







Climate Change & Inuit Mental Health

Multi-year Inuit-led research in the Canadian North demonstrates link between climate change and mental health

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Climate Change in the North

The Circumpolar North is one of the most rapidly-changing places on earth, warming at over twice the global average and, in some regions, at excess of 3 degrees Celsius. The subsequent impacts of this rapid warming on ice conditions, snow, weather, precipitation patterns, and wildlife and vegetation has, in many places, been profound. As a result, Indigenous peoples living in the Circumpolar North, including Inuit in Northern Canada, are experiencing disruptions to their livelihoods, subsistence land-based living, and their ability to travel safely on the land and ice. Indeed, due to their often-strong connections to the environment, Indigenous people have been identified as among those who will face the most serious challenges in the short term from climate change, particularly within the Arctic and Sub-Arctic regions.

Nunatsiavut, Labrador, Canada

Nunatsiavut is the homeland of the Labrador Inuit, located on the North Coast of Labrador, Canada. On December 1, 2015, Nunatsiavut celebrated its 10 Year Anniversary as a self-governing Indigenous territory in Canada. Approximately 2600 Inuit live in Nunatsiavut,

DEMOGRAPHICS

For communities in Nunatsiavut, Labrador



NAKKOVIK NAIN

POSTVILLE RIGOLET

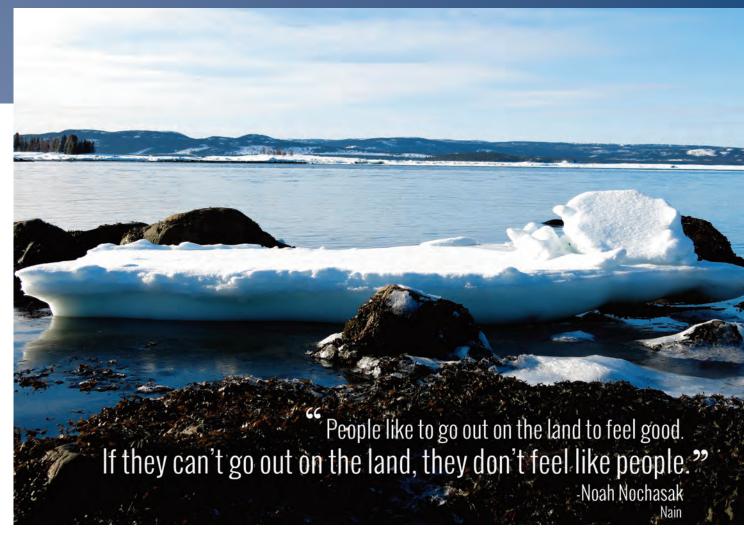
GENDER RATIOS
among Inuit communities
The distribution of finit community member interviewees in Nunetsiavur, Labrador, Canada (2012-2013), stratified by gender (n=96)

HOPEDALE MAKKOVIK

NAIN POSTVILLE RIGOLET

Fig. 1: Map and demographics of the five Inuit communities of Nunatsiavut, Labrador, with age and gender ratios of interview participants

spread among five small, fly-in only, coastal communities: Nain, Hopedale, Postville, Makkovik, and Rigolet (Figure 1). Inuit and their ancestors have lived in the region for thousands of years, directly reliant on the land and natural environment for hunting, fishing, trapping, and foraging. For Inuit in Nunatsiavut, the land not only is essential to survival, but also is foundational for culture, for maintaining Inuit heritage and ancestry, and for connecting with family and friends.



As with many other Indigenous populations globally, Inuit in Nunatsiavut have experienced the enduring legacies of colonization, including forced relocation and land displacement, the removal of children from communities to attend residential schools, and ongoing political and social marginalization – all of which are further compounded by the changes in climate and environment experienced in the region.

