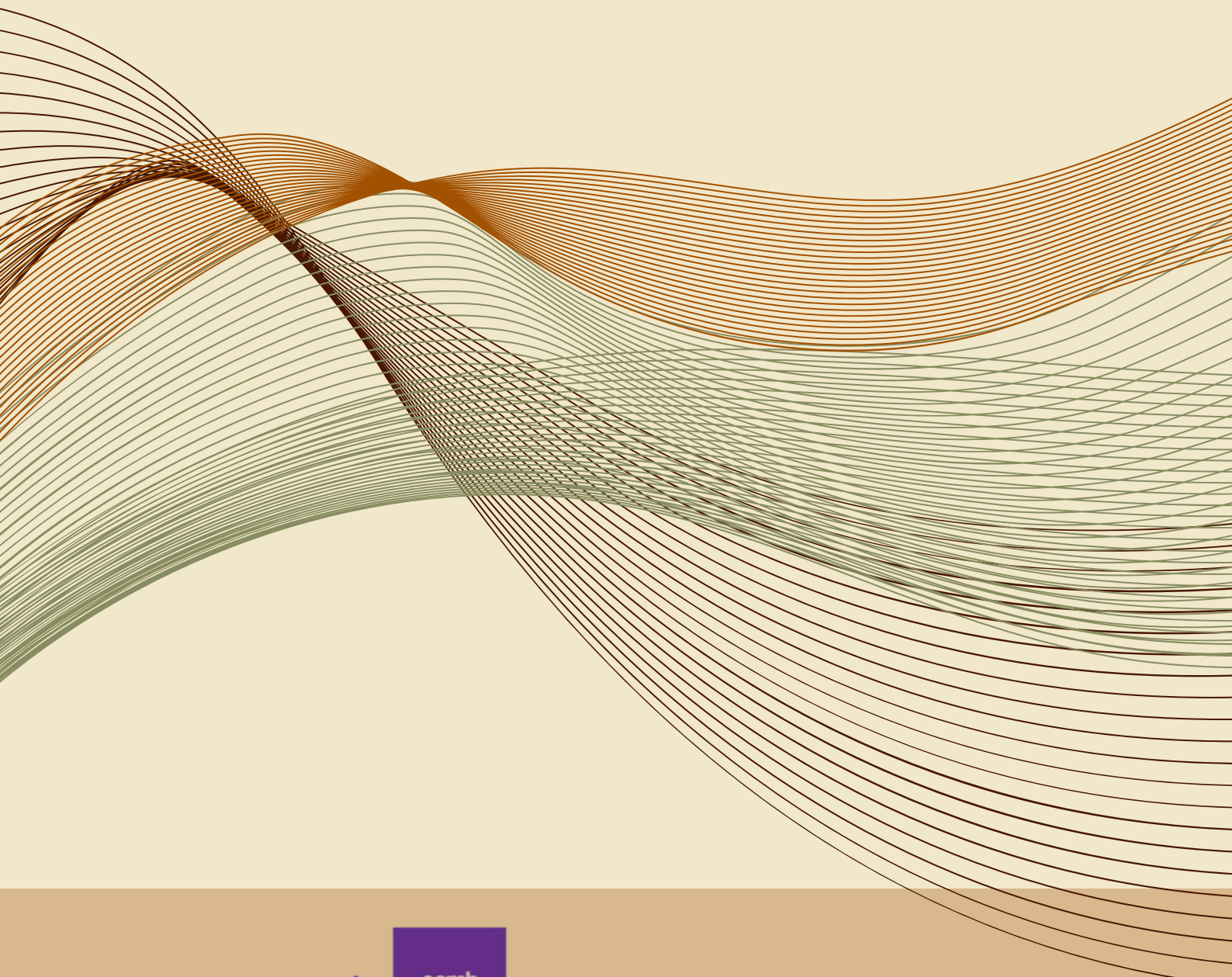


# THE CANADIAN POVERTY, HEALTH EQUITY, AND CLIMATE CHANGE INITIATIVE

**Year 1 Check In**

March 2024





# Table of Contents

<u>Overview</u> . . . . .	02
<u>Executive Summary</u> . . . . .	05
<u>Strategy and Timeline</u> . . . . .	06
<u>Initiative synopsis</u> . . . . .	07
<u>Scoping review #1</u> . . . . .	10
<u>Think tanks: Identifying risks</u> . . . . .	11
<u>Responses to date</u> . . . . .	13
<u>Cross-cutting considerations</u> . . . . .	14
<u>Leverage</u> . . . . .	15
<u>Responses by subgroup</u> . . . . .	16



# Background

2023 has been a very busy year for the Canadian Poverty, Health Equity, and Climate Change Initiative. Building from the engagement and collective wisdom of a strong and diverse group of people nationally, we have made a great deal of headway in (i) establishing a network that is comprised of many new points of partnership and (ii) starting a robust process of knowledge generation that addresses the complexity of the poverty-climate-health intersection in Canada.

Below you will find our interim report for year 1. Here we have captured some of the key early learnings from our initial series of think tanks and our first literature review. This report is intended to inform and assist the efforts of individuals and organizations engaged in work related to the poverty-climate-health nexus and increase awareness about our network, and to expand it. We hope to help inform the development of research strategies, service and system-level interventions, and activities such as upcoming national climate change and health assessment. Other knowledge exchange outputs will follow this larger report – broken out by key theme areas and in briefer formats that are more suitable for broader audiences.

