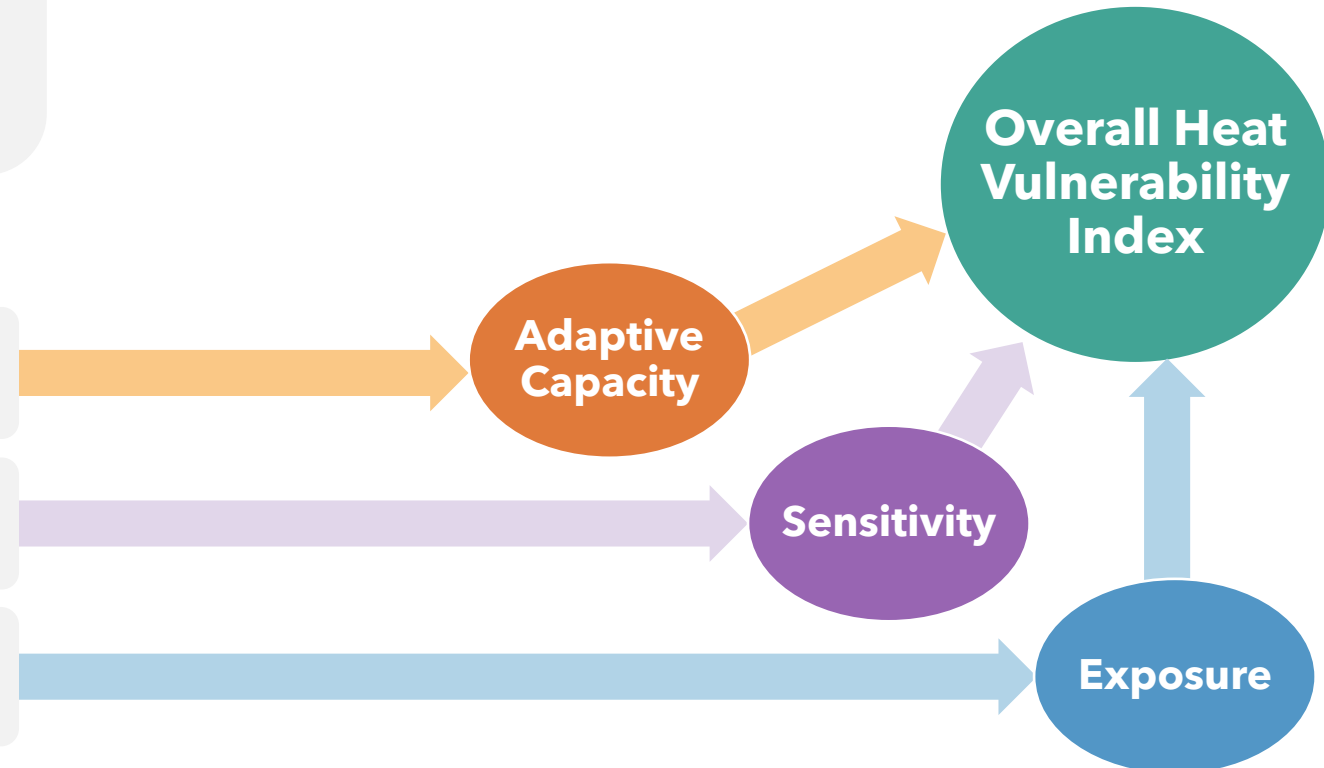


## 2. Final components

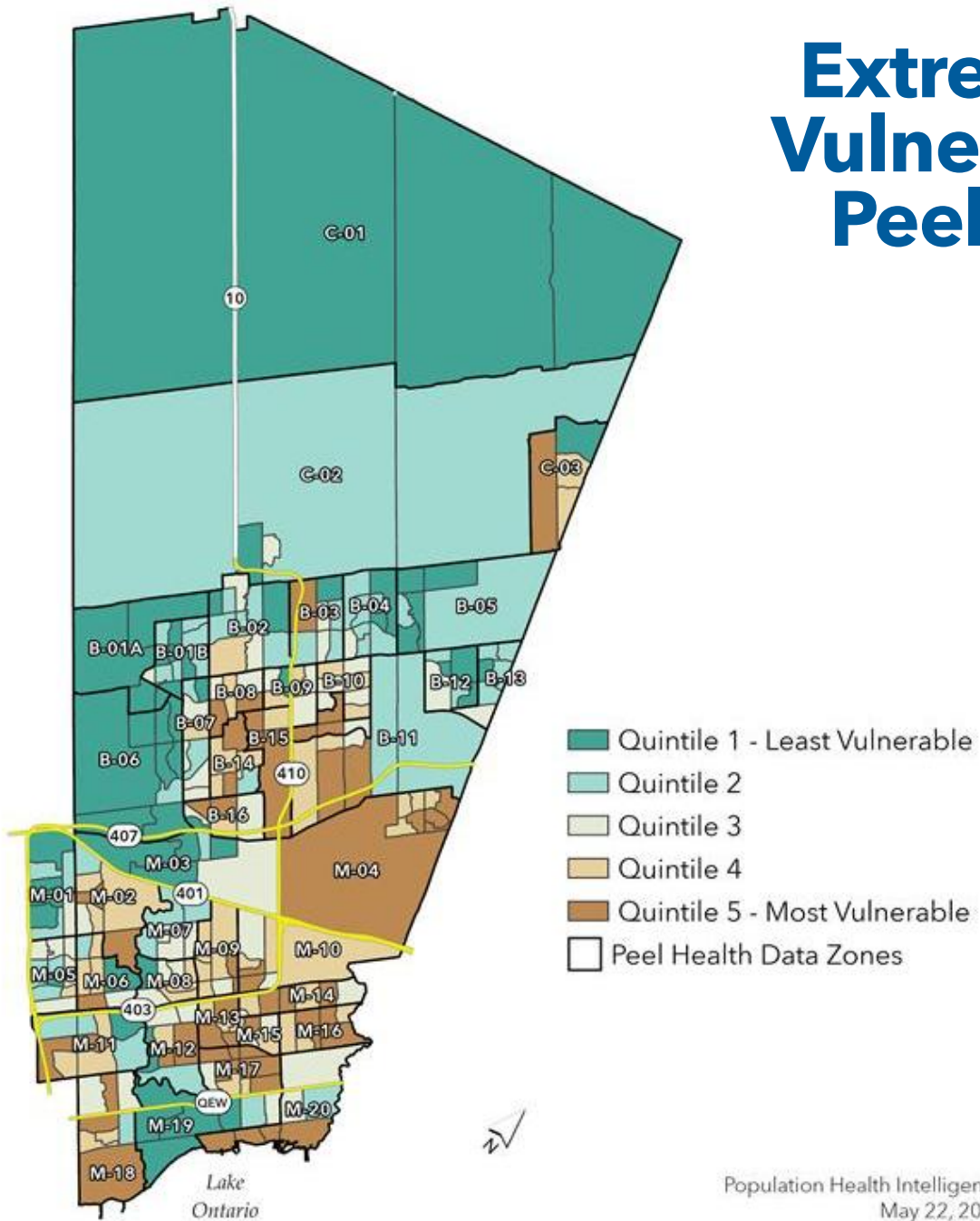


## 3. Compute scores for each Census Tract

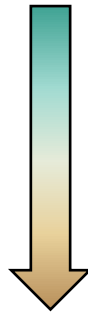
- For each of the 3 components:
  - Adaptive Capacity
  - Sensitivity
  - Exposure
- Combined: Heat Vulnerability Index (HVI)



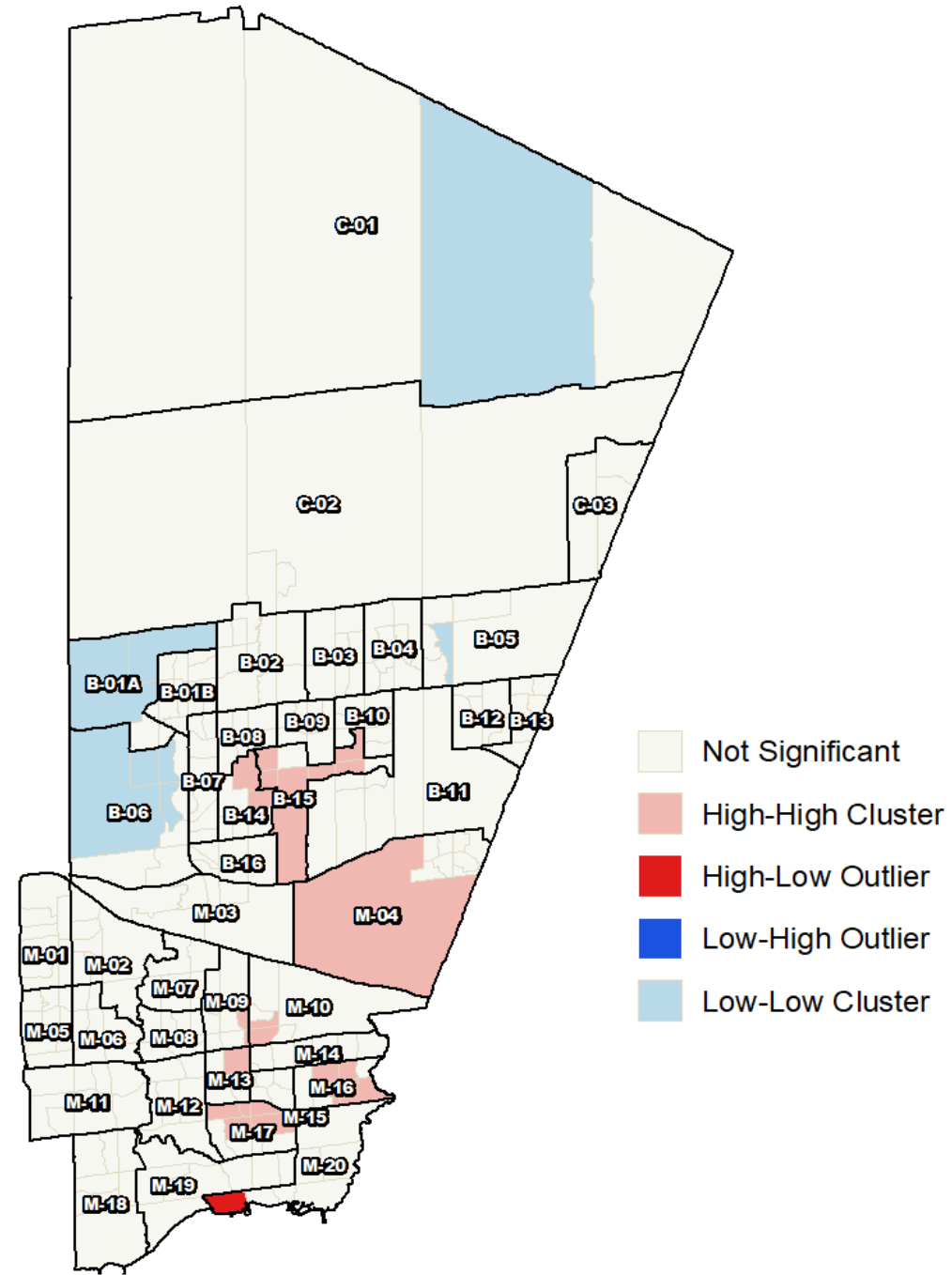
# Extreme Heat Vulnerability in Peel Region



