

Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action

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Climate Change and Health Forum

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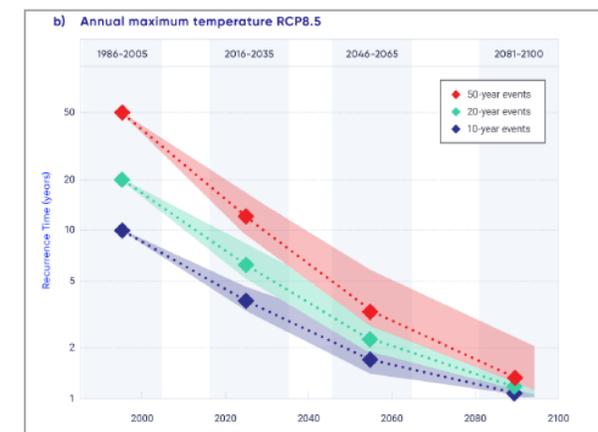
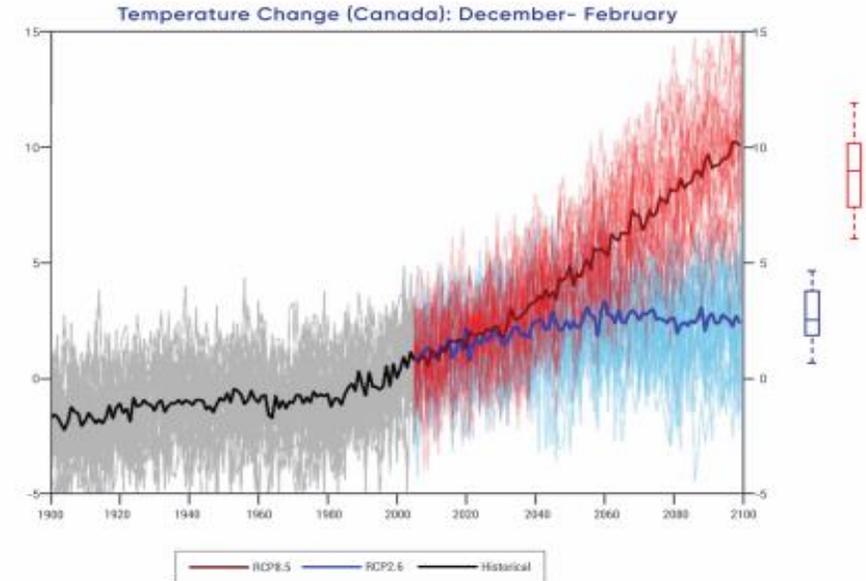
Canada is Warming Rapidly

Canada's Changing Climate Report 2019

Many current trends in climate change impacts relevant for health will continue, including:

- More frequent and intense extreme hot temperatures;
- Increased severity of extreme heat events;
- Less extreme cold;
- Increased risk of drought
- Increased risk of wildfires
- Increasing length of the growing season;
- Reduced seasonal lake ice cover across the Arctic;
- Reduced sea ice extent;
- Thinning of glaciers; and
- Warming and melting of permafrost

<https://changingclimate.ca/CCCR2019/>



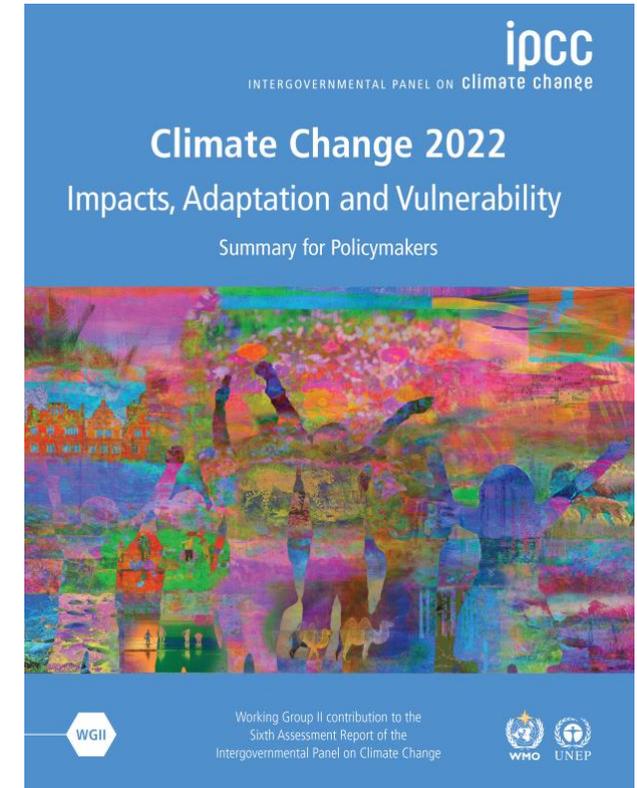
Projected changes in recurrence time (in years) for annual highest temperatures that occurred, on average, once in 10, 20, and 50 years

