



Climate Change and Health in B.C.: From Disaster Risk to Resilience

The Canadian Institutes of Health Research in collaboration with
the British Columbia Ministry of Health and
Michael Smith Health Research BC

Summary Report

Best Brains Exchange

November 22 & 23, 2022



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The event organizers and report author acknowledge that our places of work are within the unceded territory of the x^wməθkwəyəm (Musqueam), Skwxwú7mesh (Squamish), and Səlílwətaʔ/Selilwitulh (Tsleil-Waututh) Nations as well as the Lək^wəŋən Peoples: Songhees and Esquimalt First Nation. We were grateful to have speakers and participants joining us virtually from territories across Turtle Island.

Executive Summary

On November 22 and 23, 2022, senior-level policy makers from across public sectors and jurisdictions, Indigenous rightsholders and people with lived experience, researchers, climate and public health experts, and decision-makers in British Columbia (B.C.), gathered for two days of discussion, information sharing, and debate during a Best Brains Exchange (BBE). BBE participants examined how B.C.'s health sector can work collaboratively and proactively with others to protect and promote health before, during, and after climate-related shocks.

Climate change mitigation and adaptation activities go hand in hand with all elements of the emergency management cycle—mitigation, preparation, response, and recovery. Emergency preparedness requires a coordinated effort, and the need to break down silos is clear. Progress has been made in many fields, but success is disparate; moreover, grassroots efforts do not always align with governmental policies. We must now find ways to improve connections between our systems to bring this important field of work into the mainstream. Under the *Climate Preparedness and Adaptation Strategy*, the B.C. Ministry of Health along with the two provincial and five regional health authorities are working to build health system climate resilience and to promote and protect the health of B.C.'s population from climate shocks and emergencies through cross-sectoral collaboration and shared leadership.

Indigenous experiences, ways of knowing, and understanding of intergenerational responsibility make essential contributions to addressing global climate change. With Indigenous communities being disproportionately impacted by climate change, culturally sensitive action and trauma-informed care before, during, and after emergencies are essential. Indigenous knowledge and experiences were represented by several speakers and participants at this BBE.

This report summarizes the discussion, debate, and exchange of ideas from this two-day gathering, in an effort to better position B.C. to successfully manage, adapt, and respond to climate-related events, and other natural.

Introduction

On November 22 and 23, 2022, the Canadian Institutes of Health Research (CIHR) held a Best Brains Exchange (BBE)—*Climate Change and Health in BC: From Disaster Risk to Resilience*—in collaboration with the BC Ministry of Health and Michael Smith Health Research BC (Health Research BC).

The BBE brought together senior-level policy makers from across sectors and jurisdictions, Indigenous rightsholders and people with lived experience, researchers and other climate and public health experts and decision-makers, including those with knowledge of public emergency prevention, preparedness, response, and recovery.

Participants came together to learn and discuss how B.C.'s health sector can work collaboratively and proactively with others to better protect and promote health before, during, and after climate-related shocks.

More specifically, the BBE was designed to support participants to:

- Develop stronger collaboration among rightsholders and partners engaged in adapting to the health impacts of climate-related shocks and emergencies.
- Gain a shared understanding of the experience of Indigenous communities regarding the health impacts of climate-related shocks and emergencies.
- Identify opportunities throughout the emergency management cycle where the health sector can support communities before, during, and after climate-related shocks and emergencies.

Background

Background and Policy Context

Climate change is widely acknowledged as the 21st century's greatest global threat to human health. Climate change is already impacting human health in a myriad of ways, including increased death and illness from increasingly frequent extreme weather events such as heatwaves; storms and floods; the disruption of food systems; increases in zoonoses and food-, water-, and vector-borne diseases; and mental health issues¹. Climate-related shocks and emergencies can also exert significant pressure on health systems through the disruption of health services, costly infrastructure damage; and strain on the health workforce. Health authorities in Canada are already feeling the impacts of climate-related hazards².