2024 will see us building upon our early momentum and continuing to build and disseminate the best available information on implementing responses to the climate crisis that equitably address the needs of people in Canada experiencing poverty. As our initiative progresses, we will continue to share more in-depth and complete knowledge outputs.

# About

## **The Canadian Poverty, Health Equity, and Climate Change Initiative**

The Canadian Poverty, Health Equity, and Climate Change knowledge mobilization initiative started in 2022 with funding from the McConnell Foundation and the Canadian Institutes of Health Research. This initiative aims to improve Canada's climate change mitigation and adaptation responses as they relate to individuals, families, and communities that are experiencing poverty.

This initiative has established networks of experts, policymakers and community organizations and provides research, policy, education, and service direction based on the best available evidence on the climate change-poverty-health nexus in Canada.

Through a co-designed process, these networks are engaged in an array of activities, including literature reviews, think tanks, and participatory lived experience engagement. An intersectional lens is applied with specific emphases on the experiences of women, children and youth, older adults, and populations experiencing homelessness and housing precarity. Connecting and aligning this work with Indigenous communities, racialized communities, and other key points of intersection is a priority in this effort.

# The Team



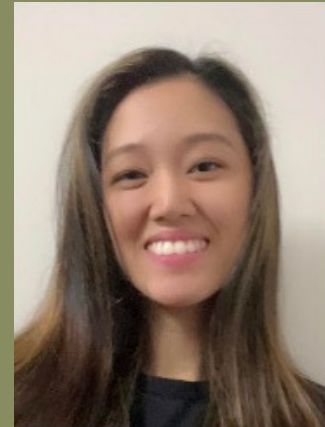
## **Team Lead**

Sean A. Kidd  
Ph.D., C.Psych.



## **Research Analyst**

Mariya Bezgrebelna  
M.A., Ph.D. (cand)



## **Research Analyst**

Leanne Lacap  
HBSc, PGC



## **Research Placement Student**

Yaa S. A. Amoah,  
M.Phil., PhD. (cand)



## **Research Placement Student**

Jolly Noor,  
HBSc, MPH (cand)



## **Research Placement Student**

Mariam Farooq,  
BA, MPH (cand)