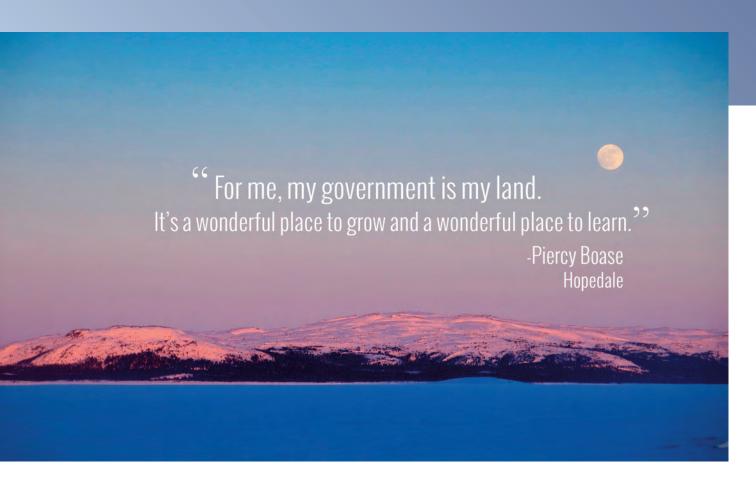
Climate Change & Mental Health

In 2009, and in response to the severity of the changes, the Rigolet Inuit Community Government gathered a team of Inuit and non-Inuit researchers to study the impacts of a changing climate and environment on health and wellbeing. From this work, it became increasingly clear that the mental health impacts of climate change were of serious concern for Rigolet residents, with the impacts wide-ranging and far-reaching.

Based on these results, in 2012, the five communities of Nunatsiavut gathered together to undertake a regional case study of the climatic determinants of mental health, to understand the pathways through which climate change was impacting Inuit mental wellbeing. Over 100 people were interviewed across the five communities, including hunters, trappers, teachers, artists and crafters, government workers, health professionals, and youth (Fig 1).

It All Starts With the Land

For all participants in this research, everyone identified the land as the most important component for Inuit mental health. As one avid hunter explained, "We feel a part of the land. It's me. It's us. It's my people." The land is considered kin, a place of healing and solace, medicine for the body, mind, and spirit, the heart of culture and ancestry, and the foundations upon which all aspects of health and wellbeing emerge. As



one woman described: "Going out on the land is everything to us – it's our heart and our soul. That's real. A lot of people think of spirituality as just a church thing and it's not, that's just one portion of spirituality. For us, going out on the land is a form of spirituality and if you can't get there, then you almost feel like your spirit is dying and then when you get out again, then you feel so much better when you come back."

With climate change, though, everything on the land is changing. It is becoming more and more difficult for Inuit in the region to travel safely on the land, due to unstable and dangerous snow and ice conditions and unexpected storms. In addition, the sea ice is forming much later and breaking up much earlier, leaving far fewer months to travel on the land to hunt and feed their families. And the animals and food and medicinal plants are also changing. All of this combines to create conditions in which people feel 'trapped' or 'stuck' in the communities, and are unable to get off on the land to support their families, their culture and their wellbeing.

This leads to serious impacts to mental health and wellbeing, including strong emotional responses and impacts to other determinants of mental health such as family stress, addictions, suicide ideation and attempts, and the loss of health sovereignty.

Emotional Impacts

For everyone interviewed, the changes in the land and environment were eliciting strong reactions and emotions, including fear, sadness, anger, anxiety, stress, distress, depression, grief, and visceral pain. Many people also discussed concerns over the future of Inuit culture and livelihoods in the region if the conditions continue to change. As one community leader explained, "Inuit are people of the sea ice. If there is no more sea ice, how can we be people of the sea ice?" This concern over identity, and the ability to maintain cultural practices that have sustained Inuit in the region for hundreds of years, caused many people to express a sense of helplessness within the face of climate change, and pain at the thought that Inuit culture and

traditions may no longer be practiced or passed down to the younger generations in the ways that have sustained previous generations.

Other Determinants of Mental Wellbeing

Many people also shared serious concerns around increasing family stress, with the potential for family violence, as people were stuck in the community more regularly, and were experiencing emotional responses to the changing conditions and the inability to support their family's food needs. Many people spoke about concerns around increasing drug and alcohol usage, as people sought to fill empty time that was previously dedicated to going out on the land to hunt and trap. In addition, since people use the land as a source of healing from difficult challenges and traumas, a decrease in time on the land could lead to more people turning to drugs and alcohol as coping mechanisms or to deal with the pain.

Connected to this, many people discussed the potential for increased suicide ideation or attempts, as people dealt with the strong emotions and loss of identity associated with being a hunter and provider, while simultaneously losing an important component of health and healing through time on the land. It has been documented that during periods of fall freezeup and spring break-up of the sea ice, there is often increased incidences of suicide attempts. Many people interviewed worried that with the extended freeze-up and break-up periods experienced, combined with the decreased amount of time when the sea ice is thick enough to travel on and related emotional reactions, there could be increased incidences of suicidal thoughts or attempts. This certainly does not imply that climate change is directly causing drug and alcohol abuse or suicide, as there are many complicated multi-faceted issues, emergent from numerous personal, social, historical,

psychological, and economic factors, which influence these challenges. Yet, from this research, Inuit are indicating that climate change is becoming an additional stressor on these determinants of mental health.