Some populations, such as rural/remote, Indigenous Peoples, and equity-seeking populations, are disproportionately impacted by climate-related emergencies, yet have fewer resources to plan and prepare for such events. Health Canada's 2022 report, "*Health of Canadians in a Changing Climate: Advancing our Knowledge for Action*", highlights how drought, wildfires, floods, and temperature extremes related to climate change disproportionately impact First Nations, Inuit, and Métis peoples whose unique relationships to land, waters, animals, plants, and natural resources increase their sensitivity and susceptibility to climate hazards. Indigenous Peoples in Canada have been actively observing and adapting to changing environments in a diversity of ways for millennia, and the Indigenous knowledge systems and practices that have been critical to their survival and resilience are increasingly recognized as valuable to understanding and responding to climate change³.

Under the provincial *Climate Preparedness and Adaptation Strategy* (CPAS; June 2022), the B.C. Ministry of Health and health authorities are leading foundational actions to build climate resilient health systems⁴. A climate-resilient health system has the capacity to "*anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stress, so as to bring sustained improvements in population health, despite an unstable climate*"⁵. Key actions in 2022-25 will assess climate impacts on health and well-being, build knowledge and capacity to prepare and respond, and promote cross-sectoral collaboration on innovative, evidence-based solutions grounded in cultural safety and health equity.

1 [COP26 Special report on climate change and health: The health argument for climate action](#). (2021) World Health Organization.

2 [Health of Canadians in a Changing Climate: Advancing our Knowledge for Action](#). (2022) Hancock, B., Andersen, W.(B.), Calmels, F., Collier, J., Cunsolo, A., Dawson, J., Darling, S., Flowers, G., Gamberg, M., Perrin, A., Healey, G., Horton, B., Howard, C., Irlbacher-Fox, S., Johnstone, J., Labrecque, E., Loseto, L., MacNeill, R., McTavish, K., Middleton, J., Pfeifer, P., Snook, J., Staples, L., Stetkiewicz, M. and Wong, C.

3 [Climate Change and Indigenous People's health in Canada](#). (2022) National Collaborating Centre for Indigenous Health (NCCIH). (Reprinted with permission from P. Berry & R. Schnitter [eds.], *Health of Canadians in a changing climate: Advancing our knowledge for action* [Chapter 2]. (2022). Ottawa: Government of Canada).

4 [Climate Preparedness and Adaptation Strategy](#). (2022) Government of British Columbia.

5 [Operational framework for building climate resilient health systems](#). (2015) World Health Organization.

Need for Evidence

This BBE was held in support of the BC Ministry of Health and its health and emergency management partners to better understand climate-related health impacts in the province and to identify opportunities to build climate resilience across the health sector. This includes building capacity for effective cross-sectoral collaboration and shared leadership needed to adapt to the complex and intersecting health impacts of climate change.

Intersectoral collaboration, such as this BBE, can support the health focused actions of the provincial Climate Preparedness and Adaptation Strategy. Learning about opportunities to reduce climate impacts on health is instructive as the Province works to develop climate resilience frameworks and models for B.C.'s health sector. This BBE will also inform the renewal of the province's central public health policy document, *BC Guiding Framework for Public Health*, which will address emerging challenges impacting the health of the population such as climate change. Connecting with community-based researchers and partners working with and supporting the unique needs of Indigenous peoples and other priority populations also provides an invaluable opportunity to inform the development of policies and programs that are culturally relevant and equitable.

Anticipated Outcomes

The intention of the BBE was to support the identification and implementation of priorities for provincial ministries and organizations responsible for emergency management in B.C., such as Health Emergency Management BC (HEMBC) and Emergency Management Climate Readiness BC (EMCR). Experiences from the COVID-19 pandemic and the 2021 extreme heat, wildfire, and flood events in B.C. offer important lessons for protecting health from future emergencies, including those made more severe by climate change. This aligns with an All-Hazards Approach to disaster risk reduction and the imperative to “Build Back Better”, as outlined in the United Nations Sendai Framework⁶.

CIHR Best Brains Exchange Program

The BBE program is designed to deliver high-quality, timely, and accessible research evidence that responds to health system policy issues and gaps in knowledge, to inform policy development, planning and program implementation. This program was originally developed by the CIHR's Institute of Health Services and Policy Research and Knowledge Translation Branch in an effort to amplify CIHR's capacity to engage with provincial and territorial ministries of health, and the Health Portfolio, and to generate applied and relevant research that is responsive to policy-maker-identified priorities.

⁶ [Sendai framework for disaster risk reduction 2015-2030](#). (2015) United Nations Office for Disaster Risk Reduction.