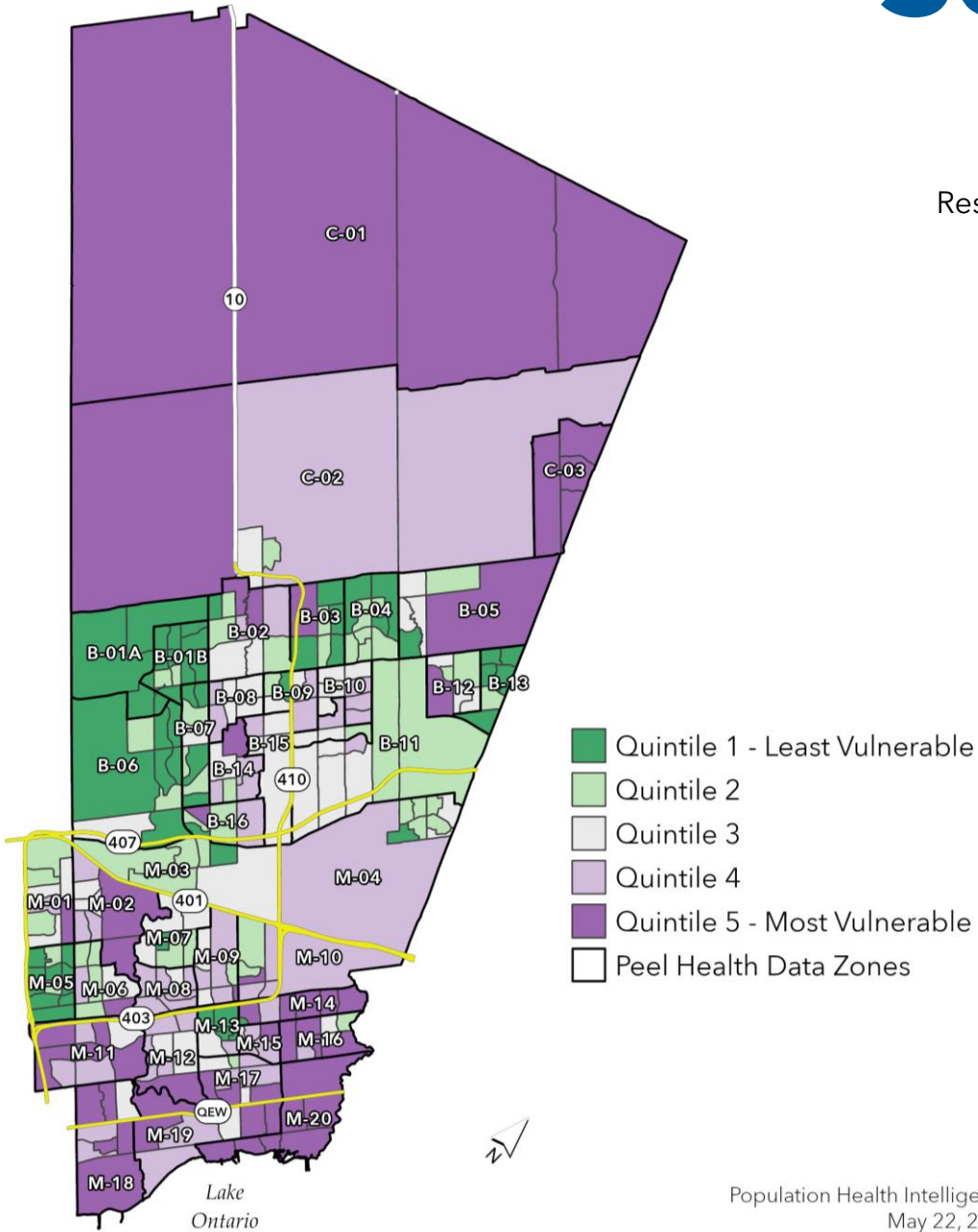
Lower Vulnerability



Greater Vulnerability



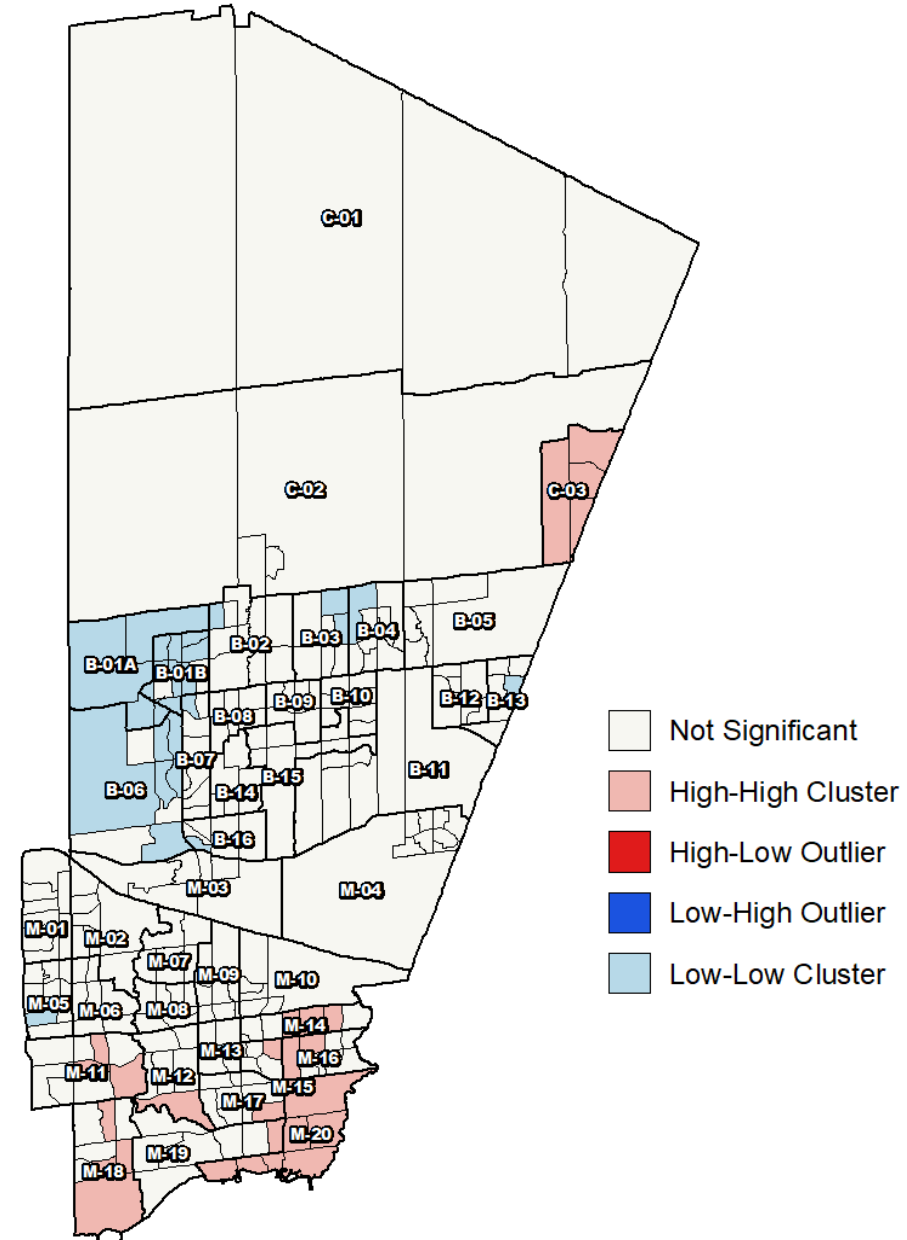
# Sensitivity



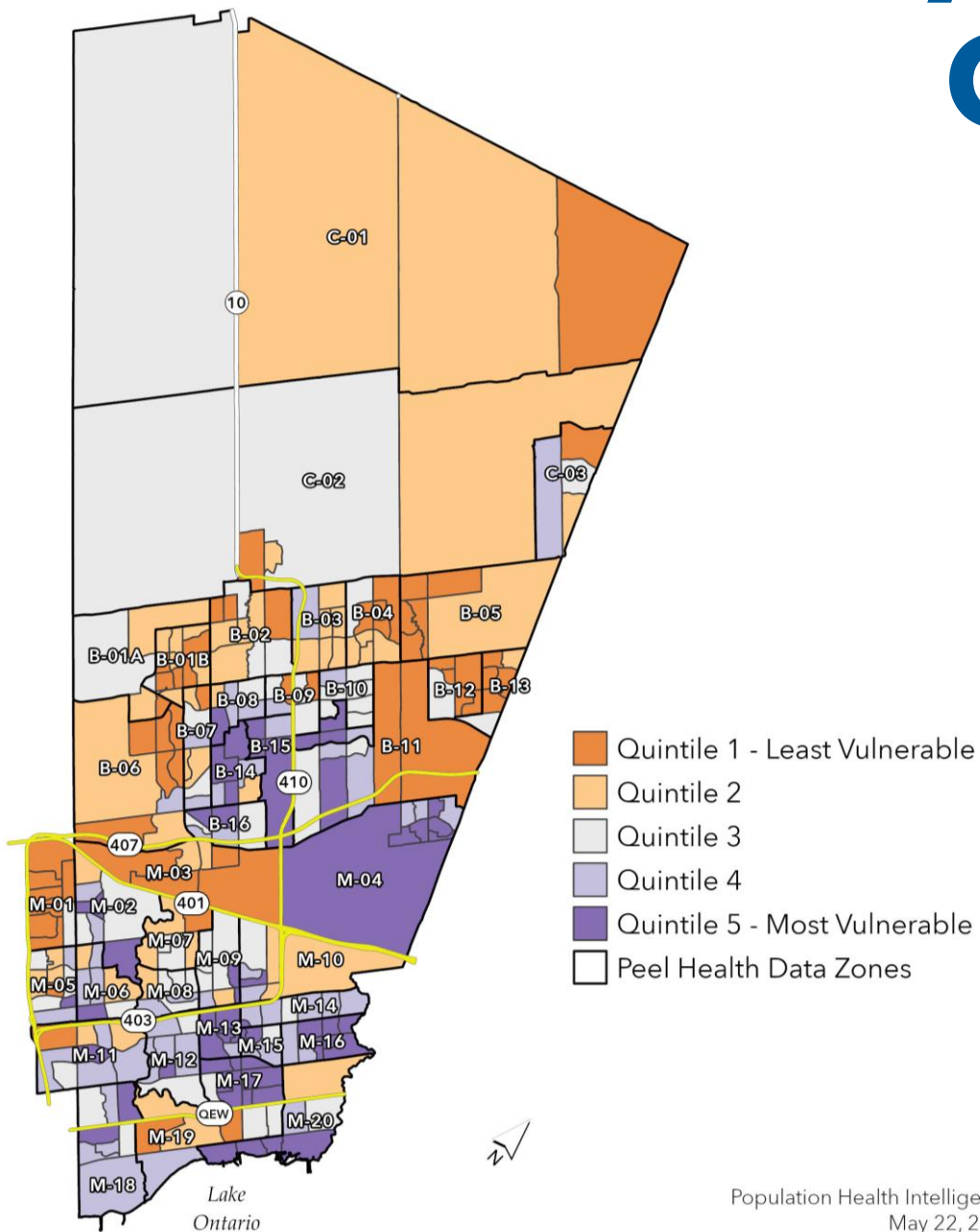
Protective



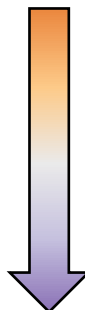
Risk



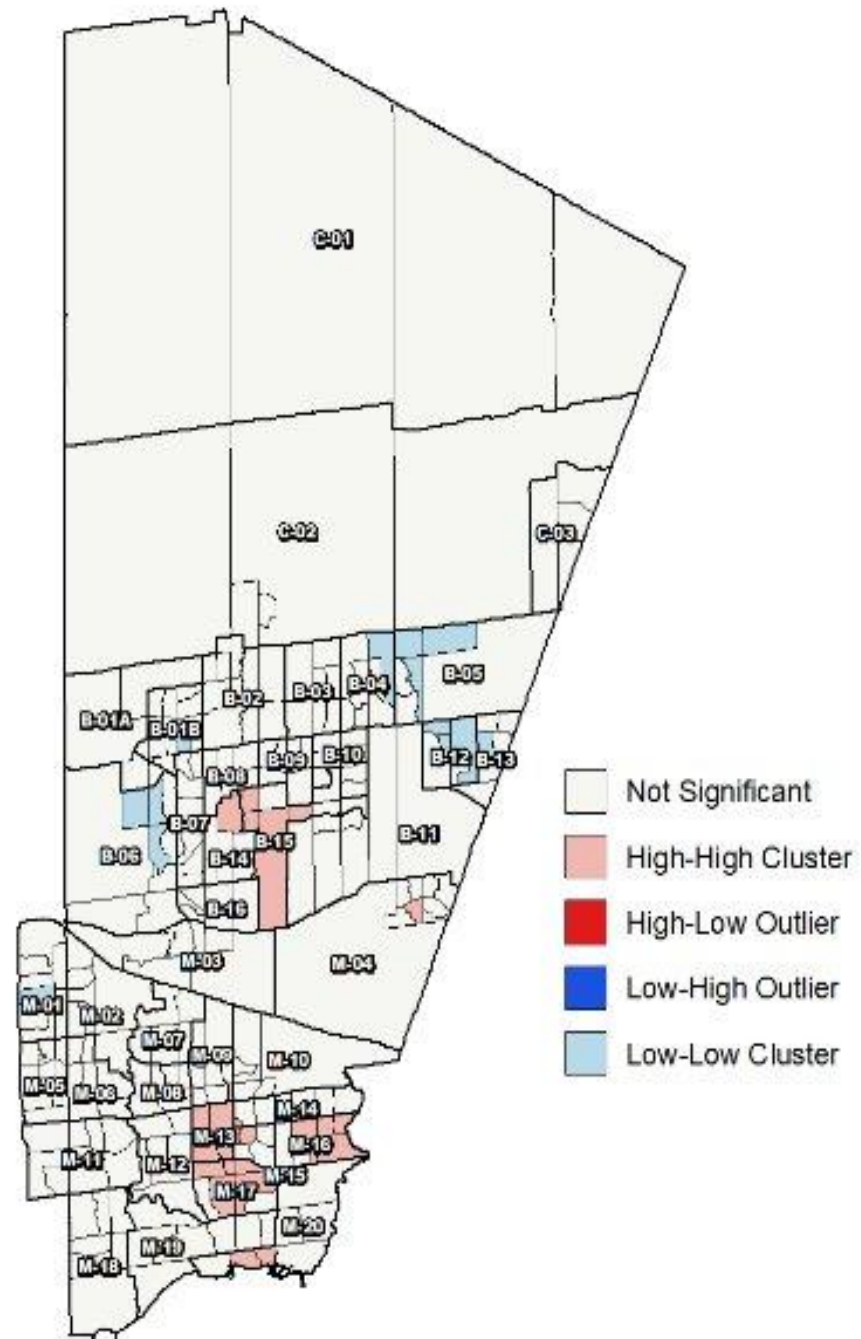
# Adaptive Capacity



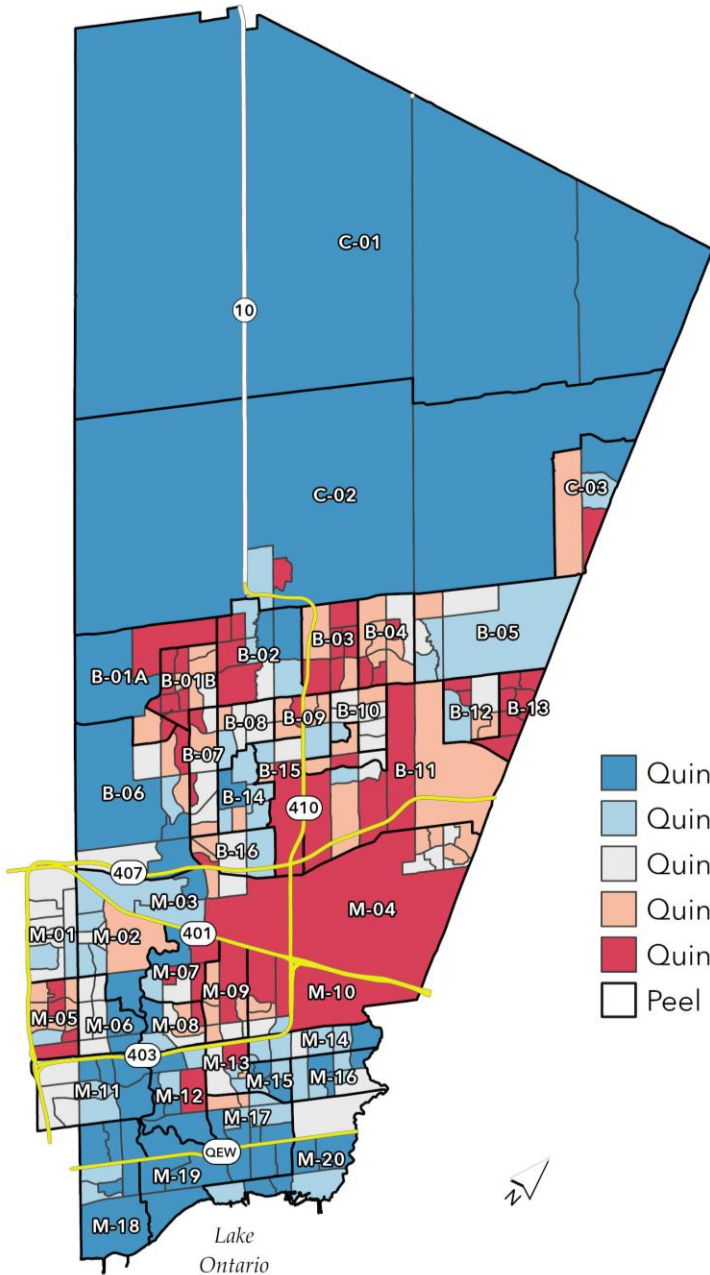
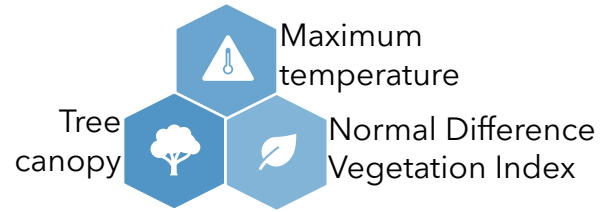
Protective