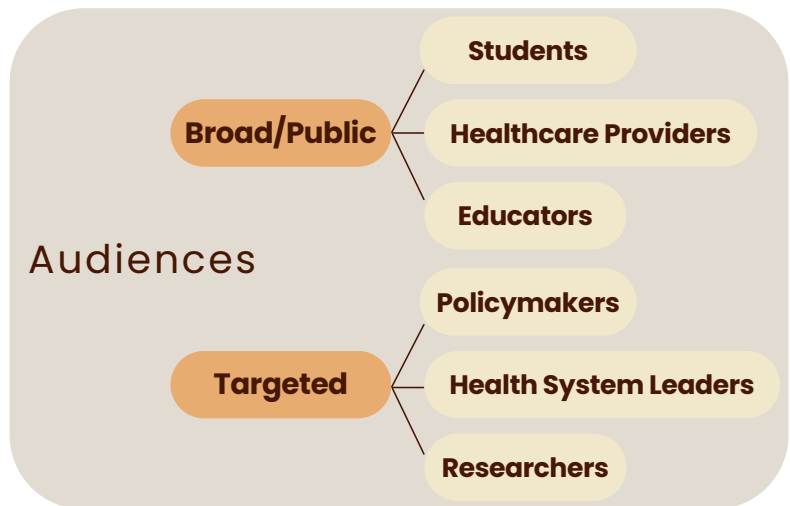
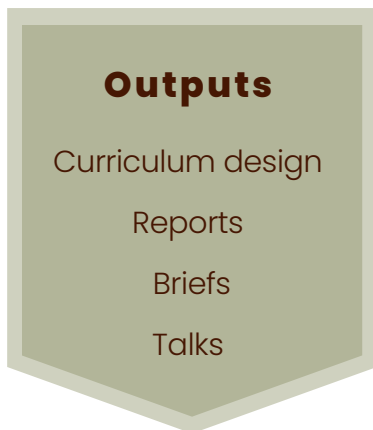
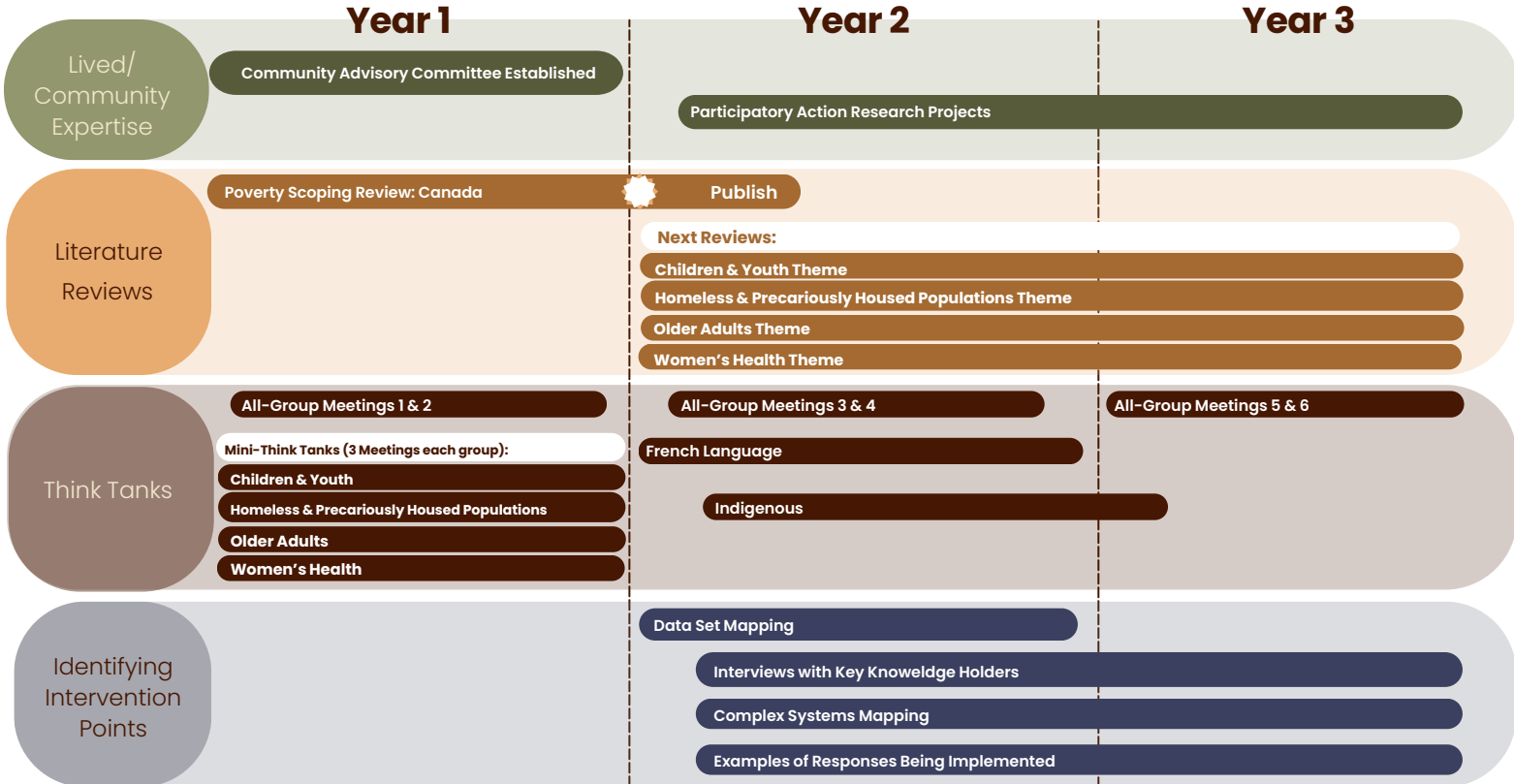
# Executive Summary of Work to Date