Increased Evidence of Health Risks from Climate Change

IPCC WG II AR6 Report Health Chapter

- Climate-related illnesses, premature deaths, malnutrition in all its forms, and threats to mental health and wellbeing are increasing (*very high confidence*).
- Climate hazards are increasingly contributing to a growing number of adverse health outcomes (including communicable and non-communicable diseases) in multiple geographical areas (*very high confidence*).
- A significant increase in ill health and premature deaths from climate-sensitive diseases and conditions is projected due to climate change (*high confidence*).
- Climate change is projected to significantly increase population exposure to heat waves (*very high confidence*).
- With timely, proactive and effective adaptation many risks for human health and wellbeing could be reduced and some potentially avoided (*very high confidence*).
- Climate resilient development has a strong potential to generate substantial co-benefits for health and wellbeing, and to reduce risks of involuntary displacement and conflict (*very high confidence*).

Cissé, et al., in press



Canada in a Changing Climate: Advancing Our Knowledge for Action

- Addresses climate change risks to the health of people living in Canada, their communities and health systems **to inform effective measures to build climate resilience.**
- Answers the questions:
 - **What are the current and projected impacts** of climate change on the health of Canadians and their health systems?
 - **Who is most at risk** from these impacts?
 - **What is the status of health adaptation** in Canada?
 - **How can we adapt to reduce health risks** and develop more resilient individuals and health systems?
 - **What knowledge gaps and research** needs remain?

<https://changingclimate.ca/health-in-a-changing-climate/>

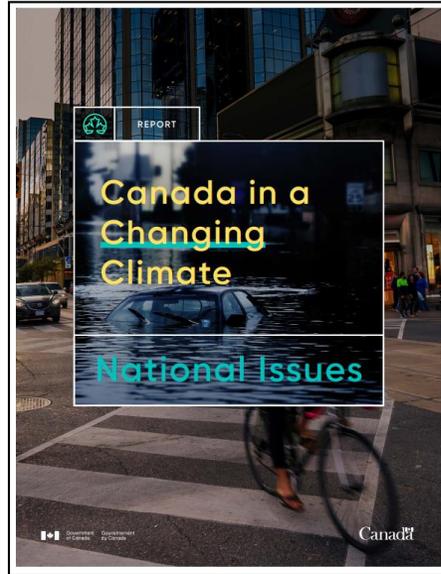


Canada in a Changing Climate - National Assessment Process

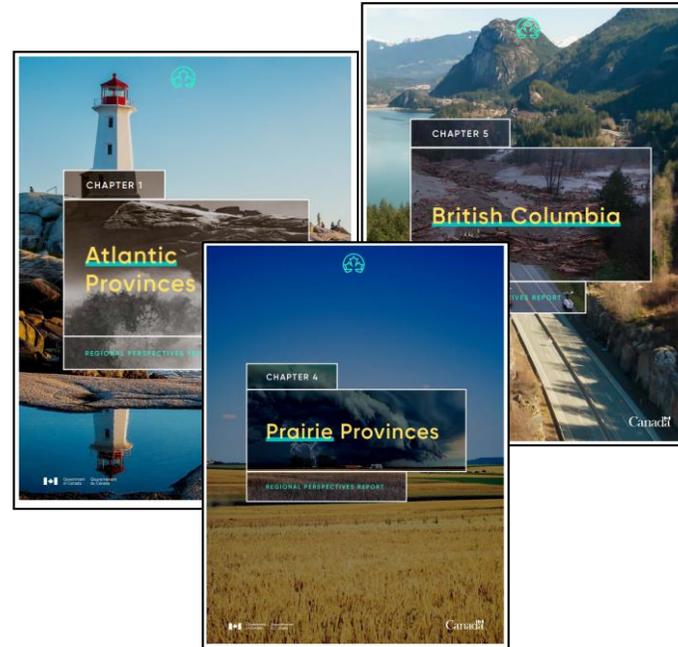
ECCC – April 2019



NRCan – June 2021



NRCan – Ongoing



HC – February 2022



Coming Soon...