Risk



# Exposure

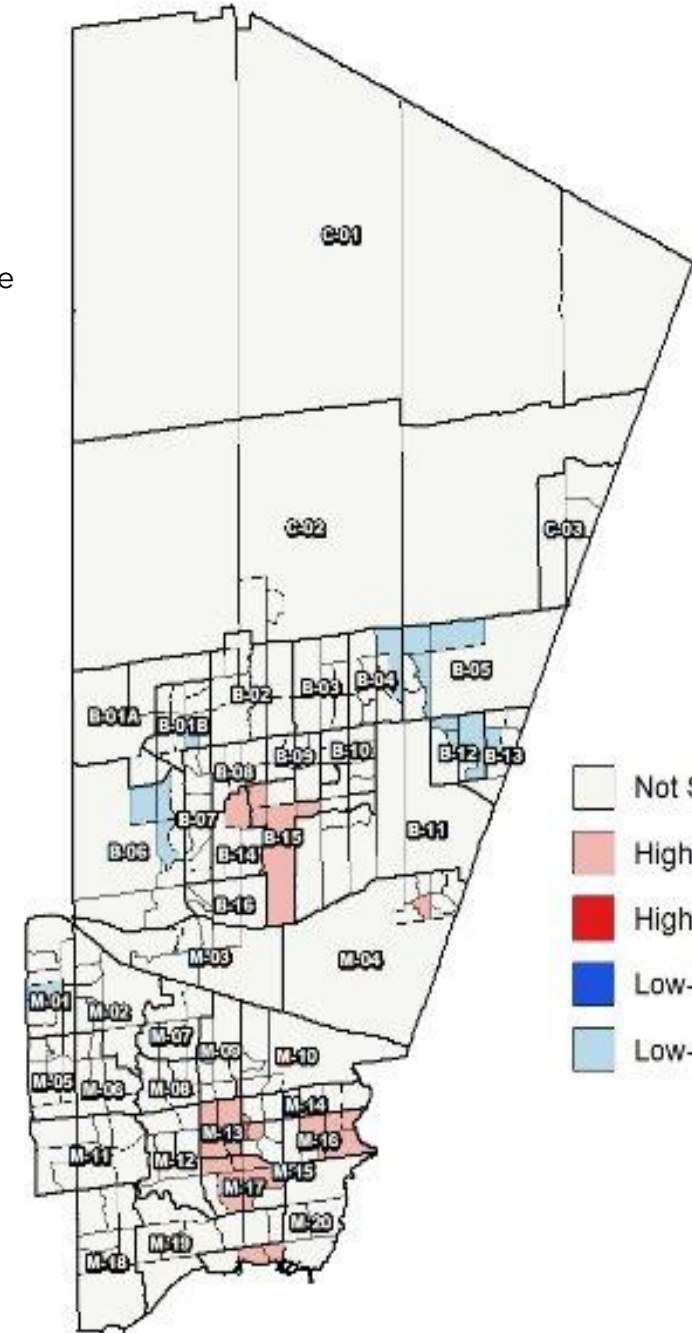


- Quintile 1 - Least Vulnerable
- Quintile 2
- Quintile 3
- Quintile 4
- Quintile 5 - Most Vulnerable
- Peel Health Data Zones

Protective

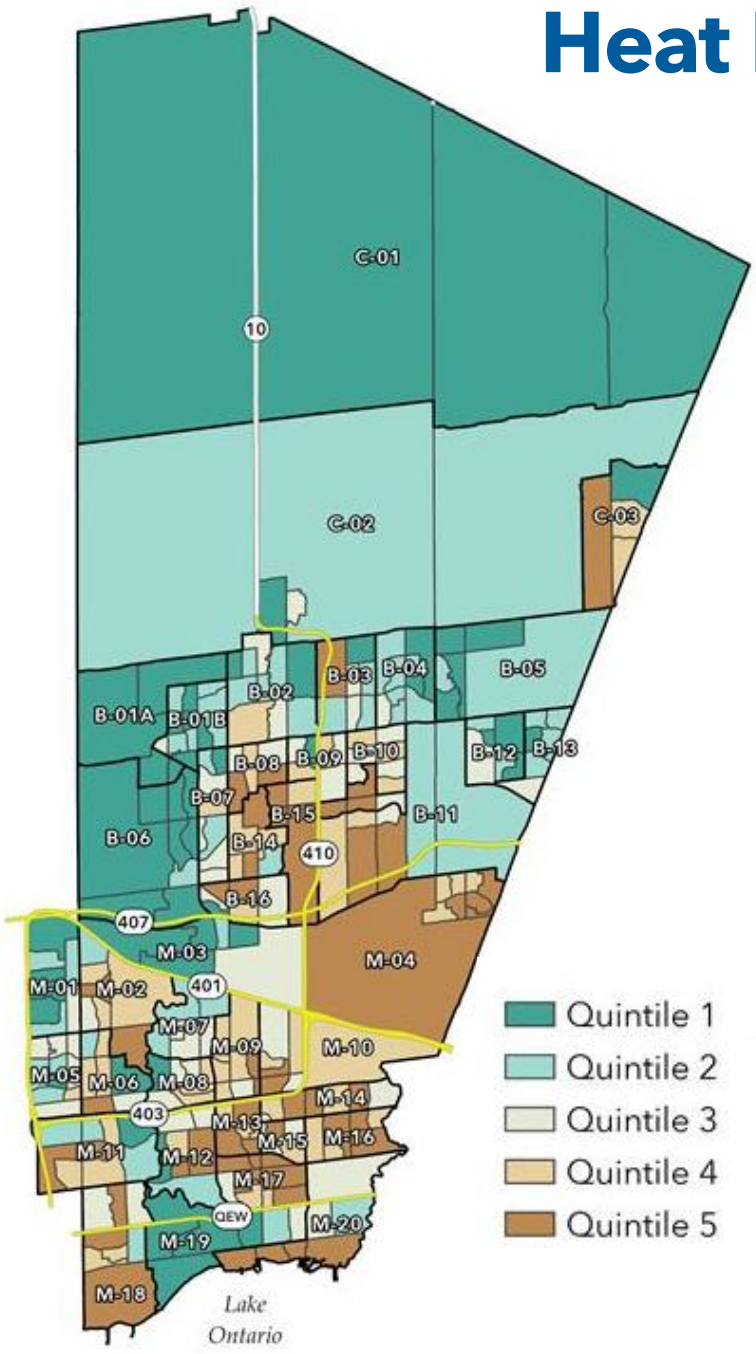


Risk

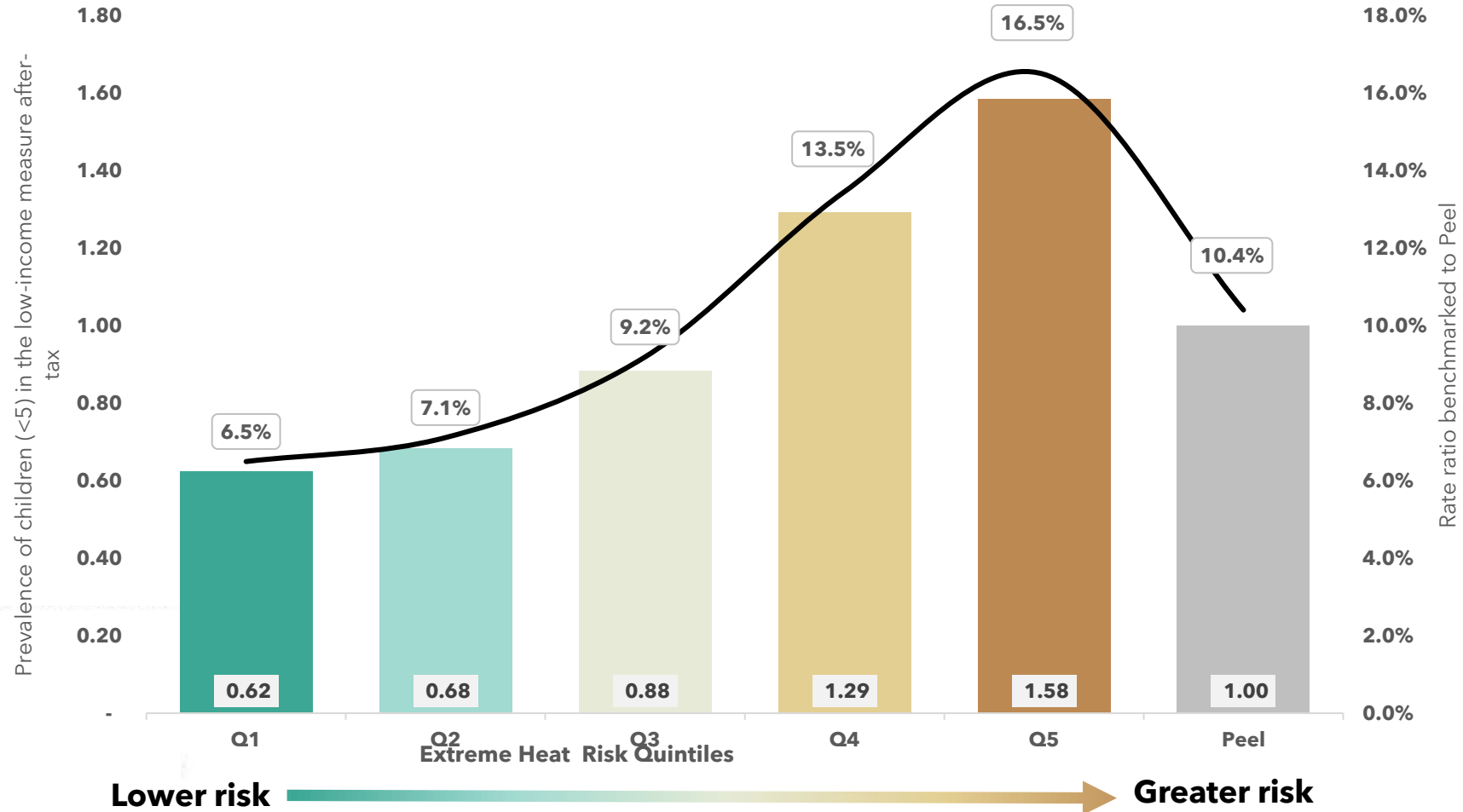


- Not Significant
- High-High Cluster
- High-Low Outlier
- Low-High Outlier
- Low-Low Cluster

# Heat Risk & Health Equity Stratifiers

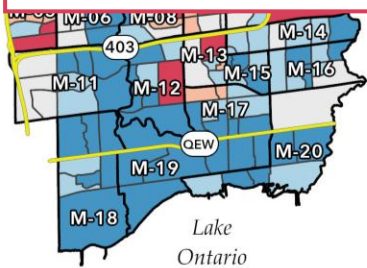


Children (0-5) in the low-income measure, after-tax



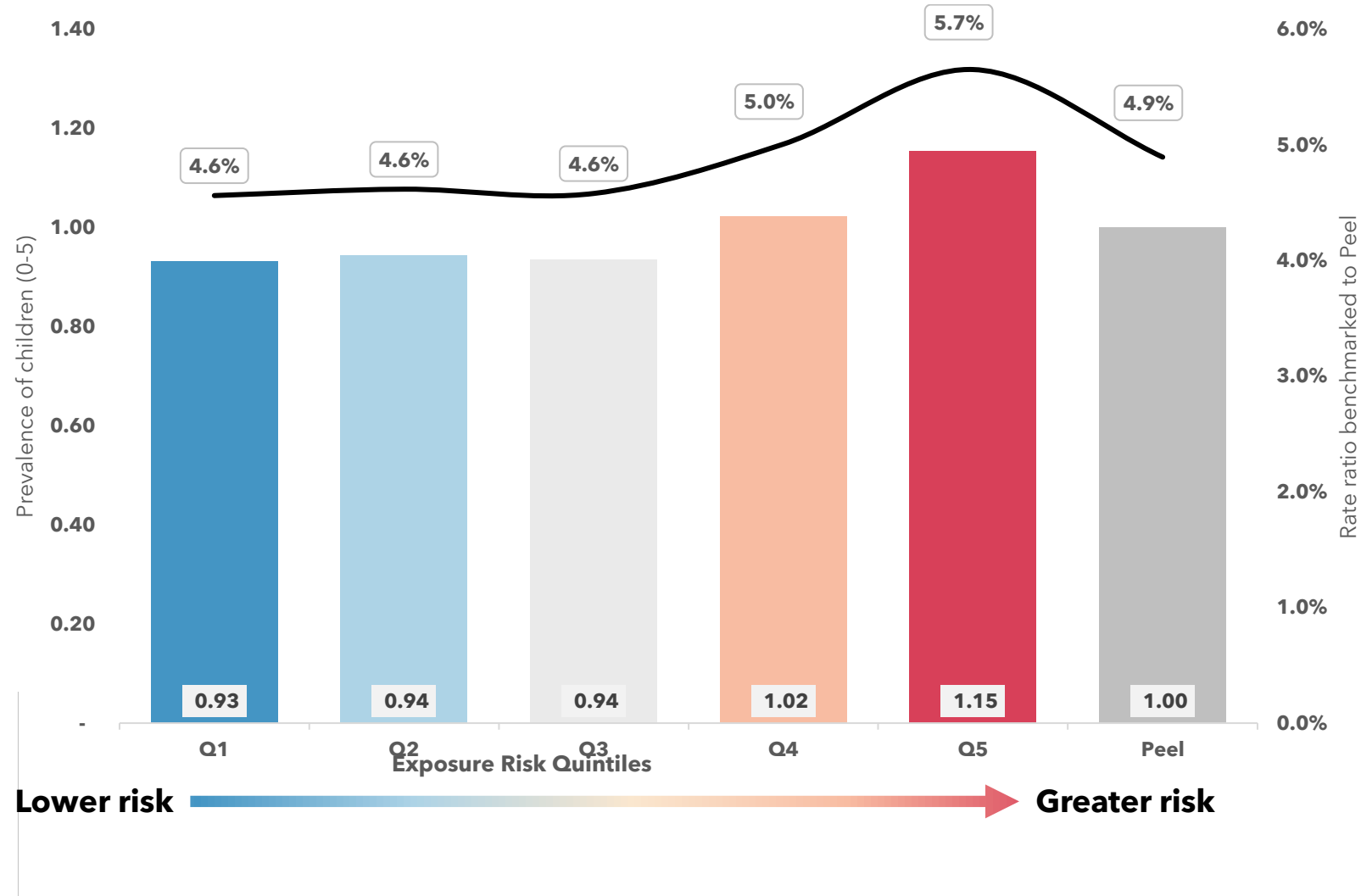
# Exposure Risk & Health Equity Stratifiers

Children (0-5) make up 5.7% of the population in communities most vulnerable to heat, compared to 4.6% in areas of lowest vulnerability.