In the broadest sense the information that we have gathered in our first year has validated the ‘threat multiplier’ nature of climate change with respect to people in Canada experiencing poverty. Poverty is a key factor in individual and community vulnerability to environmental risks. There was a consensus on this point in expert think tanks and the poverty-climate vulnerability risk connection is very evident in the research literature. These risks revolve around, and are compounded by several intersections, as a function of factors such as age, gender, and access to shelter. Indigenous and racialized identities play key roles as well, with climate change representing another facet of colonial histories characterized by rights violations and exclusion. Specific environmental risks addressed in the literature and in our think tanks included heat, wild fires, air pollution, and secondary risks such as poor food security.

Our first year of work in this area has also demonstrated the significant knowledge gaps that are present at the poverty-climate-health nexus in Canada. With respect to the risks populations experiencing poverty face, most of the data available is at a very general/high level and will be of limited use in informing intervention design and assessing the effectiveness of responses. The think tank discussions were particularly helpful in beginning to generate areas where more specific information is needed – particularly for identity intersections. Examples include the risks of violence and re-traumatization faced by women in wildfire evacuations and specific implications for Indigenous communities in this regard. Large knowledge gaps are also evident in areas of environmental racism – for example considering older adult, racialized asylum-seekers who face systemic barriers in accessing support during heat waves. A large data gap theme is also that of the problem that most of our limited information is based on current risk scenarios – with little done that looks at projections of mounting environmental risks.

However, the bulk of our think tank discussions focussed on solutions – indeed highlighting the need to better understand the potential to engage and support the resilience of the diverse communities and individuals experiencing poverty in solution design. It is clear that the most impactful and co-benefiting solutions are upstream and preventative. We also gathered an array of short- and medium-term responses, primarily in the frame of adaptation, that could engage and reduce the risks faced by women, children and youth, older adults, and inadequately sheltered populations experiencing poverty.

