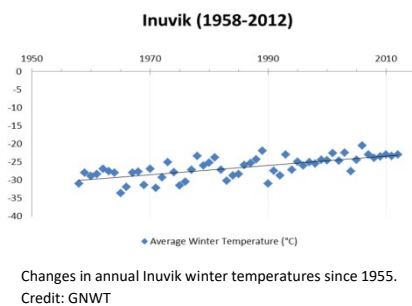


Climate Change, Health and Wellbeing

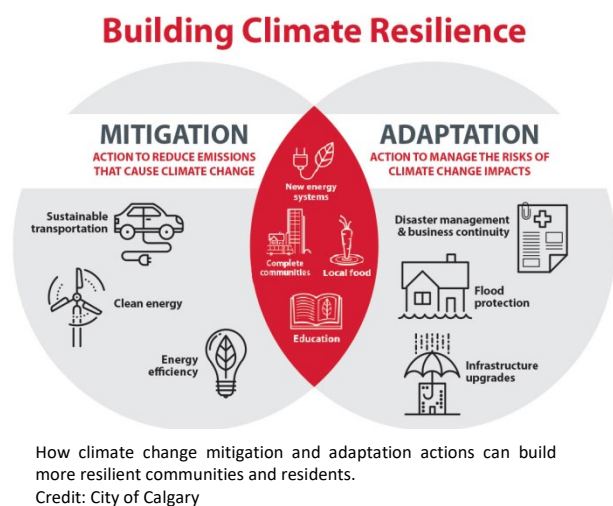
As the climate changes, the impacts of warmer temperatures are beginning to be seen in changes in the health of residents across the Canadian North. Health impacts vary by region, but include increased heat-related illness, such as heat stroke and death higher pollen levels (with the potential to trigger more frequent and severe asthma exacerbations), worsened air pollution from wildfire smoke, and increased ground-level ozone resulting in increased heart and respiratory disease.



Canada's Arctic is already seeing rapid change, bringing food insecurity due to decreased access to traditional foods, reduced safety of ice-based travel, limitations to accessing traditional lands, and mental health impacts from changed landscapes and climates. These impacts on human health can work synergistically with other uniquely northern factors, effecting health outcomes in the NWT, resulting in a greater impact than might be expected and further stressing the NWT health system.

Impacts on agriculture and food security will also be region-specific, varying from potentially helpful milder winters and increased precipitation to crop-damaging severe weather and drought. Even across the NWT, these changes will be varied difficult to predict, and will have impacts in association with changes in hydrology and the degradation of permafrost. Additionally, Canadians can expect increased stress and displacement, and reduced predictability from disasters such as floods and wildfires, expansion in the range of certain vector-borne diseases, increased risk of water-borne disease following changed precipitation patterns, and greater exposure to higher levels of ultraviolet radiation.

Governments, industries, communities and individuals are working to reduce greenhouse emissions, to lessen the impact of climate change. At the same time, there are a variety of actions which can be taken to help minimize the risks to health. Climate change "adaptation" refers to changes that we can make at many levels to reduce the health impacts from the hazards that a changing climate can cause. Projects and programs that help communities and organizations respond to current or predicted climate change impacts are taking place throughout the NWT, the Canadian north and across Canada.



Some climate change health adaptation actions that can be taken in the NWT include: climate change adaptation planning and climate vulnerability assessments undertaken at local or regional scales; initiatives that improve food security and access to the land, which are intrinsically link to the climate in

the NWT; efforts to build understanding of climate knowledge, transmit or translate knowledge and inform decision-making at all levels; and initiatives to address the mental health and cultural impacts that climate change has upon Indigenous NWT residents.

Where adaptation actions take place to respond to climate change impacts, climate resiliency is the ability of a community or organization to absorb the stresses of climate change and adapt to future climate change impacts to the benefit of the community or organization. Adaptation actions often result in more resilient communities, but actions can also be taken to directly build climate resiliency. Projects that strengthen local culture and community connections; encourage hunters, trappers and other traditional land users; or build climate knowledge and decision-making networks and capacity, can all build a more climate resilient community in the NWT.

Climate change adaptation actions, responding to the health impacts of climate change, should improve the health outcomes of NWT residents. With appropriate action, stronger, healthier, climate resilient NWT communities will flourish, despite the impacts that climate change is having on the NWT. Realizing these impacts, planning appropriate actions and taking them as soon as possible is the best way to maximize the benefits of climate change adaptation.

Starting questions:

- How is climate change impacting the health of your community?
 - What changes have you seen in your community that already impact health and wellness?
 - What changes in health and wellness would you predict to see in the future, as warming continues?
- What actions could you take today (with proper funding and capacity) to reduce the impacts that climate change is having on human health?
- What actions do you think will be necessary to take in the future, as warming continues?
- How resilient to climate change is your community?
- How could you improve climate resiliency within your community?
 - Today, with current capacity and funding sources?
 - Long-term, with unlimited capacity and funding sources?