- Indigenous Resilience
- National Assessment Synthesis

CCHA 2022

CONTENTS

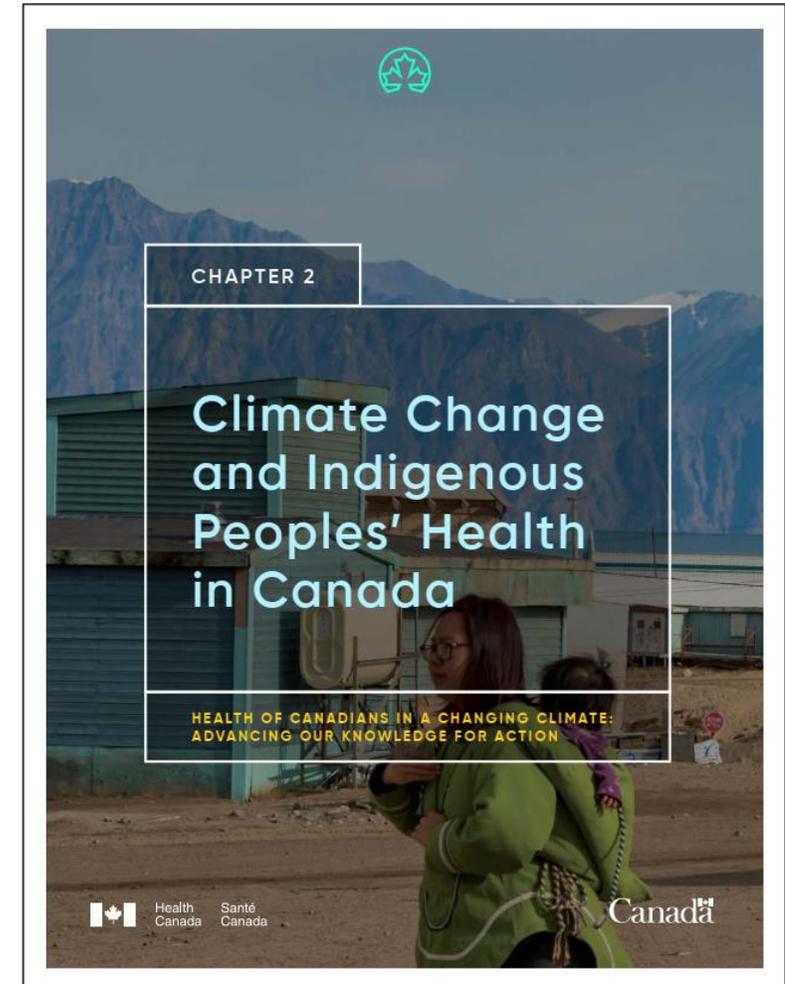
- **Climate change impacts on Indigenous Peoples**
- Natural hazards
- Mental health and well-being
- Air quality
- Infectious diseases
- Water quality, quantity and security
- Food safety and security
- Climate change impacts on health equity
- Adaptation and health system resilience



<https://changingclimate.ca/health-in-a-changing-climate/>

What's New in this Report?

- **New knowledge of health impacts on Indigenous Peoples – and health adaptations**
- **Health equity framework** to inform adaptation and GHG mitigation actions
- **Health system climate resiliency framework and indicators**
- Detailed examination of **mental health impacts** of climate change and needed adaptations
- **34 case studies of health adaptation**
- **Health co-benefits and risks of GHG emissions** framework and estimates





1. Climate change is already negatively impacting the health of Canadians.
2. Health risks will increase as warming continues and the greater the warming the greater the threats to health.
3. Some Canadians are affected more severely by climate change as exposure and sensitivity to hazards and the ability to take protective measures varies across and within populations and communities.
4. The effects of climate change on health systems in Canada, for example, damage to health facilities and disruptions to health services and operations, are already evident and will increase in the absence of strong adaptation measures.
5. Efforts to prepare for climate change are known to reduce risks and protect health. We must take action now.