# Strategy and Timeline



## Areas of focus in 2024

2024 is going to be a very busy year for The Canadian Poverty, Health Equity, and Climate Change Initiative! In terms of ongoing knowledge generation, we will be interviewing those with key knowledge of intersectionality, engaging Indigenous communities, and holding French language think tank sessions. Scoping and systematic reviews will be completed in areas of women's health, children and youth, older adults, and homelessness – all at the poverty-climate-health intersection. We will engage experts in complex systems mapping to assist members of our group in identifying the dynamic, complex system underlying our topic – with the intent of identifying leveraged points of intervention. This work will include mapping existing data sets, describing policy and intervention design examples across Canada from which learnings might be taken, and moving towards greater specificity (e.g., improved articulation of the staging of responses). We will build open-access education tools – starting with a broad, public audience in mind and seeking funding to expand to provide products specifically tailored for groups such as high school students and healthcare providers. We will continue to engage system leaders, care providers, and policymakers to help in the collective effort to design, implement, and assess equitable adaptation and mitigation responses.

# Detailed Summary of 2023 Activities

## Who has come together

The end of 2023 marked 1 year of our group being fully up and running.

In this time we have built out and consolidated a network of 36 experts and partners – all working at the nexus of poverty, climate, and health.

This is a diverse group of individuals across geographic region, disciplines, communities of focus, and environmental risks studied and responded to. We are walking a path guided by First Nation Elder leadership and other points of connection with Indigenous collaborators. We have established advisories which represent research, practice and policy expertise, community expertise, and international representation.

## What Was Done

### Meetings

- 2 full group startup meetings
- 5 Community Expert Advisory meetings, 4 research, policy and sector leader advisory meetings, and international advisory established
- 12 think tank meetings attended by 23 network experts

### Grants

- CIHR Catalyst Grant (Our initiative as lead)
- SSHRCH-CMHC Partnership Grant (Co-led with a Carleton University group)

### Outputs

- Scoping review on poverty-climate-health in Canada well underway
- 1 commentary written

### Team

- 4 graduate trainee positions
- 1 new full time RA position established

### Knowledge Sharing

- 4 conference presentations (2 upcoming) and 1 webinar
- Multiple opportunities to begin to share learnings in an array of forums (e.g., Wellcome Trust-Planetary Health Alliance Connecting Climate Minds project)
- Identified 51 organizations working in this space

### Collaboration Outcomes

- 2 grants
- 1 paper
- Multiple points of collaboration beginning to spin out from the network





## What we've learned: **The big picture**

The poverty-climate-health nexus in Canada is a broad topic. When referencing the concept of 'health', both physical and mental health are considered together. The topic is nested within the well-known 'threat multiplier' nature of climate change, our first year of work has revealed large knowledge and action gaps.

Without specific information on how to develop equitable adaptation and mitigation responses and ways to assess whether or not they are working, people experiencing poverty in Canada will suffer worse health outcomes. In such a context, efforts to advance human rights and Truth and Reconciliation Call for Action in the context of environmental risks will be hampered.

The heightened risks that poverty presents in the face of climate change sit solidly in the midst of several points of tension. On the side of broad considerations that amplify risk include discriminatory and colonial institutions and beliefs (with poverty being a highly stigmatized identity), messages of poverty being a hopeless and intractable problem, and the propagation of misinformation about climate change and reinforcement of the status quo. Broad frameworks that move responses forward include those of climate justice, Indigenous-centred responses that draw on partnerships with community experts and many disciplines, and approaches that are action and prevention-oriented.



## Intersections

As much as there is value in considering risks related to specific groups such as children and youth experiencing poverty, these are artificial silos. There are many important identity intersections to consider in thinking about both risks and responses. For example, specific implications can be identified for older adults who are racialized refugee claimants, for First Nations women living on rural reserves, for children with disabilities.

The implications of climate change for racialized populations will be particularly important as our work moves forward – considering how vulnerabilities and resilience both unfold for groups experiencing systematic forms of deprivation and a lack of inclusion in response generation. For example, it is widely recognized that Indigenous knowledge systems hold a great deal of promise in developing leveraged environmental interventions that embrace interconnectedness. There is also emerging work that is addressing both the disproportionate exposures faced by Black populations in Canada (food insecurity, poverty, residence concentrations in exposed urban environments) and their lack of inclusion in education and response generation about climate change risks and responses.

While we have discussed intersectionality in all of our think tanks, a key next part of our work focuses specifically on an intersectional analysis.