- Quintile 1 - Least Vulnerable
- Quintile 2
- Quintile 3
- Quintile 4
- Quintile 5 - Most Vulnerable

Children (0-5)



# Applicability

Support planning  
and program/policy  
development.

Increase  
understanding of  
neighbourhood  
specific needs.

Support  
development of  
emergency plans.

Collaboration across  
public health,  
broader  
organization and  
community partners.

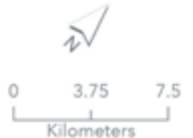
Application support.

# Heat Vulnerability Index and Peel Living Buildings

Census Tracts



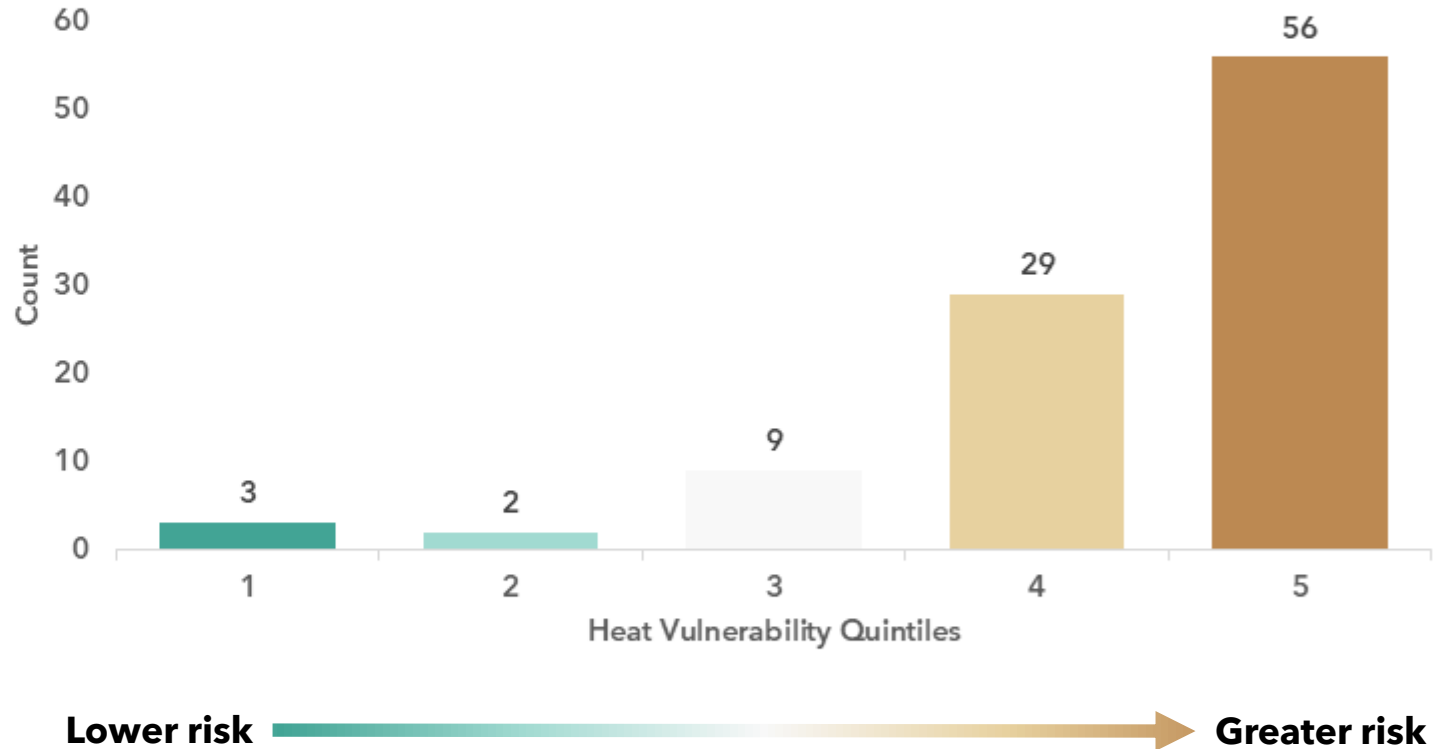
- Heat Vulnerability Index - Quintiles
- Quintile 1 (Least Vulnerable)
  - Quintile 2
  - Quintile 3
  - Quintile 4
  - Quintile 5 (Most Vulnerable)
  - Peel Living Buildings



Peel Public Health  
Public Health Intelligence  
October 14, 2025

# Prioritization of Climate Retrofits in Peel Buildings

Peel Living Buildings by Heat Vulnerability Index Quintile



# Acknowledgements

- David Guillette, GIS Specialist
- Elena Galatsis, Health Analyst
- Franca Ursitti, Program Manager
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- Lydia Cheng, Epidemiologist
- Maureen Horn, Program Manager
- Meagan Temporale, Advisor
- Monali Varia, Director
- Nicholas Brandon, AMOH
- Jessica Mammone, Analyst

# References

1. Statistics Canada. 2021 Census
2. Wilton D, Diong C, Paterson M. Climate Change Vulnerability Assessment through Principal Component Analysis and Data Mapping by Census Tracts in Peel Region, Applied Health Research Question (AHRQ) #2024 0950 156 000. Toronto: Institute for Clinical Evaluative Sciences; 2023.
3. Metrics of land surface temperature, indexed to DMTI Spatial Inc. postal codes were provided by CANUE (Canadian Urban Environmental Health Research Consortium). References: [1] Setton, E; Redivo A. (2022). Three-year warm-season maximum land surface temperature from LandSat 8. Developed for the Canadian Urban Environmental Health Research Consortium. [2] Osei, Edwin (2022). Google Earth Engine code for calculating LST using LandSat 8. Computer code, posted on Stack Exchange April 22, 2022. [3] CanMap Postal Code Suite [compute file] DMTI Spatial Inc,. various years.
4. Peel Data Centre
5. NDVI values for Peel were determined using the NDVI Function (ArcGIS Pro 2.9.9) and the red band (Band 4) and near-infrared (NIR) band (Band 5) from Landsat imagery (USGS, July 13, 2021). The mean NDVI value for each census tract in Peel was extracted using the Zonal Statistics function (ArcGIS Pro 2.9.9)

# Data Sources

## **Institute for Clinical Evaluative Sciences (IC/ES)**

- Wilton D, Diong C, Paterson M. Climate Change Vulnerability Assessment through Principal Component Analysis and Data Mapping by Census Tracts in Peel Region, Applied Health Research Question (AHRQ) #2024 0950 156 000. Toronto: Institute for Clinical Evaluative Sciences; 2023.

## **The Canadian Urban Environmental Health Research Consortium (CANUE)**

- Setton, E; Redivo A. (2022). Three-year warm-season maximum land surface temperature from LandSat 8. Developed for the Canadian Urban Environmental Health Research Consortium.
- Osei, Edwin (2022). Google Earth Engine code for calculating LST using LandSat 8. Computer code, posted on Stack Exchange April 22, 2022.
- CanMap Postal Code Suite [compute file] DMTI Spatial Inc,. various years

## **Peel Data Centre**

- PDC, 2021, Tree Canopy (% of CT with tree canopy cover), accessed September 2023.

## **United States Geological Survey (USGS)**

- U.S. Geological Survey, 2021, Landsat Normalized Difference Vegetation Index: U.S. Geological Survey database, accessed September 2023, at <https://www.usgs.gov/landsat-missions/landsat-normalized-difference-vegetation-index>.

## **Statistics Canada Census Data (2021)**

- Statistics Canada. (2021). Family Characteristics: Living Alone
- Statistics Canada. (2021). Household Characteristics: Renter
- Statistics Canada. (2021). Low income and income inequality in 2020: Prevalence of low income based on the Low-income measure, after tax (LIM-AT) (%)

# Thank you

[Franca.Ursitti@peelregion.ca](mailto:Franca.Ursitti@peelregion.ca)



# Older Adult Care in a Changing Climate

Climate, Health, and Sustainable Care Annual Symposium

Oct 30, 2025

Dr. Jessica Cuppage MD MHI CCFP (COE)



I wish to acknowledge this land on which the University of Toronto operates. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and I am grateful to have the opportunity to work on this land.



# DISCLOSURE

I have no conflicts of interest to disclose.

I do not have a relationship with a for-profit and/or a not-for-profit organization to disclose.

I have not received any funding for this presentation.

The views represented in this presentation are my own, based solely on my own exploration of the subject matter and experiences. I am not making an endorsement for a specific tool/process/program.



# LEARNING OBJECTIVES

By the end of this session, participants will be better able to:

1. Describe how climate change disproportionately affects older adults.
2. Explain the contribution of older adult care to healthcare's environmental footprint.
3. Identify strategies to reduce unnecessary care and enhance climate resiliency in older adult care.
4. Recognize the alignment between sustainable care and improved health outcomes, patient goals, and system resilience.





# 01

...

## OLDER ADULTS & CLIMATE CHANGE

Vulnerabilities of older adults to climate change as well as opportunities.

# 02

...

## THE PRESENT

Strategies you can use immediately to contribute to climate conscious older adult care.

# 03

...

## THE FUTURE

Where might climate conscious care of older adults go?

# 04

...

## SUMMARY & CALL TO ACTION

# 01



## OLDER ADULTS & CLIMATE CHANGE



# BRITISH COLUMBIA HEAT DOME



- In Canada, **extreme heat events** are the leading weather-related cause of death<sup>1</sup>
- Heat dome in British Columbia in late June 2021 led to **619 heat-related deaths**<sup>1</sup>
- Most of the deceased were<sup>1</sup>:
  - older adults (67% over age 70)
  - multiple chronic diseases (91% on one chronic disease registry, >80% on three chronic disease registries)
  - lived alone (56%)
  - died indoors (98%)

## Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021

Report to the Chief Coroner of British Columbia

Release Date: June 7, 2022

(Egilson et al., 2022)

# VULNERABILITY OF OLDER ADULTS

## Heart

Aging is associated with reduced myocardial contractility. This leaves older adults less capable of augmenting cardiac output in response to heat-related dehydration and metabolic burden

Older adults are also more likely to be on medications such as diuretics and beta blockers, which further blunt the ability of the heart to respond to environmental stress-related cardiac demand



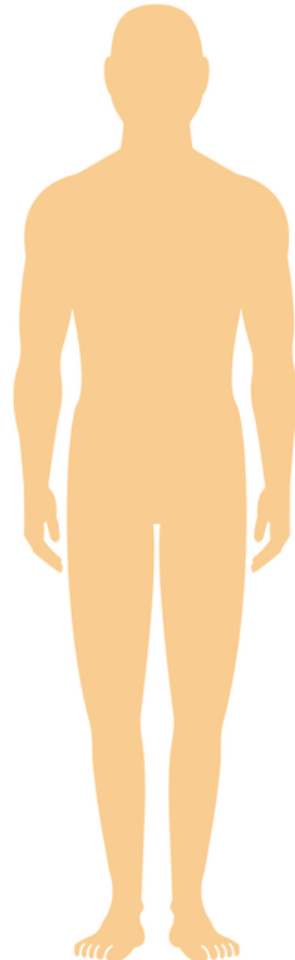
## Lungs

Aging leads to impaired pulmonary vascular barrier function due to poor epithelial progenitor cell recovery and extracellular matrix loss, leaving older adults more susceptible to the effects of inhaled particles and toxins



## Kidneys / Gut

Increasing age results in a reduction of the body's ability to redirect blood flow from the splanchnic vasculature to surface capillaries for heat dispersal



## Brain

Dementia is not only itself a predictor of worse clinical outcome from air pollution exposure, it is itself believed to be worsened by particulate matter inhalation



## Skin

Aging is associated with reduction in thermoreceptor density, blunting the body's autoregulatory mechanisms against extreme heat and cold



Older adults have decreased overall sweat production, particularly from the core of the body, reducing evaporative cooling efficiency

## Immune System

Immunosenescence, a phenomenon of weakened innate and adaptive immunity leaves older adults more vulnerable to epidemic infectious disease, less responsive to vaccines, and more susceptible to pro-atherosclerotic autoinflammationthe heart to respond to environmental



(Chang et al., 2022)

### Box 1. Medications that can increase an individual's risk of heat-related illness

#### Medications affecting the cardiovascular system

- Diuretics
- Vasodilators (eg, nitrates, ACE inhibitors)
- Calcium channel blockers
- $\beta$ -blockers
- Stimulants
- Anticholinergics

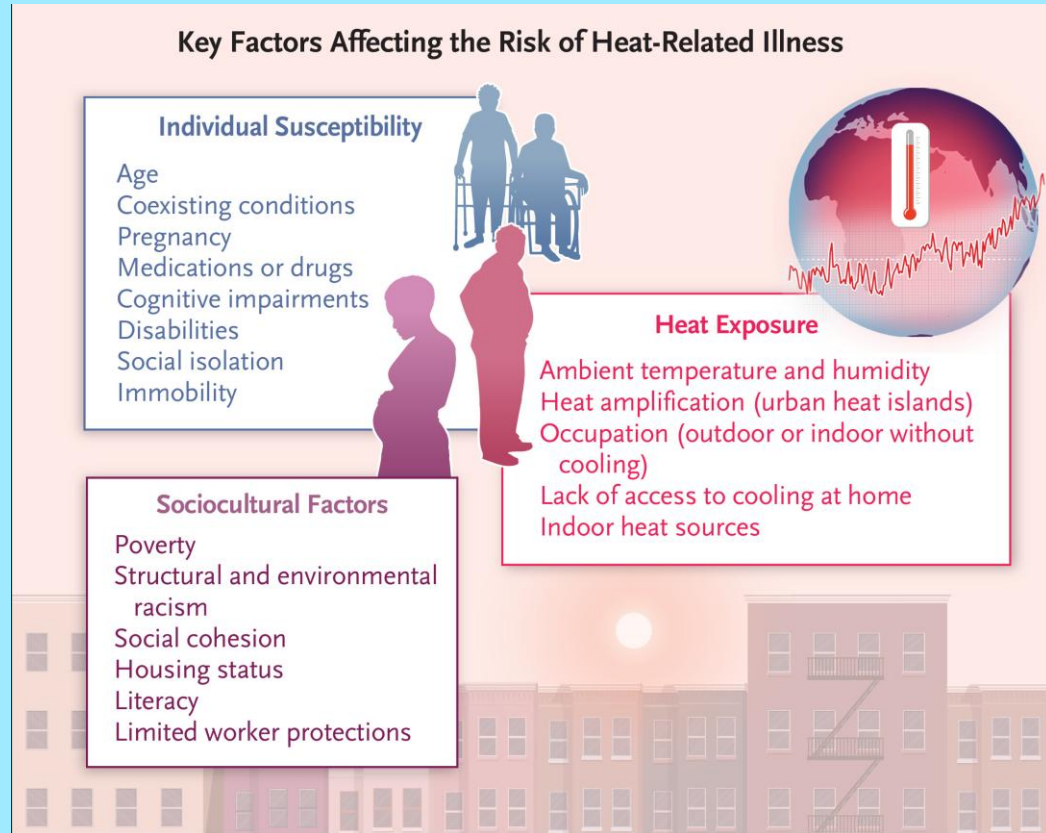
#### Medications affecting the nervous system

- Antipsychotics
- Antidepressants
- Cholinesterase inhibitors and memantine
- Anti-Parkinson agents
- Anti-epileptics
- Lithium

ACE—angiotensin-converting enzyme.