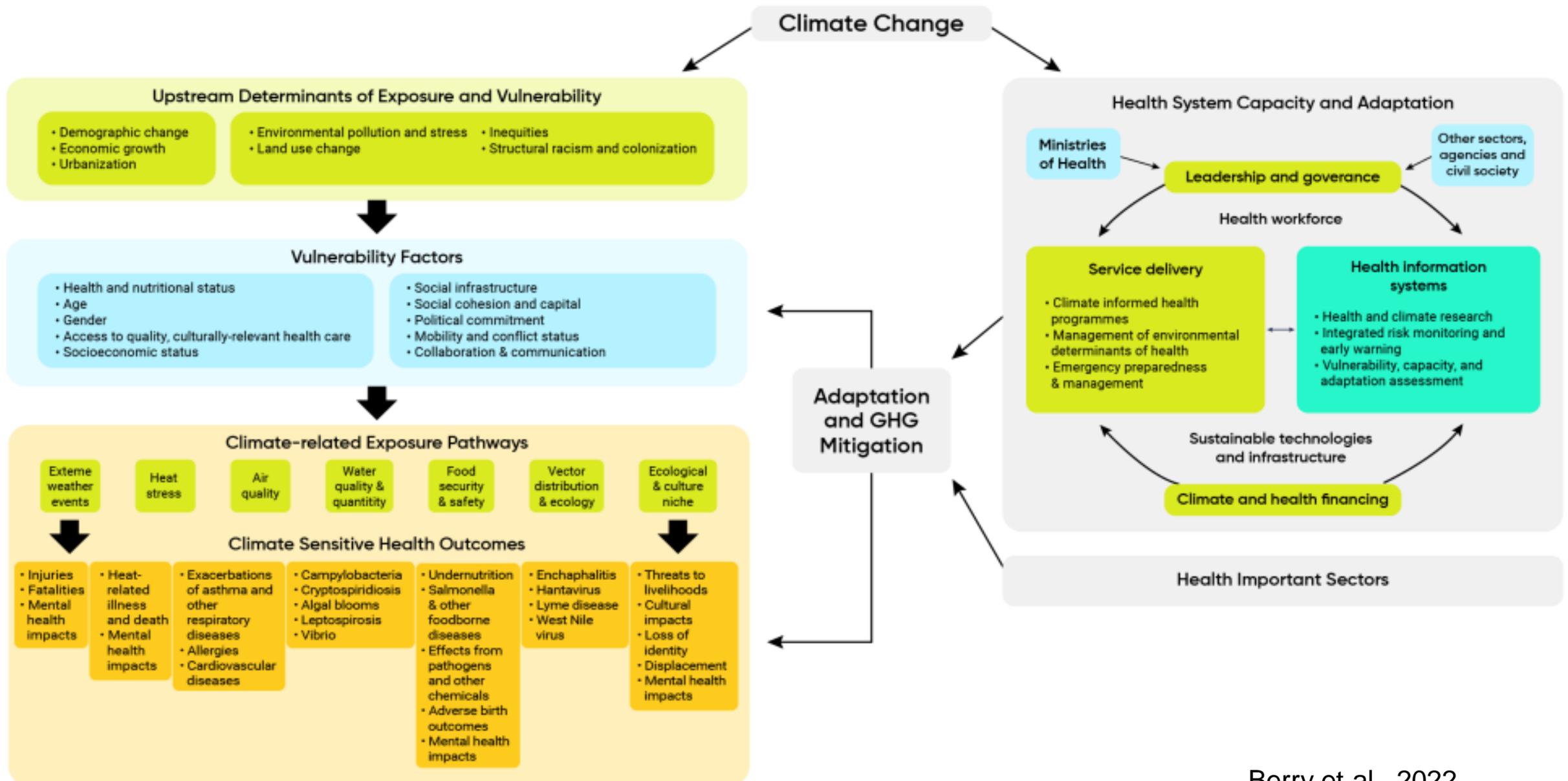
6. The health impacts of climate change on First Nations, Inuit, and Métis peoples are far-reaching with disproportionate impacts on their communities, including food and water security and safety, air quality, infrastructure, personal safety, mental health and wellness, livelihoods, culture, and identity.

7. To successfully protect all Canadians from the health impacts of climate change, decision makers must pursue adaptation actions that are inclusive and equitable and consider the needs of racialized, marginalized, and low income populations.

8. Increased efforts to reduce greenhouse gas emissions is required to help protect the health of Canadians.

9. Reducing greenhouse gas emissions can provide very large and immediate health co-benefits to Canadians.

Pathways through which climate change affects the health of Canadians



“With timely, proactive and effective adaptation many risks for human health and wellbeing could be reduced and some potentially avoided” (very high confidence)