# Risk at the poverty–health–climate intersection

## Scoping review #1

We are well under way with our initial scoping review that looks at the peer-reviewed literature. This review is still underway, but here is a sketch of some of the main findings from the small body of papers identified (28 reports):

### Heat



- Lower socioeconomic status (SES) neighbourhoods and downtown core neighborhoods vulnerable to heat islands show evidence of greater daily years of life lost and medical emergencies in hot periods.
- Self-reported vulnerability with respect to the adverse health impacts of heat has points of emphasis amongst people with pre-existing medical conditions, with low-income being a factor.
- For older adults, heat vulnerability is a function of both socioeconomic status and cost of living. Health-risk associations include mortality and ER use.
- For low SES women who are pregnant, heat stress increases the risks of placental abruption.
- Heat action plans are a promising response as evidenced by associated reductions in mortality in a Montreal implementation, particularly amongst those living in low SES neighborhoods.

### Air Pollution



- Heightened risks from air pollution for children and older adults, with poverty being an important factor.
- Slightly mixed results with one study not finding an association between climate change impacts and reduced air quality, whereas most others do, including large longitudinal national datasets.

### Food Security



- For Indigenous communities, a warming climate can negatively impact traditional food access and land use, with implications for health in communities affected by poverty.
- Traditional environmental knowledge was also identified as an adaptation strategy.
- Considering broader populations, the risk of drought as a function of climate change has also been identified as a factor that negatively impacts food security and health.

### Wildfire



- Access to transportation, securing safe and appropriate accommodation, and equitable dispersion of resources all become salient in evacuation situations for people experiencing poverty, with plans seldom tailored to address such issues.

### Pollen



- Health risks of pollen exposure are heightened as a function of SES, with risks increasing for individuals with pre-existing health conditions.

# Risk at the poverty-health-climate intersection

## Think tank themes

Think tank conversations, while focussed primarily on responses, elaborated on the risks faced by the populations of focus in this initial round of meetings. Think tanks in our first year took place in four areas of focus – women’s health, children and youth health, older adult health, and the health of people lacking adequate shelter/experiencing homelessness. In each of the four domains, think tanks progressed from a general discussion in the first meeting – predominantly about risks each subpopulation faces. Subsequent meetings were more structured, moving to the generation of short, medium and longer term responses. Consensus was sought on specific responses to discuss in more depth – that might serve as exemplars that demonstrate what might ultimately be best practice principles. With respect to the articulation of risks, major themes include:

### Children & Youth

- 1) Risk considerations concentrate largely in the area of mental health, with routine findings of high rates of climate anxiety, a sense of institutional betrayal, hopelessness, and distress.
- 2) In households experiencing poverty, there are unique considerations with respect to brain development, impacted sleep, food and water security, and greater air pollution exposure.
- 3) Children and youth experiencing poverty are likely to have more challenged situations during emergency evacuations, where education on risk and means to respond to risk, remains low.
- 4) Messaging and education typically doesn’t address implications for low-income households where parent(s) may be routinely exposed to heat and other environmental risks due to outdoor employment.

## Homeless and Precariously Housed Populations

- 1) Evidence of weather extremes contributing to illness morbidity and mortality for these populations experiencing many forms of systemic adversity and physical and mental health challenges.
- 2) Specific problems include those experiencing heat exposure, air pollution, and a lack of access to basic amenities and services compounded by extreme weather events.
- 3) Homeless populations are rarely considered in climate risk assessments and emergency response plans.
- 4) Inadequate housing considerations include congregate environments that do not provide air conditioning, have windows that cannot be opened, or force residents to be outside during the day.

## Older Adults

- 1) The health risks posed by climate change are well known to be more strongly experienced by older adults.
- 2) Engagement can be even more challenging in terms of access to information about risks, assumptions of base levels of support that are not present, and exposure to greater risks in environments lacking air conditioning and other cool spaces.
- 3) Older adults are often not considered in risk assessment and response planning – a problem compounded when poverty is present.
- 4) The most pronounced demonstration of these risks to date was the mortality rate amongst older adults in the 2021 heat dome with a lack of access to resources contributing largely to those outcomes.