(Green et al., 2024)

# STRUCTURAL VULNERABILITY



(Sorensen & Hess, 2022)

- **Material and social deprivation:** more decedents lived in socially or materially deprived neighbourhoods than the general population<sup>1</sup>
- **Lack of access to cooling:** Majority did not have air conditioning (93%)<sup>1</sup>
- **Social isolation:** Most decedents lived alone (56%)<sup>1</sup>
- **Structural racism:** Urban heat island effect<sup>4</sup>

# OPPORTUNITY: CLIMATE MITIGATION

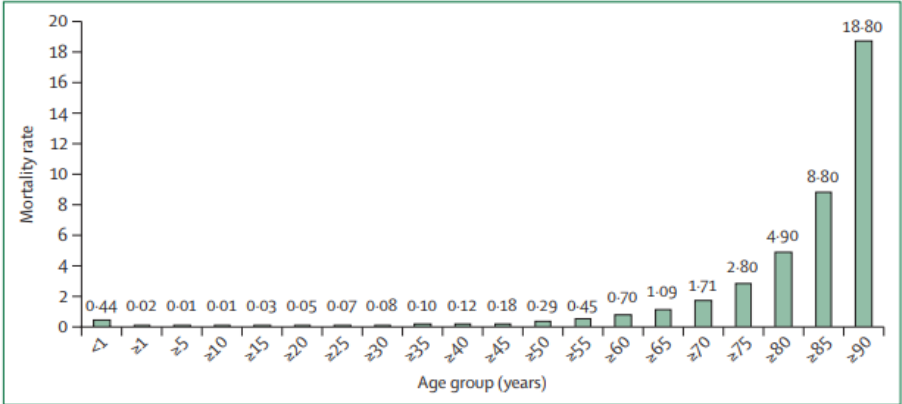


Figure 1: Mortality rates per 100 people per age group per year (Canada, 2019)<sup>6</sup>

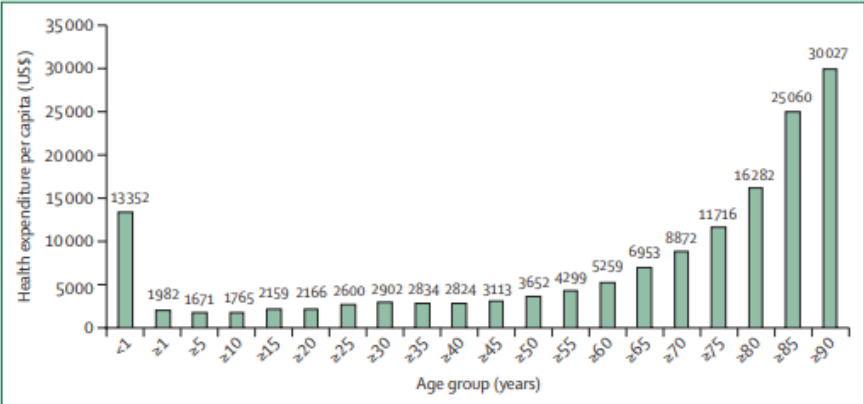


Figure 3: Health expenditure per capita excluding medications by age group (Canada, 2019)<sup>25</sup>

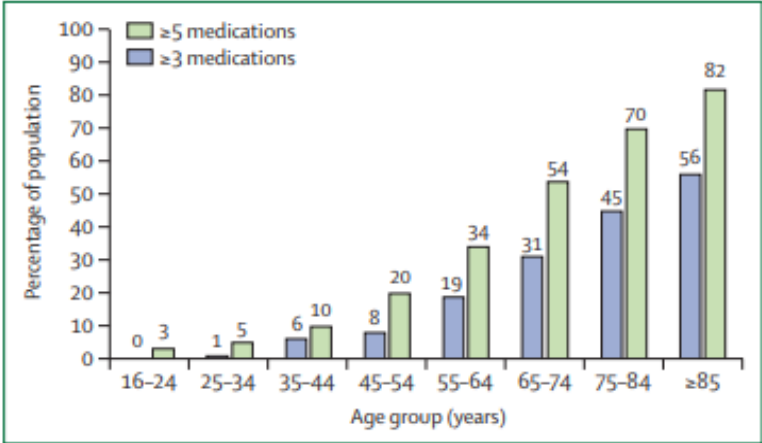


Figure 2: Percentage of population with polypharmacy by age group (England, 2016)<sup>24</sup>

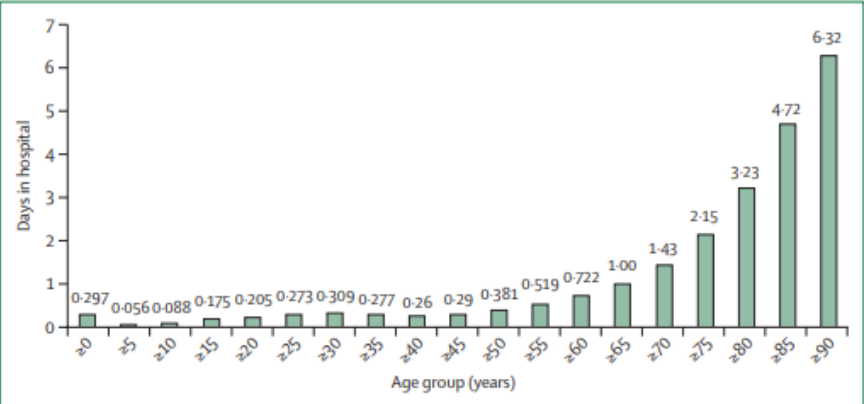


Figure 4: Days in hospital per person per year per age group (Canada, 2019)<sup>22,23</sup>

# OPPORTUNITY: CLIMATE ADAPTATION



...

## FAMILY PHYSICIANS


Therapeutic relationship,  
holistic approach to care,  
trusted resource.<sup>3</sup>



...

## CLINICAL CARE

>60% of decedents  
had seen a medical  
professional within  
the month prior to  
their death.<sup>1</sup>



02

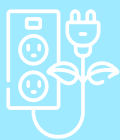


THE PRESENT





# CLIMATE CONSCIOUS OLDER ADULT CARE



**ADVANCE CARE PLANNING**



**REDUCING POLYPHARMACY**



**HEAT PREPAREDNESS**





# 1. ADVANCE CARE PLANNING



Health-care use increases exponentially in the terminal year, primarily due to hospitalizations, which are more resource-intensive than care in other settings and may be at odds with patient values and preferences.<sup>6</sup>

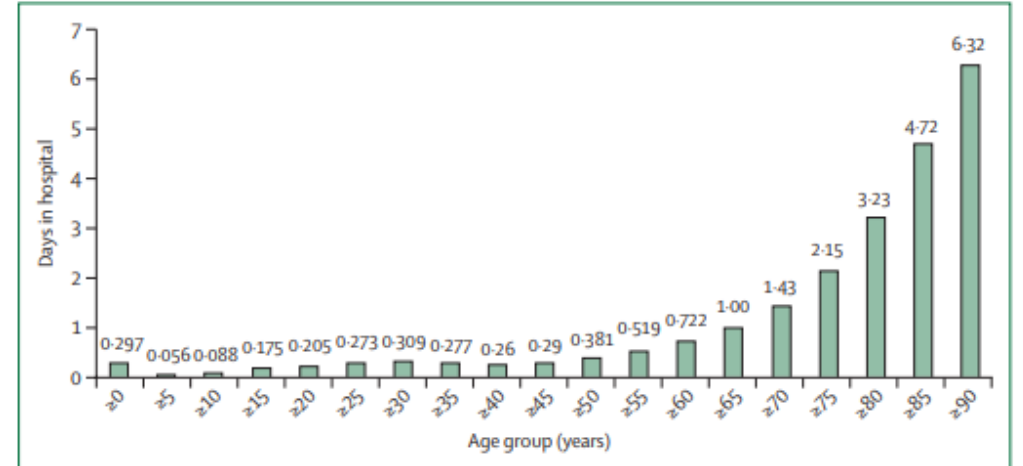


Figure 4: Days in hospital per person per year per age group (Canada, 2019)<sup>22,23</sup>

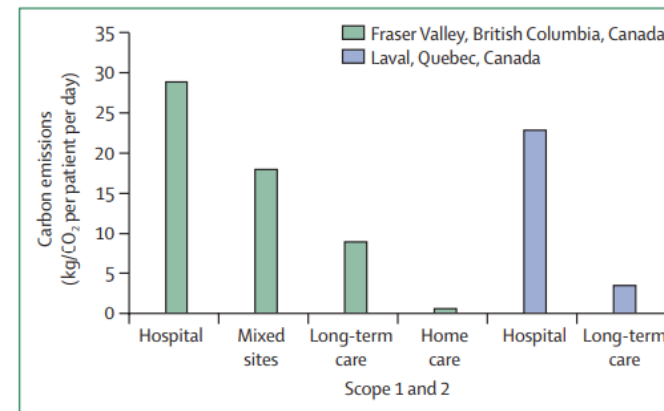


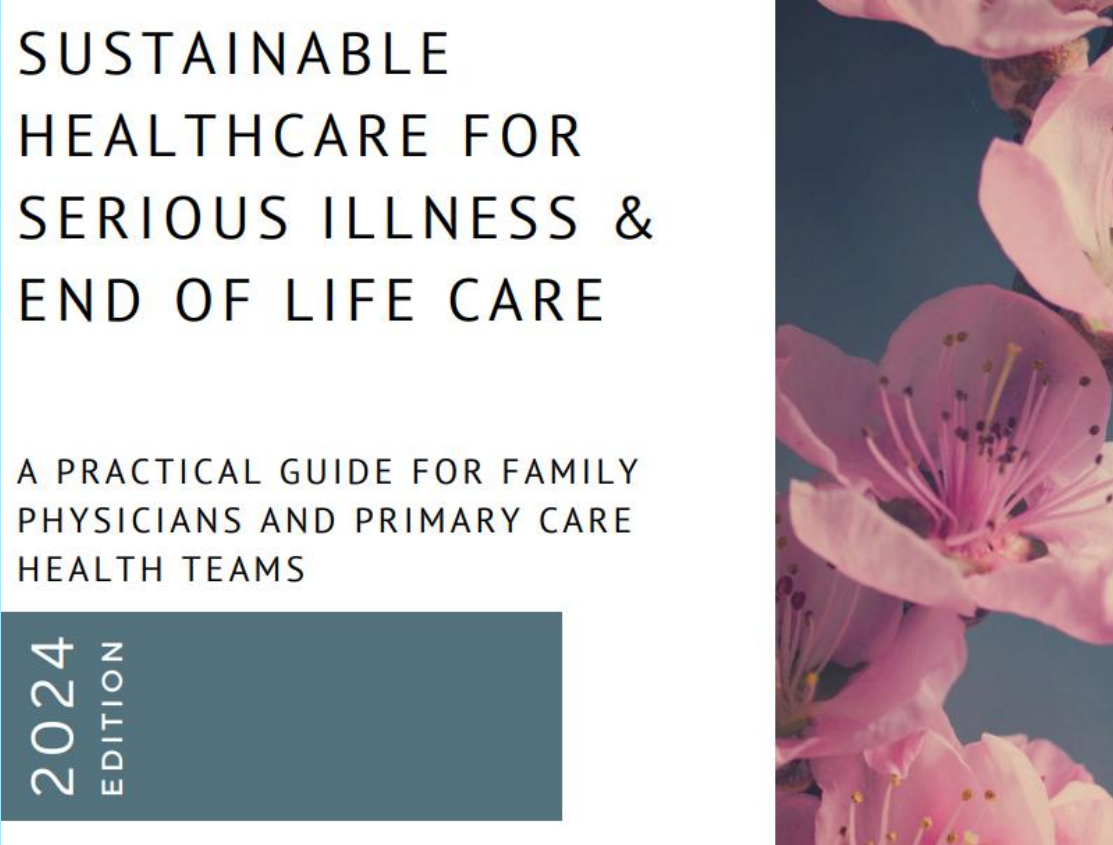
Figure 5: Estimated carbon footprint of different health-care facility types by Canadian province

Scope 1 and 2, excluding transportation. Estimate for Fraser Valley home care informed by estimates of energy consumption and bed data provided by Fraser Health Authority, with support from the Energy and Environmental Sustainability team.