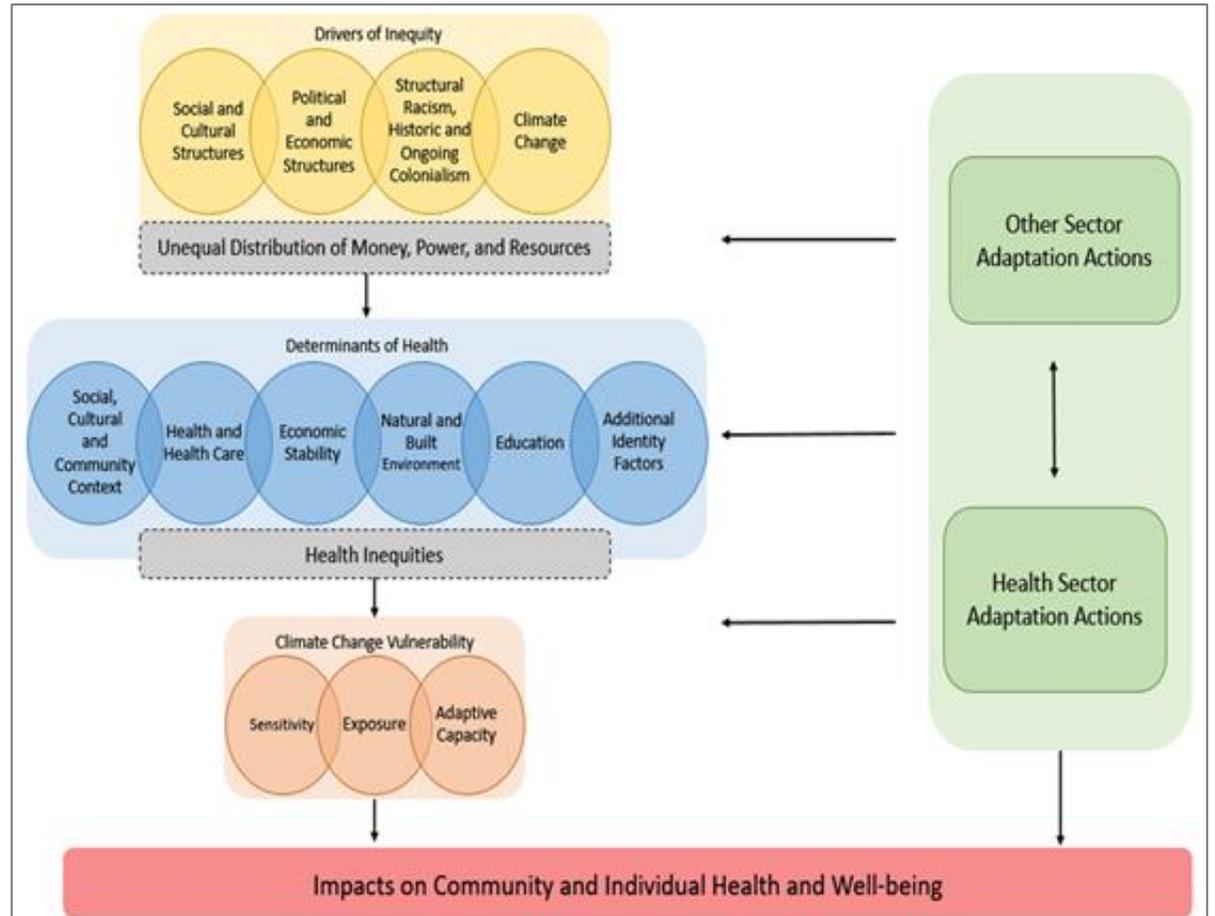
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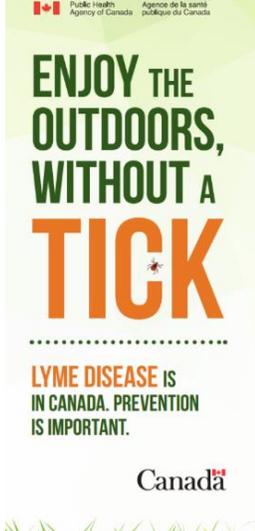
KEY FINDINGS

Understanding Climate Change Impacts on Health Equity

- **Climate change can exacerbate existing health inequities among people living in Canada**, which can increase vulnerability to the health risks from climate change for some individuals and populations.
- **Measures to adapt to the impacts of climate change and/or reduce GHG emissions can have large impacts on health equity** – either positive or negative.
- **Designing and implementing effective actions to address climate change should ensure inclusive, equitable, and community-based participation in the planning processes**, particularly with marginalized individuals and communities that already experience a disproportionate burden of illness and health inequities.



Canadian Federal Health Partners Actions on Climate Change

 <p>Supporting First Nations in climate change adaptation Appuyer les Premières nations dans l'adaptation au changement climatique</p>	 <p>ENJOY THE OUTDOORS, WITHOUT A TICK LYME DISEASE IS IN CANADA. PREVENTION IS IMPORTANT.</p>	 <p>HealthADAPT Working together for climate resilient health systems</p>
<p>Health Canada</p>	<p>Extreme heat health impacts Climate-resilient health system capacity building and evidence</p>	
<p>Public Health Agency of Canada</p>	<p>Food-, water-, vector-borne infectious diseases</p>	
<p>Canadian Institutes of Health Research</p>	<p>Research on northern food security and Lyme disease</p>	
<p>Canadian Food Inspection Agency</p>	<p>Plant and animal health and crop production programs</p>	
<p>Indigenous Services Canada</p>	<p>Indigenous community-driven climate change capacity building and action</p>	

Health Canada

HC's **HealthADAPT** contribution program supported health authorities in assessing and addressing risks (\$3M over four years supporting ten projects as a pilot).

Through HC's Heat Program, **77% of health regions are working to take action to protect health from extreme heat.** Efforts include opening cooling centres, providing extreme heat health messaging to communities and working to support the most vulnerable.