Health Sovereignty in a Changing North

Clearly, for Inuit mental health and wellness, the land is foundational. As one Inuk explained, "Going out on the land is just as much a part of our life as breathing. Really, we are so close to the land. So if we don't get out then, for our wellbeing, it's like taking part of your arm away. It's like you are not fulfilled."

For many people interviewed, they felt they had lost control over their ability to support their mental health and wellbeing through Inuit cultural practices and traditions, including spending time on the land, hunting, trapping, fishing, and foraging. As one individual explained, "If a way of life is taken away because of circumstances that you have no control over, then you lose control of a part of your life." Without the ability to connect to land-based activities for health and wellness due to changes in climate and environment over which they have no control and are perpetuated from outside forces, Inuit in Nunatsiavut explained that they felt they have lost control of their health, their freedom to access health-sustaining resources out on the land, and their ability to keep themselves and their families healthy in an Inuit way.

COP21 in Paris

As this article goes to press, the United Nations Convention on Climate Change Conference of the Parties 21 (COP21) will have just concluded in Paris, France. While much of the discussion is around infrastructure, economic impacts, technological solutions, and adaptation strategies, there is increasing discussion around the health impacts of climate change. Yet, the social, cultural, and economic impacts of mental health have the potential to be far-reaching, impacting millions of people worldwide through direct and indirect pathways. We need to take seriously the psychological dimensions of climate change, including the mental health tolls from climate change and the incentives or disincentives to mitigating and adapting behaviours.

Climate change is an unprecedented threat to global mental health, and the mental health impacts from climate change need to be prioritised. This is no long abstract or theoretical - people worldwide are already experiencing a range of psycho-social responses. Now is the time for governments, decision-makers, researchers, Indigenous leaders and communities, and health professionals to collaborate together through multi-sectoral partnerships and collaborations to recognize the current and potential impacts of climate change on mental health and to act to mitigate the psychological impacts of climate change by committing to ambitious emissions-cutting targets under a 2 degrees Celsius average global increase, supporting mitigation and adaptation responses, and shoring up health supports, particularly within rural and remote regions.

Key Research Collaborators

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Baikie, 'My Word': Storytelling & Digital Media Lab
| Herb Jacque & Myrtle Groves, Makkovik Inuit
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Wayne Piercy & Juliana Flowers, Hopedale Inuit
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Research Funding

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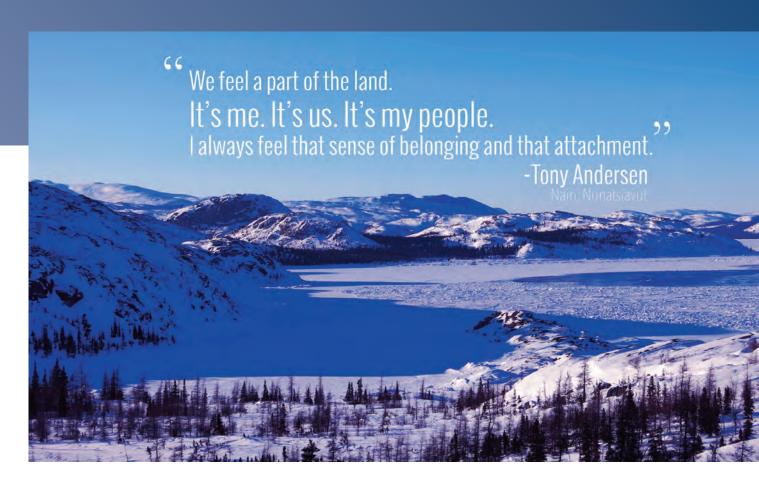
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Ashlee Cunsolo Willox is a community-engaged researcher, working at the intersection of place, culture, health, and environment, with an emphasis on the determinants of Indigenous health. She is a pioneer in climate change and mental health research, and has given over 200 presentations and received wide media coverage for this work. In 2014, she released a collaboratively made documentary film with the Inuit communities of Nunatsiavut, Labrador, on climate change and mental health, Attutauniujuk Nunami/Lament for the Land, which was released free online. She is an inaugural member of the Royal Society of Canada's College of New Scholars, Artists, and Scientists and one of Nature Canada's 75 Women for Nature.



Suggested Readings

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