# SUSTAINABLE END OF LIFE CARE

- Most Canadians when surveyed indicate that they **prefer to die at home**<sup>8</sup>
- 2023 CIHI report indicates that in 2021-2022 only **13% of deaths occurred in the home**<sup>8</sup>
- **Advance Care Planning (ACP)** can reduce likelihood of hospitalization and increase likelihood of dying at home or in a care home<sup>6</sup>
- **Sustainable EOL Care toolkit** has many resources for ACP<sup>9</sup>



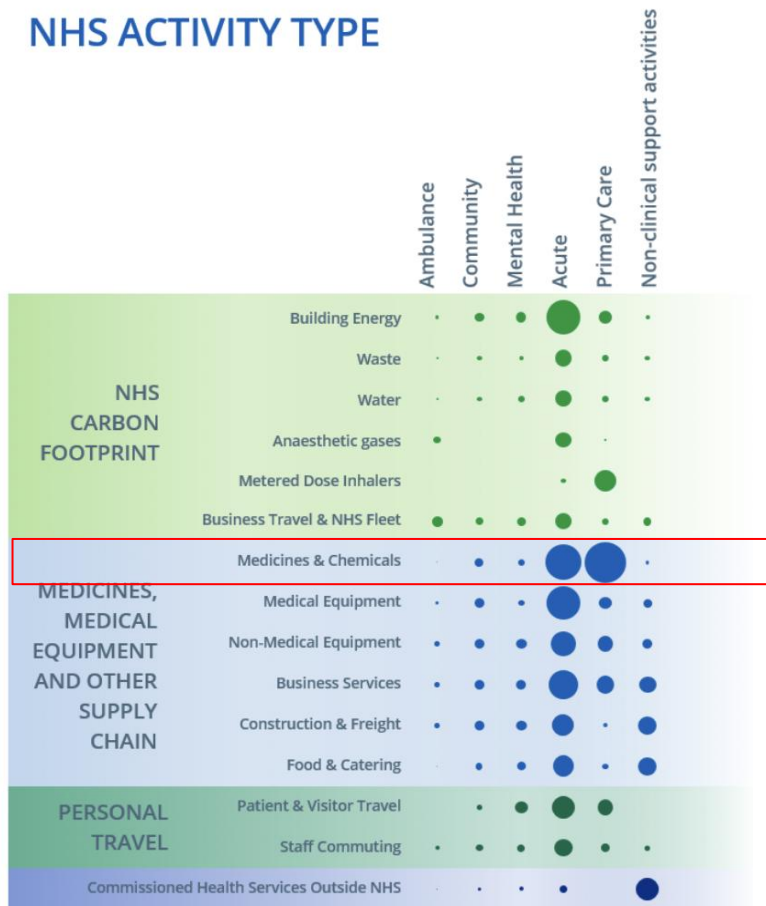
(Sergeant et al., 2024)



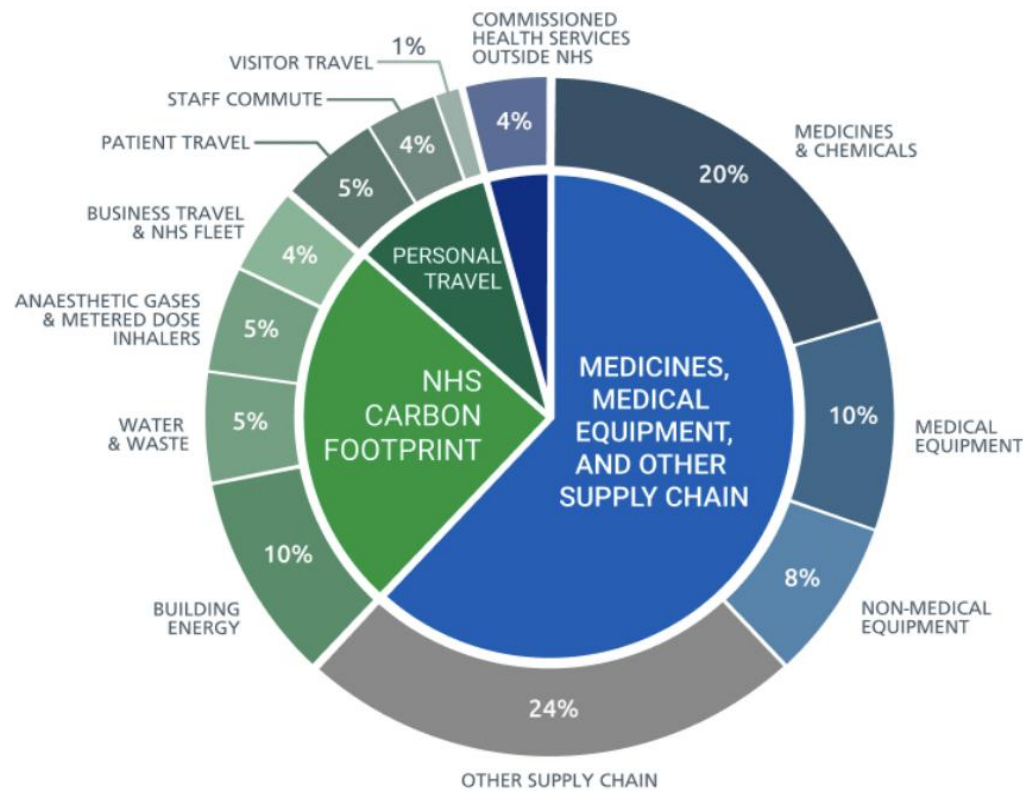
# 2. REDUCING POLYPHARMACY



## NHS ACTIVITY TYPE



(NHS England, 2022)



(NHS England, 2022)

# ADDRESSING POLYPHARMACY

(Sergeant et al., 2024)

- Rates of polypharmacy increase with age<sup>6</sup>
- Associated with a variety of **negative clinical outcomes for patients**, including medication non-adherence, hospitalization, falls, long-term care placement, and adverse drug events<sup>11,12</sup>

**Deprescribing Guidelines** exist for<sup>13</sup>:

- Proton Pump Inhibitors (PPIs)
- Antihyperglycemic Agents (AHGs)
- Antipsychotics for BPSD
- Benzodiazepine Receptor Agonists (BZRAs)
- Opioid Analgesics
- Benzodiazepine and Sedative Hypnotics (BSHs) for Insomnia

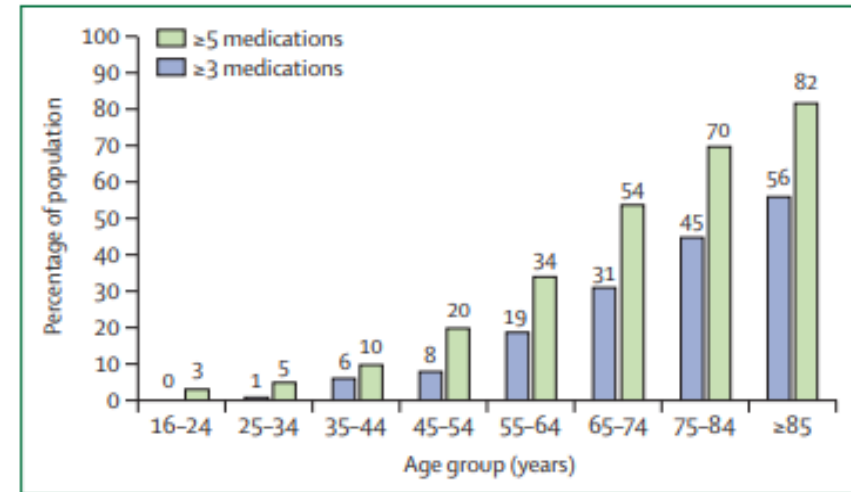


Figure 2: Percentage of population with polypharmacy by age group (England, 2016)<sup>21</sup>





## 3. HEAT PREPAREDNESS



Given our new climate reality, older adult clinicians should be aware of how to counsel patients about heat-related illness, and how to recognize and manage heat-related illness.

### **Box 2. Heat-mitigating strategies to discuss with patients at risk of heat-related illness**

If the patient does not have air conditioning

- Use fans (check that fans are in working order before it gets hot, install fans, buy new fans)
- Find out if there are cool public places (eg, churches, libraries, community centres) if home cannot be adequately cooled and make a transportation plan if accessibility is a challenge
- Contact family or friends who have air conditioning and arrange for “cooling breaks” when there are heat events
- Keep shades or curtains closed during the day
- Limit caffeine and alcohol intake
- Avoid cooking with an oven if possible
- Take a cool bath or shower
- Wear light-coloured clothing when outdoors in the sun
- Drink plenty of water, even before feeling thirsty
- Ask a family member or friend to check in regularly during heat events

If the patient has air-conditioning or air-cooling systems

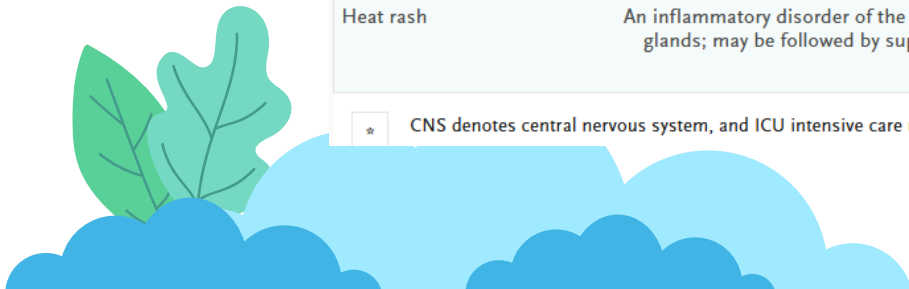
- Stay indoors; set indoor temperature to less than 26°C
- Ensure that cooling system is well-maintained and functioning before the start of each summer season
- Keep shades or curtains closed during the day
- Limit caffeine and alcohol intake
- Avoid cooking with an oven if possible
- Take a cool bath or shower
- Wear light-coloured clothing when outdoors in the sun
- Drink plenty of water, even before feeling thirsty
- Ask a family member or friend to check in regularly during heat events

# MANAGING HEAT-RELATED ILLNESS

Heat-Related Illness	Description <sup>9</sup>	Treatment <sup>10,11</sup>
<b>Severe illness</b>		
Heat stroke	A multisystem, life-threatening illness characterized by elevation of the core body temperature (to >40°C) and CNS dysfunction Classic heat stroke: most often occurs among older persons with compromised behavioral and physiological compensatory responses to heat exposure Exertional heat stroke: most often occurs among healthy persons during extreme physical exertion, which results in excessive metabolic heat generation, often but not always with concomitant ambient heat exposure	Move patient to cool environment; manage airway, breathing, and circulation; administer rapid cooling with cold-water or ice-water immersion or other means; administer intravenous rehydration; and evacuate to emergency department after on-site cooling is performed. ICU admission is warranted for management of end-organ sequelae.
<b>Moderate illness</b>		
Heat exhaustion	Profound fatigue, weakness, nausea, headache, or dizziness (or a combination of these symptoms) resulting from a decrease in body water content or blood volume due to water or salt depletion from heat exposure; mild elevation (<40°C) in body temperature may be present, but no altered mental status	Remove patient from heat; treat with rest in supine position, evaporative cooling, and intravenous or oral rehydration; monitor mental status. Delayed response to treatment warrants further evaluation.
<b>Mild illness</b>		
Heat syncope	Brief loss of consciousness due to vasodilation and pooling of blood in the limbs as a result of physiological compensation to heat exposure	Remove patient from heat and treat with rest in supine position, passive cooling, and oral or intravenous rehydration. Prolonged recovery or a medical history or physical examination arousing concern for a cardiac cause if the patient has cardiac risk factors should prompt further evaluation.
Heat edema	Swelling of the limbs caused by peripheral vasodilation and interstitial pooling resulting from physiological compensation in response to heat exposure	Remove patient from heat and elevate the legs. Diuretic agents are not indicated.
Heat cramps	Painful muscle spasms in the abdomen, arms, or legs during or after activity in the heat, which often occur when excessive amounts of salt are lost during sweating from physical exertion	Remove patient from heat, treat with rest, oral electrolytes, and fluid repletion.
Heat rash	An inflammatory disorder of the epidermis that results from blockage of sweat glands; may be followed by superimposed bacterial soft-tissue infection.	Remove patient's clothing; treat with evaporative cooling and glucocorticoid and antibacterial creams as needed, but avoid topical emollients; monitor for cellulitis. Advise patients to avoid hot environments and to wear loose clothing.

★ CNS denotes central nervous system, and ICU intensive care unit.

(Sorensen & Hess, 2022)



03

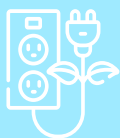


THE FUTURE





# FUTURE OF CLIMATE CONSCIOUS OLDER ADULT CARE



**INNOVATIVE CARE MODELS**



**DIGITAL HEALTH**



**GREEN SPACES**





# 1. INNOVATIVE CARE MODELS



How might we reimagine care of older adults to ensure that they are able to age in the place of their choosing?

## Staying in own home is better for seniors, if it's what they want, and for community

At 87, Vera Spence wants to continue living in her home, and research shows if it's safe, she should



[Tori Weldon](#) · CBC News · Posted: Oct 20, 2020 4:00 AM EDT | Last Updated: October 20, 2020



Apart from the four years she spent in Bathurst, Vera Spence has lived most of her 87 years of life in Murray Corner. She plans to continue to do so, with the help of her family and the program Nursing Homes Without Walls. (Tori Weldon/CBC)

# AGING IN THE RIGHT PLACE

- **81%** of Canadian seniors prefer to age at home<sup>17</sup>
- **26%** predict they will be able to do so<sup>17</sup>
- The National Institute on Aging (NIA) defines Ageing in the Right Place (AIRP) as “the process of **enabling healthy ageing in the most appropriate setting** based on an older person’s personal preferences, circumstances and care needs.”<sup>15</sup>
- *Implement care models and policies that enable more older Canadians to live at home and in their communities with greater independence<sup>15</sup>*

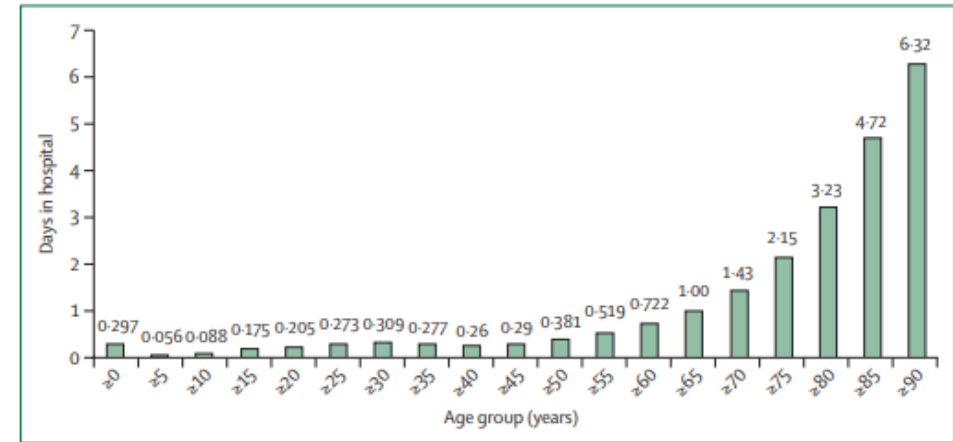


Figure 4: Days in hospital per person per year per age group (Canada, 2019)<sup>22-23</sup>

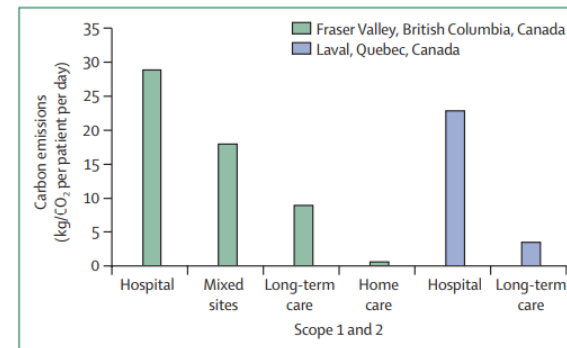


Figure 5: Estimated carbon footprint of different health-care facility types by Canadian province  
Scope 1 and 2, excluding transportation. Estimate for Fraser Valley home care informed by estimates of energy consumption and bed data provided by Fraser Health Authority, with support from the Energy and Environmental Sustainability team.