HealthADAPT Capacity Building Program

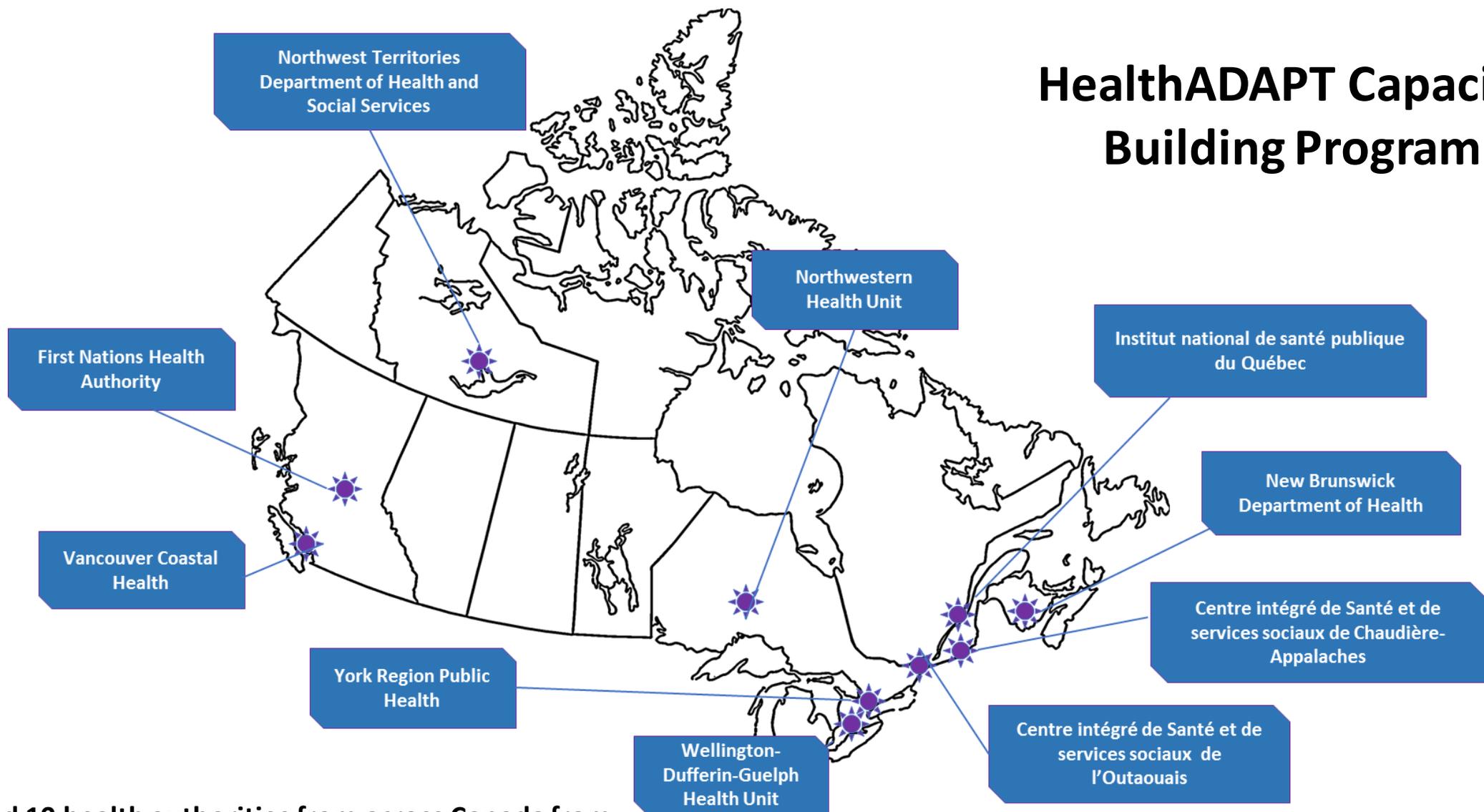
10 health authorities from across Canada received funding and expert support from 2018-2022 to conduct **climate change and health vulnerability assessments**

The projects selected represent the diversity across the country, including:

- Urban
- Rural
- Coastal communities
- Health sector spectrum (i.e., provincial/territorial ministries of health, regional/local health authorities, public health units)