## Women's Health

- 1) There is a need to address environmental risks during pregnancy, especially for women of low socioeconomic background.
- 2) Consideration of risks of exposure to violence and isolation during weather extremes, including the risk of being exposed to violent perpetrators during evacuations (compounded for women experiencing poverty).
- 3) In high-risk periods, a lack of resources and choice regarding living circumstances all translate into greater exposure.
- 4) Inclusion problems: energy transition jobs have historically been male-focused, women have been at the centre of under and unpaid labour in community climate response, and limited attention to women's health for outdoor, female workers.

# Thoughts on Responses to Date at the Poverty–Climate–Health Nexus

## Initial mapping of responses

Across all groups above, the longer term, whole system responses represent domains with the greatest number of co-benefits. These include responses such as access to affordable housing, ensuring a basic income, food, water and energy security, ensuring human rights are respected, and ensuring that mitigation and adaptation responses are inclusive for people experiencing poverty. Other leveraged responses could include legislating maximum indoor temperatures and enforcing said legislation, designing public spaces that provide safety and resources in the face of environmental risks (e.g., shade, free and accessible water), appointing and resourcing climate response officers across support sector contexts, developing inclusive asset and risk assessments and designing inclusive climate response plans.

## Needing to move beyond risk

As much as understanding risk is important in thinking about how responses need to be developed, attending to strengths, resources, and the perspectives of the groups experiencing these risks is at least of equal importance. For responses to be relevant, co-designed, and grounded in action, at-risk populations need to be considered as contributors to responses with one caution. It must be understood that for communities experiencing poverty to contribute, resources must be provided to make those contributions equitable, feasible, and sustainable.

# Key cross-cutting considerations



Nuanced data – qualitative, longitudinal, asset and risk mapping, climate and extreme weather risk mapping, attention to rural vs urban and other social and geographic frames



Who is at the table – Indigenous, community expertise, sector appropriate



Infrastructures and funding to facilitate a learning, iterating system based on data and cultural relevance



Dedicated staff who have funding capacity for implementation



Organized planning and governance;  
Rights-based policy and accountability mechanisms



Education of all actors – education that is inclusive and destigmatizes poverty



Integrated into whole society responses – not parsed out as a stand – alone poverty strategy which can add to stigma



## Where is the leverage?

For all of the groups that our think tanks and reviews have focussed on, the responses with the greatest potential for impact are those that are prevention-oriented and upstream. For example, ensuring access to basic income and creating access to affordable, climate-resilient housing and associated infrastructures, and legislating maximum indoor temperatures will improve the health and wellbeing of the whole of society. This kind of approach is sometimes referred to as ‘multisolving’. Chronic homelessness can and should be preventable in Canada – eliminating the greatest degree of environmental risk exposure. COVID-19 pandemic responses provided a tangible example of how we can generate whole society/system responses – the response to climate change needs to draw on those lessons and become more ambitious and sustainable.

Other important frames to consider include those that acknowledge and embed relevant histories (e.g., colonialism, racism and discrimination) and the taking of a life course approach (integrative responses over the lifespan versus artificially siloed responses pinned to a particular stage of development). Such framings of problems and solutions will also assist with better assessing whole society risks and the economic and social benefits of responses. Lastly, current planning processes would benefit from using data that projects likely future scenarios rather than our current state – to reduce the risk of the lag from design to implementation leading to inadequate responses.



# Think tank response generation by subgroup

## Short and medium term

The responses described below were derived from our think tank transcripts from each of the four major theme areas. It was a consensus across groups to focus primarily on short and medium term responses – bracketing whole system change approaches as described earlier in the report. Short term was loosely framed as within 1-3 years with medium term understood to fall within a longer time period but stopping short of whole system responses. These themes are provided as an initial sketch of promising directions – with further specificity to be generated as we gather more information in coming years.