(Sergeant et al., 2024)



## 2. DIGITAL HEALTH\*

...



### VIRTUAL CARE

...

Improves access for rural & remote communities, reduce travel-related emissions.<sup>18,19</sup>



### PATIENT EMPOWERMENT

...

Programs aimed at improving patients' self-management.<sup>20,21</sup>



### AGING-IN-PLACE

...

“Hospital at home”, remote patient monitoring to avoid ER visits, admissions.<sup>6,22,23</sup>

\*Consider: environmental harms of technologies, access to technology and the digital divide



## 3. GREEN SPACES

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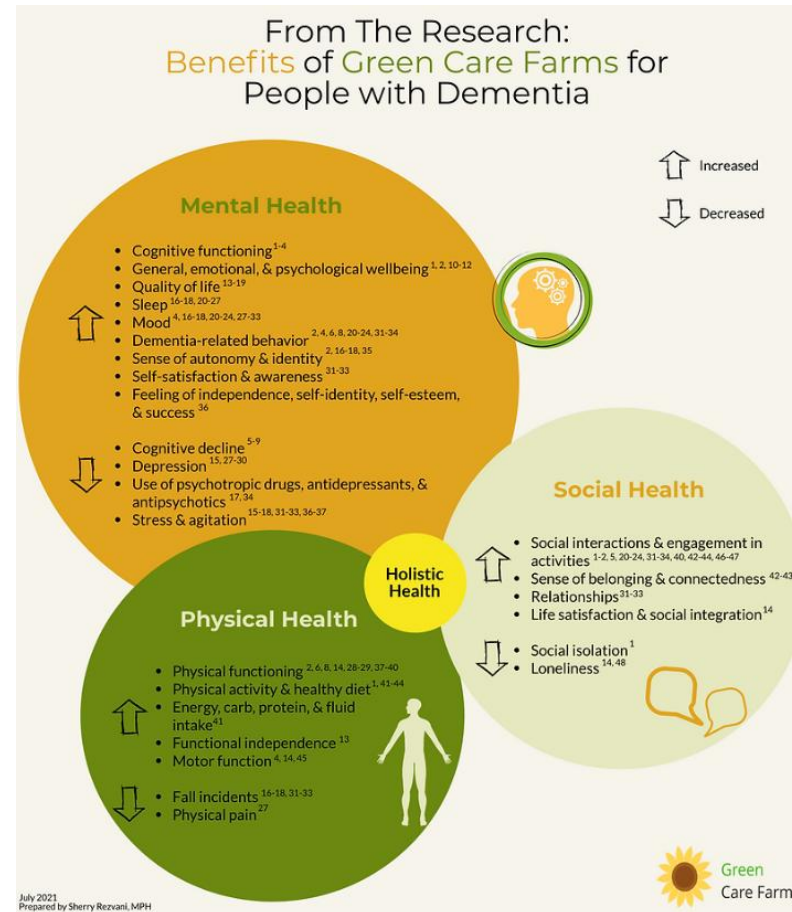
Green spaces are a well-established way to reduce the urban heat island effect, and can improve the quality of life of both older adults and health care practitioners. <sup>24-26,29,30</sup>



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# CARE FARMS

- **Agricultural activities combined with support services**, common across Europe<sup>25</sup>
- **Contact with nature and animals**, time spent outdoors, activity engagement, physical activity, social interactions, healthy eating, a **sense of meaning in life**<sup>25</sup>
- Incorporated in 2021, **Green Care Farms is Canada's first care farm for people living with dementia**<sup>27</sup>
- **Mission:** "to promote purpose and belonging for people with dementia through the delivery of therapeutic gardening programs"<sup>27</sup>
- **Offerings:** day programs, group visits, educational courses<sup>28</sup>



(Research on Care Farms | Green Care Farms Inc, 2024)

04

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**SUMMARY &  
CALL TO ACTION**





# SUMMARY

## THE PROBLEM



Climate change will negatively impact human health and health systems. Health care is a resource-intensive sector and contributes to climate change.



## OLDER ADULTS & CLIMATE CHANGE



Older adults are uniquely vulnerable to the health impacts of climate change, but great opportunity for climate action also exists in older adult care.



## THE PRESENT



Current climate action strategies include Advance Care Planning, Deprescribing, and heat preparedness and counseling.



## THE FUTURE



Innovative care models enabling older adults to age in the right place, digital health tools, and green spaces all represent exciting opportunities.



# CALL TO ACTION:

Can you make one change to your practice today, that can help advance sustainable older adult care?



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# Thanks!



Do you have any questions?  
Please fill out the evaluation!

[jcuppage@baycrest.org](mailto:jcuppage@baycrest.org)



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# Protecting communities from extreme heat

Anushen Selvasegar, CREW volunteer

Samantha Green, Family Physician & incoming president, CAPE

Formed in 2014 to raise awareness of local climate change impacts and to equip residents of low-income high-rise apartments in Toronto with tools and strategies to cope with climate related emergencies

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- In 2016, CREW developed a Neighbours Helping Neighbours program led by low-income seniors from a variety of ethnocultural backgrounds
- They called themselves Extreme Weather Volunteers. Since then, CREW has focused its work on low-income, high-rise neighbourhoods, where we invite everyone to join us

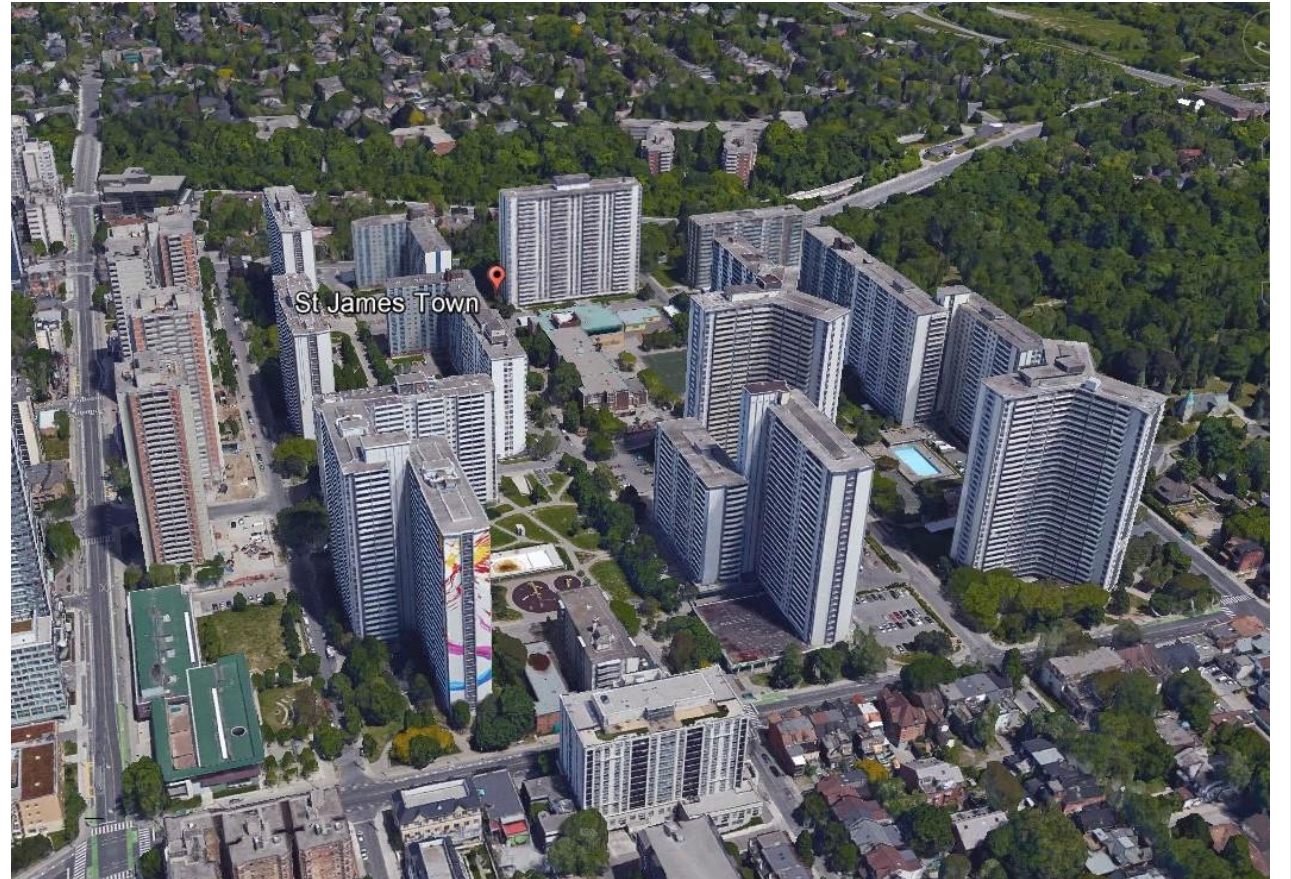


A project of  **MakeWay**

**All CREW activities are designed to promote the cross-generational, cross-cultural, social networking that is central to community resilience.**

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- Our Incubator neighbourhood: St James Town Toronto
- St James Town is one of the most densely populated neighbourhoods in Canada, with 19 high-rise rental buildings
- High-rise residents in low-income neighbourhoods are disproportionately affected by climate impacts.
- CREW has been active in St. James Town since 2017



## Building Community Resilience: Social networking

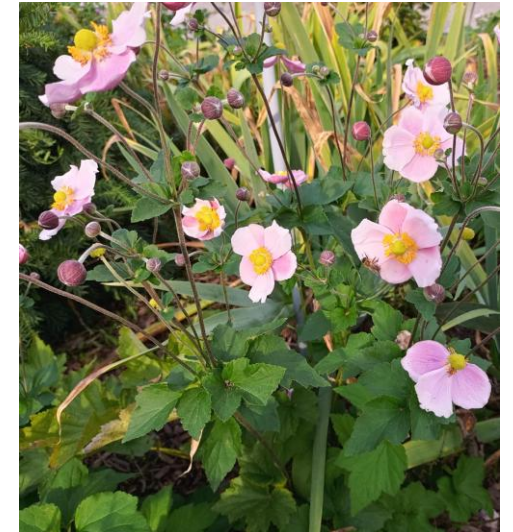
- CREW brings people together in a range of social gatherings. These give residents opportunities to get to know and trust their neighbours, make new friends, learn together, build skills, and take some form of action
- When something bad happens, these connected groups can respond quickly





- Make friends, meet your neighbours, set up support networks. Help those who are struggling – connecting isolated neighbours
- Learn how to adapt to local climate impacts and prepare for emergencies

## Seniors and non-seniors weekly conversations

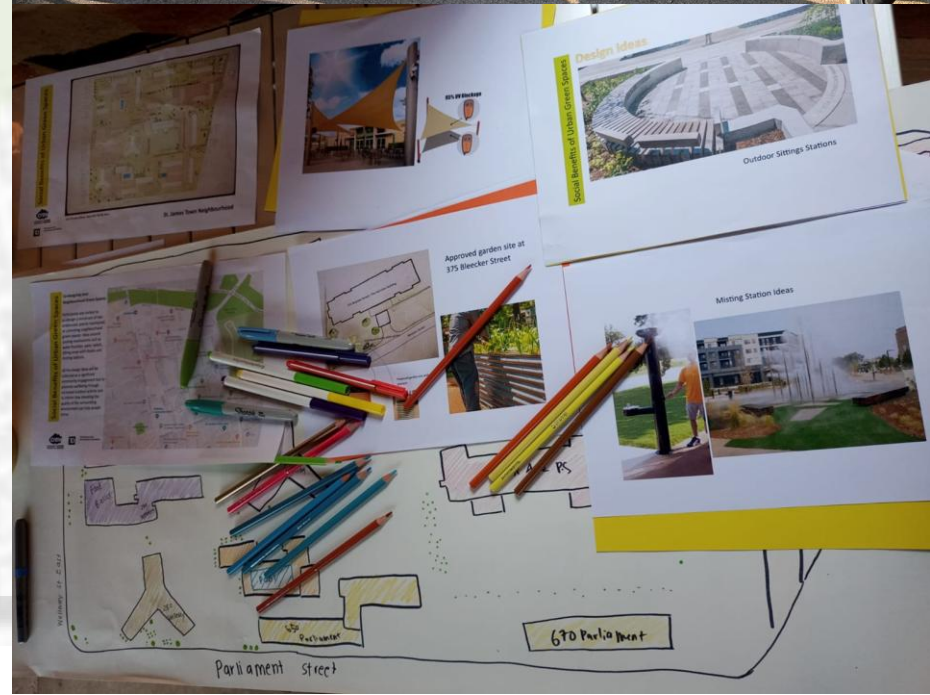


*We meet every Tuesday in the local Anglican Church. The church provides free space for CREW in return for help with the church gardens*



# Green discovery walks

- Training volunteer walk guides
- Walks are welcoming, fun and make exploring easy
- They empower a sense of belonging to the neighbourhood and the city



# The pilot building

## The Hamilton

375 Bleecker Street, Toronto, M4X 1M3  
North St. Jamestown

- Built in 1969
- 955 apartments on 24 floors.
- ~3-4 persons per unit, making a total of 3,000 people