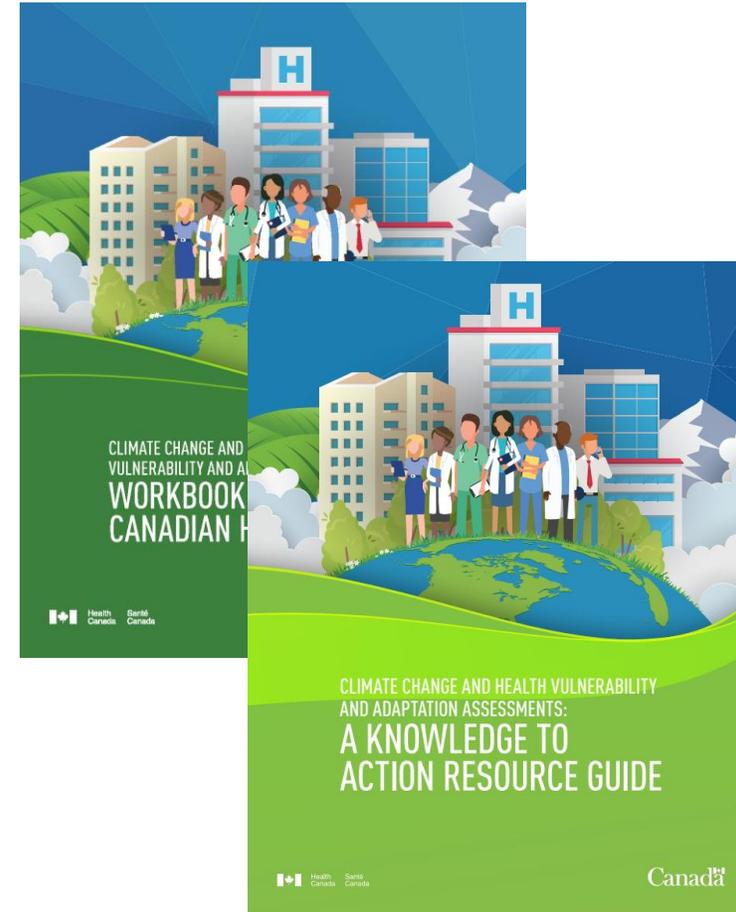
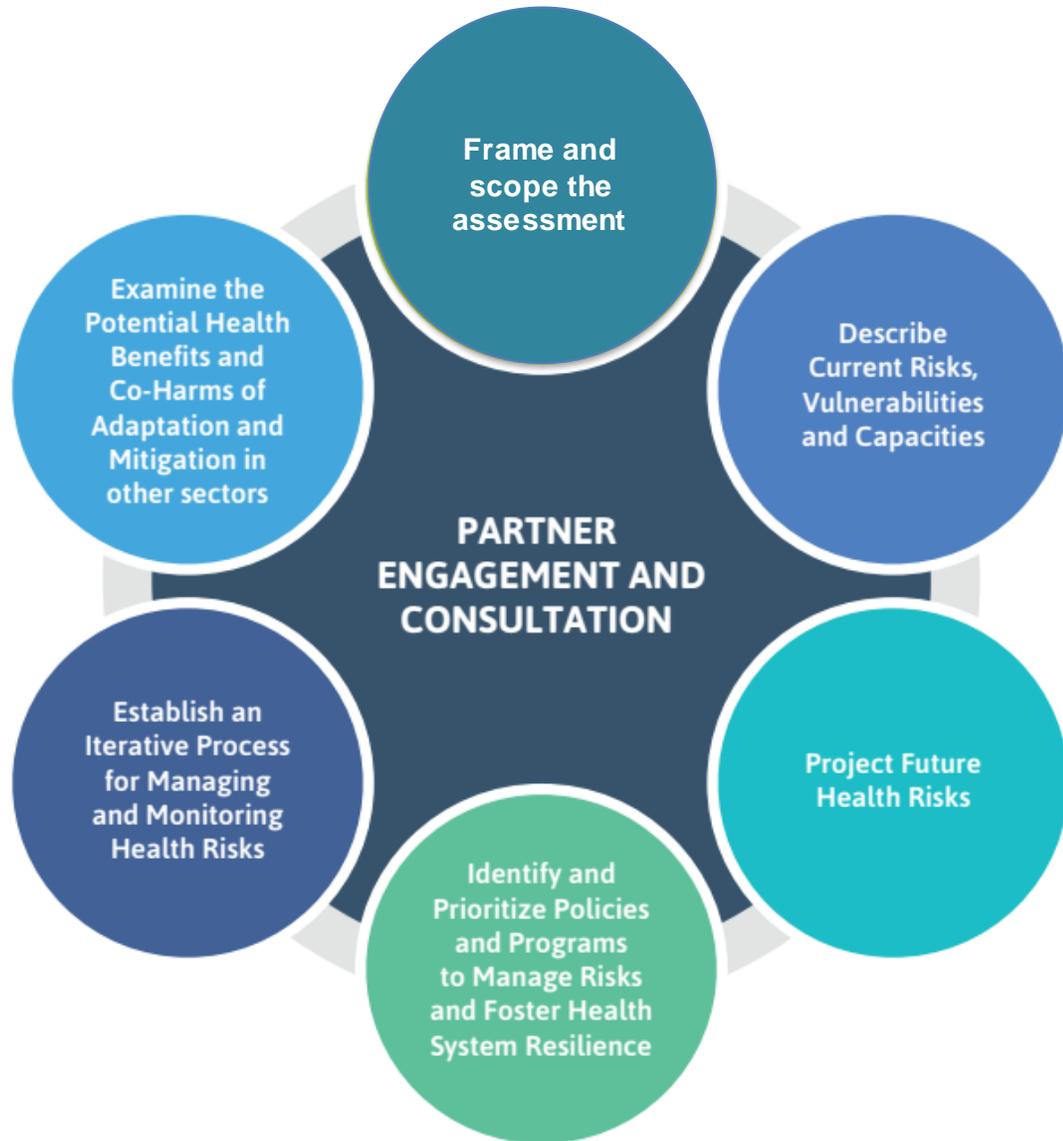
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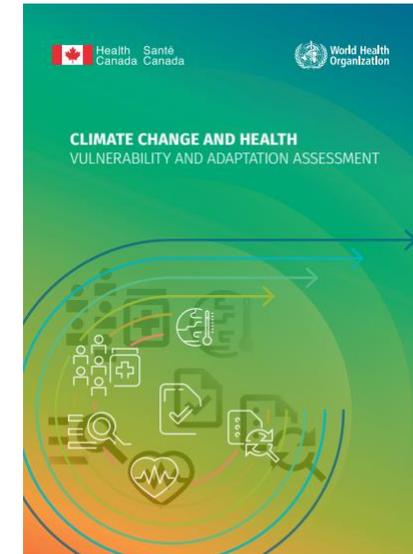
<https://www.canada.ca/en/health-canada/programs/health-adapt.html>