### Homelessness and Inadequate Housing

No shelter through to temporary, unstable, and unsafe living conditions

#### Short Term

- Assess high risk populations and conduct social vulnerability assessments.
- Develop inclusive disaster response plans and proactively track environmental risks (examples throughout like the global one – EMT bags with temp measures etc.).
- Implementing targeted acute exposure risk responses (e.g., emergency flagging related to climate and extreme weather risk mapping, location and population mapping) including attention vulnerabilities related to medical conditions.
- Provide easy access to shade and water.
- Free access to transit (when transportation can be made safely) in climate-related weather events.
- Trained climate-specific responders including peer support who can engage in outreach and provide education, risk assessment, and response kits.
- Addressing unique risks in responses – violence exposure for women, populations with disabilities.
- Educate health and social service providers on unique risks for service users lacking adequate shelter and evidence-based strategies for responding.

#### Medium Term

- Testing and iterating on inclusive disaster plans.
- Implementing strategies to create climate resilience in housing stock where poverty is an issue.

## Children & Youth

### Short Term

- Indexing information/education related to the local frame (e.g., children whose parents are in the oil and gas industry; children experiencing poverty, with parents who work outdoors, who lack AC) – for parents and children both – that is action oriented.
- Indexing information/education to be representative of and relevant to Black identifying children and youth, children and youth living with disabilities, Indigenous youth – through co-creation.
- Increase opportunities for college and university students to get involved in research projects and other activities related to climate change and health equity.
- Review and revision of disaster response plans for relevance to children and youth experiencing poverty.

### Medium Term

- Review and iteration on disaster response for children and youth experiencing poverty.
- Gather data in the frame of children’s rights and health – to support legal action in this area related to the right to a healthy environment (e.g., the UN Convention on the Rights of Children).
- Create frameworks for youth to act as teachers for other youth and children and for other actors in this space across the board.

## Women’s Health

### Short Term

- Increase awareness of environmental risk unique impacts on women experiencing poverty and engage pertinent sectors and organizations in same.
- Destigmatize poverty and empower women to recognize when the need help and how to get it – with specific emphasis on women in poverty and other intersections.
- Creating welcoming spaces for diverse women experiencing poverty to get support related to environmental risks.
- Risk flagging as a function of degree of exposure provided to healthcare providers at times of heightened environmental risks to women’s health.
- Create disaster responses that are co-designed by women experiencing poverty.

### Medium Term

- Set standards to ensure equal representation of women in leadership positions in disaster, care, and systems response planning related to climate adaptation and mitigation responses.
- Iterate upon and improve disaster responses with respect to the degree to which they reduce risk for women experiencing poverty.

## Older Adults

### Short Term

- Conduct social vulnerability assessments with older adults and develop inclusive disaster and adaptation response plans, attending to what works for older adults in specific ethnic groups.
- Identifying who in such communities knows those who are isolated and/or reluctant to engage – and who has influence therein – and design proactive response strategies.
- Design responses for the unique implications for older adults in rural contexts.
- Identifying and addressing misinformation (recommendations to shut windows and stay indoors – doesn't work if no AC).
- Involve older adults as people with knowledge to share – learning from Indigenous elder engagement.
- Engage physicians, and traditional media – on messaging risks and responses – looking at how diverse older adults get information.
- Processes for ensuring safe access to medications in weather extremes.

### Medium Term

- Promote and support cooperative housing models for risk-exposed older adults.
- Assessing and iterating on proactive outreach strategies, through care providers and buddy systems, that reach older adults in poverty.
- Share best-practices and standardize heat-health check-ins.
- Implementing procedures for food and water security during disasters (e.g. freezer off and lost food) with proactive responses ahead of storm and weather extreme predictions.
- Implement rights frameworks – implementing legal and advocacy channels for marginalized older adults (e.g., newcomers).
- Chief heat officer roles established with directives specific to older adults experiencing poverty.