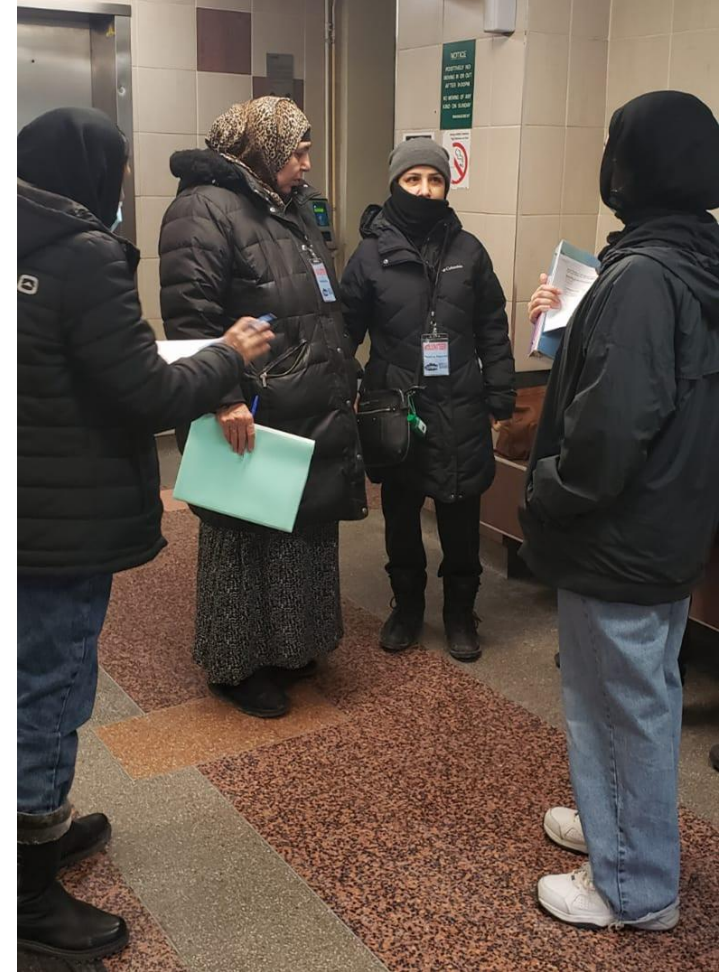
# Vulnerabilities

- No inviting public spaces - either inside or out. Less opportunity for casual interactions and social connections
- Residents don't have disposable income. 23% of residents live on incomes of less than \$19,000 per annum and 34% less than \$50,000
- Many seniors, extended families, and people with mental and physical health challenges
- Low-income, racialized, and often isolated seniors are among the most vulnerable to climate impacts, especially heatwaves, storms and flooding that cause power outages
- Nineteen percent of St. James Town's approximately 18,616 residents are over 55, and 50.5% of seniors live alone compared to Toronto's average of 26.7%.
- Many residents do not have AC or Wi-Fi

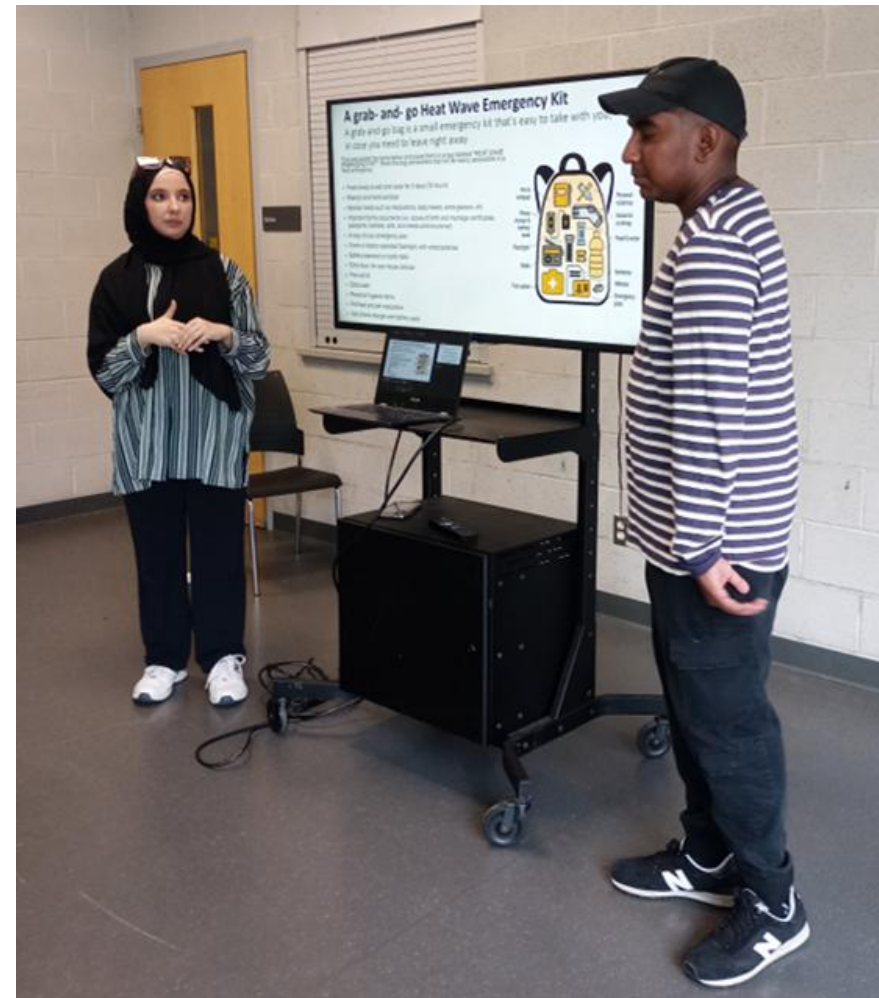
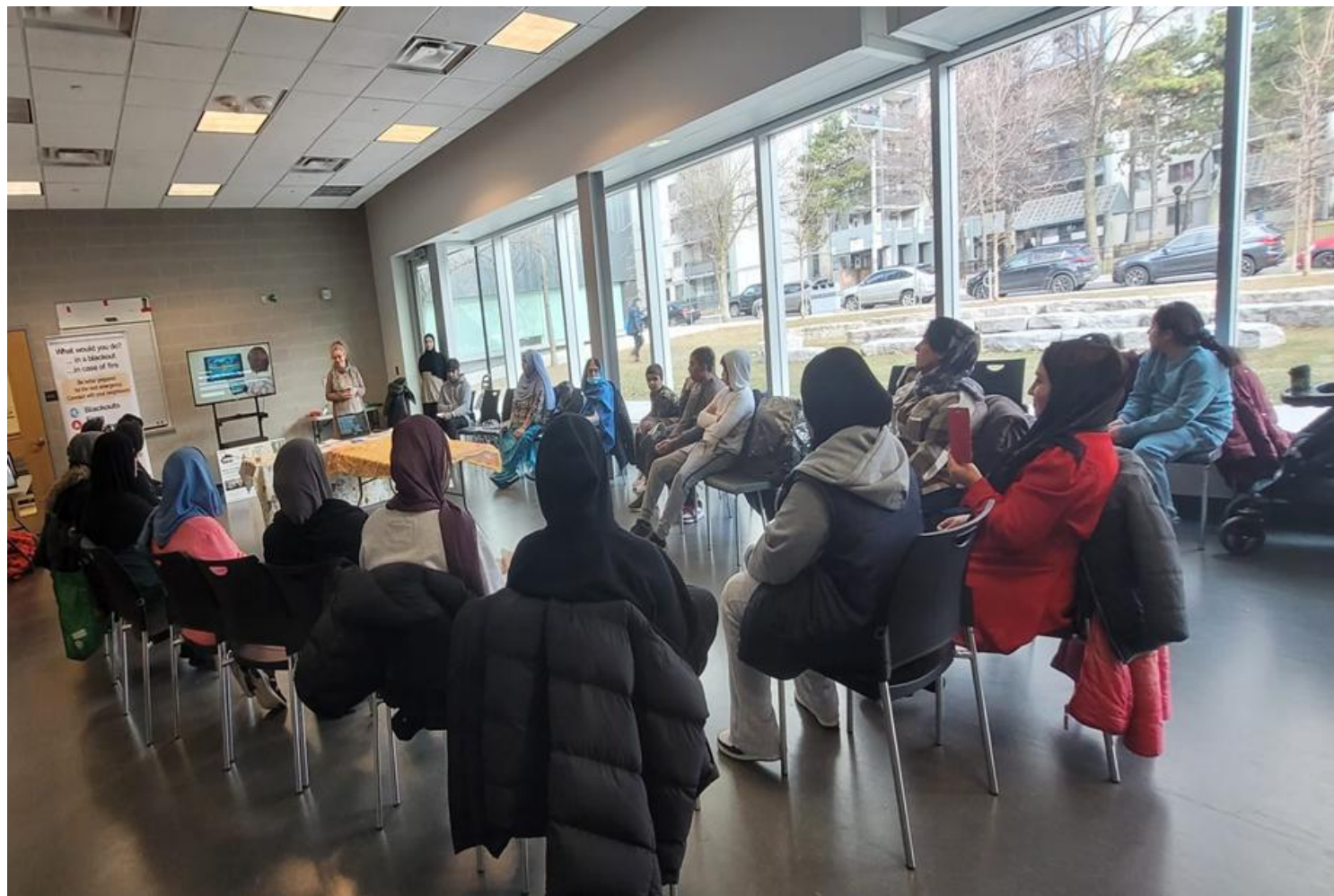
# Customizing 375 Bleecker Street preparedness for climate impacts

Our 'testing the protocol' work plan:

- Key volunteers recruits additional volunteers – a resident 'floor captain' for each of the 23 floors
- Co-design and implement a Train-the-Trainer for new recruit
- Deliver climate awareness & emergency preparedness Train-the-Trainer workshops for the new floor captains
- Volunteer 'floor captains' trained to:
  - promote emergency preparedness planning through public outreach in lobby, elevator, laundry room, and outside of the building
  - meet as many neighbours on their floor as possible (they work in pairs to do this) and learning who is most vulnerable on their floor
  - showing residents how to make themselves and their apartments 'heat wave ready' (as best they can)
  - showing residents how to create 72-hour heat wave emergency kits and plans on a minimal budget (as best they can)



# We trained the leaders To become the trainers



# Trained volunteers training leaders in SJT and other neighbourhoods

Emergency plan and kit training game: what are the essentials?



# We conducted surveys – to learn from residents



We want to document residents' experiences with the 2024 heat season and use this information to improve the heat wave protocol.

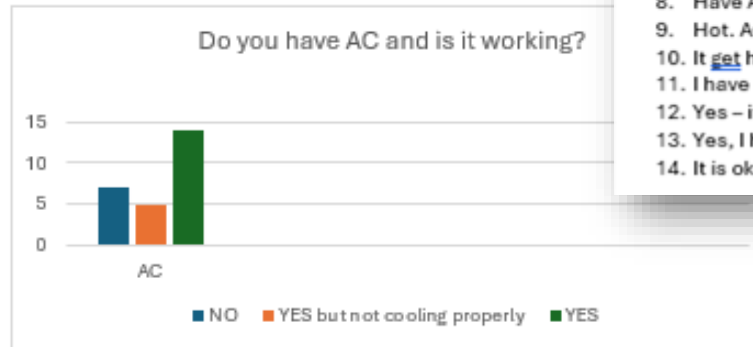
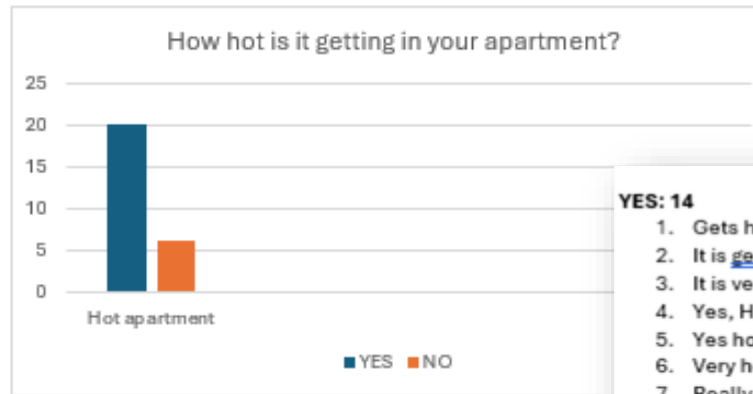
Floor number # .....

1. How hot is it getting in your apartment? Do you have AC and is it working?

2. Do you have your emergency cooling kit ready?

3. Do you have someone who checks on you to make sure that you are ok? Who do you check?

4. What should we ask people?



### YES: 14

1. Gets hot in summer. AC works – in the living room
2. It is get really hot/ yes, one AC and working
3. It is very hot in summer. 1 AC only -portable.
4. Yes, Have AC. My apartment is cool
5. Yes hot. 1 AC
6. Very hot. Yes it is working
7. Really hot. Yes 1 AC
8. Have AC
9. Hot. AC works
10. It get hot in the morning as apartment facing the sun. AC works and it is a portable
11. I have AC and it is working
12. Yes – it is working. Apt is not sunny at all.
13. Yes, I have an AC in the living room and it is working
14. It is ok, not too hot. AC is working (portable AC)



# Expanding outdoors

## 375 Climate Resilience Garden

Sturdy, durable raised garden beds that not only last for a long time, but also provide friendly, accessible gardening opportunities for seniors and people with mobility issues



What would you do?  
... in a blackout  
... in case of fire

Be better prepared  
for the next emergency.  
Connect with your neighbours!



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**crew** COMMUNITY RESILIENCE TO EXTREME WEATHER  
DONATE  
[crewresilience.ca/donate/](http://crewresilience.ca/donate/)





POVERTY

KEEPS US

SICK

HIPAP HIPAP HIPAP





# Recommendations:

1. Change the timing for applications to be accepted. Change the application window to March 1 to September 30 or **remove this time restriction entirely**.
2. Simplify the application process. **Eliminate the requirement for phone applications** in favour of electronic (via email or a dedicated portal) or mail-in submissions. To assess financial need, **only require submission of Notice of Assessment**.
3. **Expand clinical practitioners** who can provide a prescription to include pharmacists, social workers, occupational therapists, physiotherapists, respiratory therapists, nurses and psychologists.
4. Provide an **online portal** for prescribers to submit prescription to simplify the process for health care providers.
5. For individuals approved for funding, **provide a cooling device**, including delivery and set up for those who need this, similar to the program in British Columbia.
6. For those who are unable to manage ongoing maintenance, **provide ongoing maintenance**.

# Joint Statement: Actions Needed to Protect Toronto Tenants from Extreme Heat



Canadian  
Environmental Law  
Association

EQUITY. JUSTICE. HEALTH.