Climate Change and Health Vulnerability and Adaptation Assessment



<https://www.canada.ca/en/health-canada/services/publications/healthy-living/climate-health-adapt-vulnerability-adaptation-assessments-workbook.html>

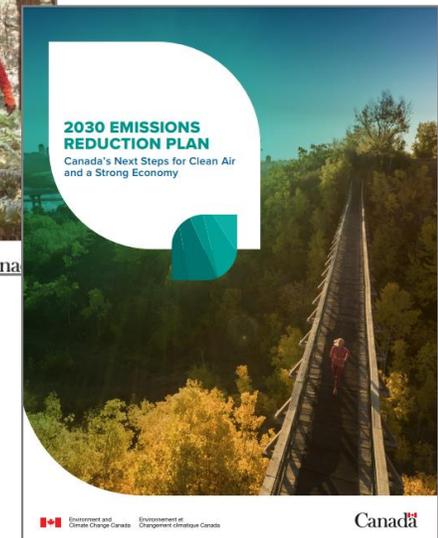
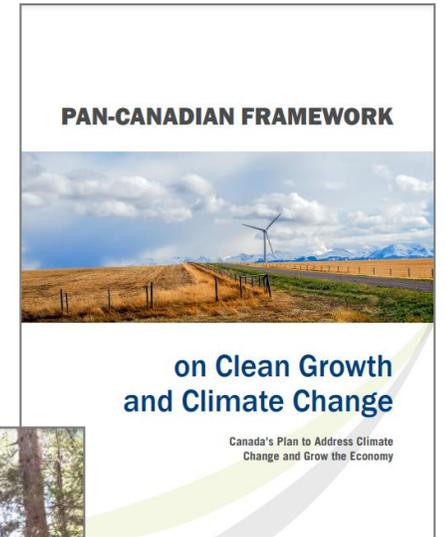
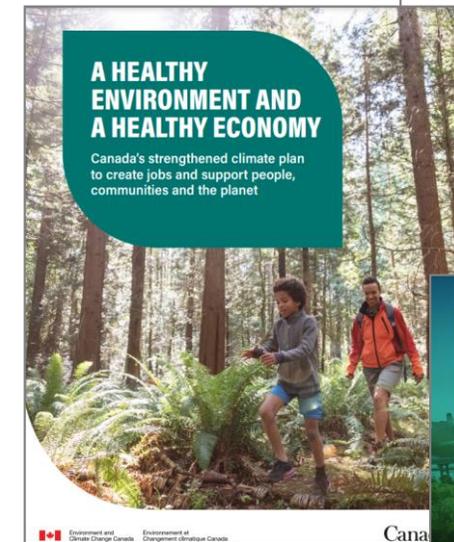
<https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/healthadapt-report-eng.pdf>



<https://www.who.int/publications/i/item/10665345968>

Canada's First National Adaptation Strategy

- The GoC is working with P/T's, Indigenous Peoples, and other partners and experts to develop Canada's first **National Adaptation Strategy** by fall 2022, in advance of COP27.
 - ECCC as the federal climate change lead, is working aside key departments (e.g. NRCan, INFC, HC, PS) to develop the Strategy. Engagement began spring 2021.
 - Commitment under the December 2020 Strengthened Climate Plan, complements the Government's mitigation agenda (e.g. Emissions Reduction Plan).
- The Strategy builds out the commitment to adaptation in the **Pan-Canadian Framework on Clean Growth and Climate Change**, to advance a **whole of society approach**, leveraging existing work on disaster risk reduction, and include action that is cross-cutting and complementary to adaptation strategies led by provinces, territories, local governments, Indigenous peoples, and others.



FOR MORE INFORMATION

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