

Climate Change, Human Health and Trade

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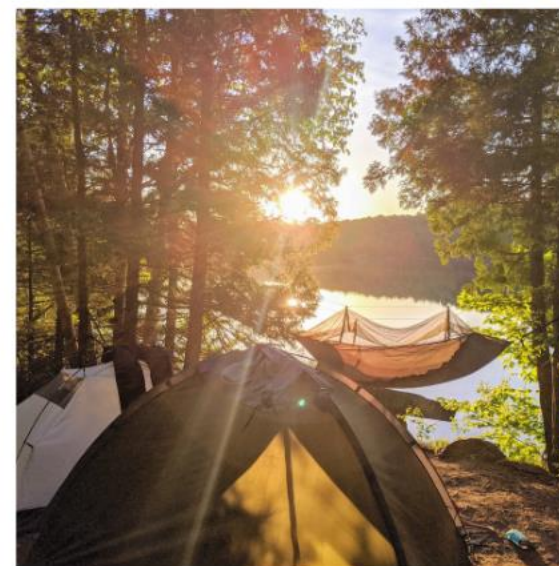


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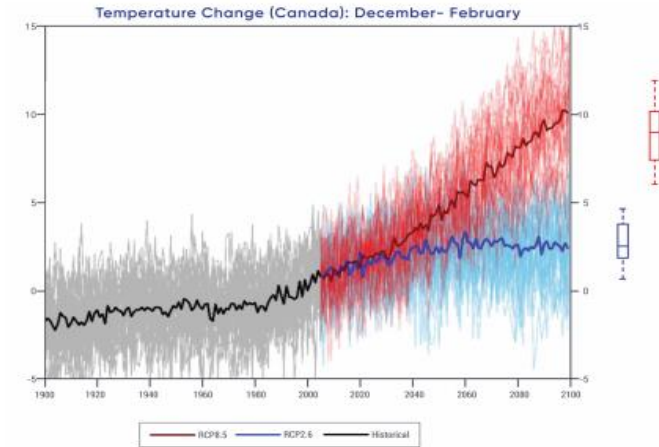
Canada is Warming Rapidly in Ways that Affect Health

Canada's Changing Climate Report 2019

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

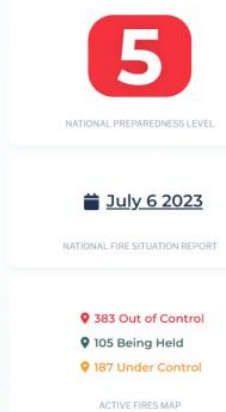
- More frequent and intense extreme hot temperatures;
- Increased severity of extreme heat events;
- Less extreme cold;
- Increased risk of drought
- Increased risk of wildfires
- Increasing length of the growing season;
- Reduced seasonal lake ice cover across the Arctic;
- Reduced sea ice extent;
-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

(Bush & Lemmen, 2019)



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

2023 – Record Fire Season in Canada



<https://www.ciffc.ca/>

Climate Change, Human Health and Trade

Health System Resilience Building

- Infrastructures, operations, food and medical supplies
- New technologies
- Mainstreaming



Evidence-informed Climate Change Actions

- New research
- Vulnerability and adaptation assessments
- Surveillance and monitoring



Cross-sectoral Collaborations to Protect Health

- Network building
- Information sharing
- Institutional coordination



Trade

Effective Adaptation

- Proactive and planned
- Future facing – anticipate surprises
- Iterative with evaluation
- Inclusive – diverse voices



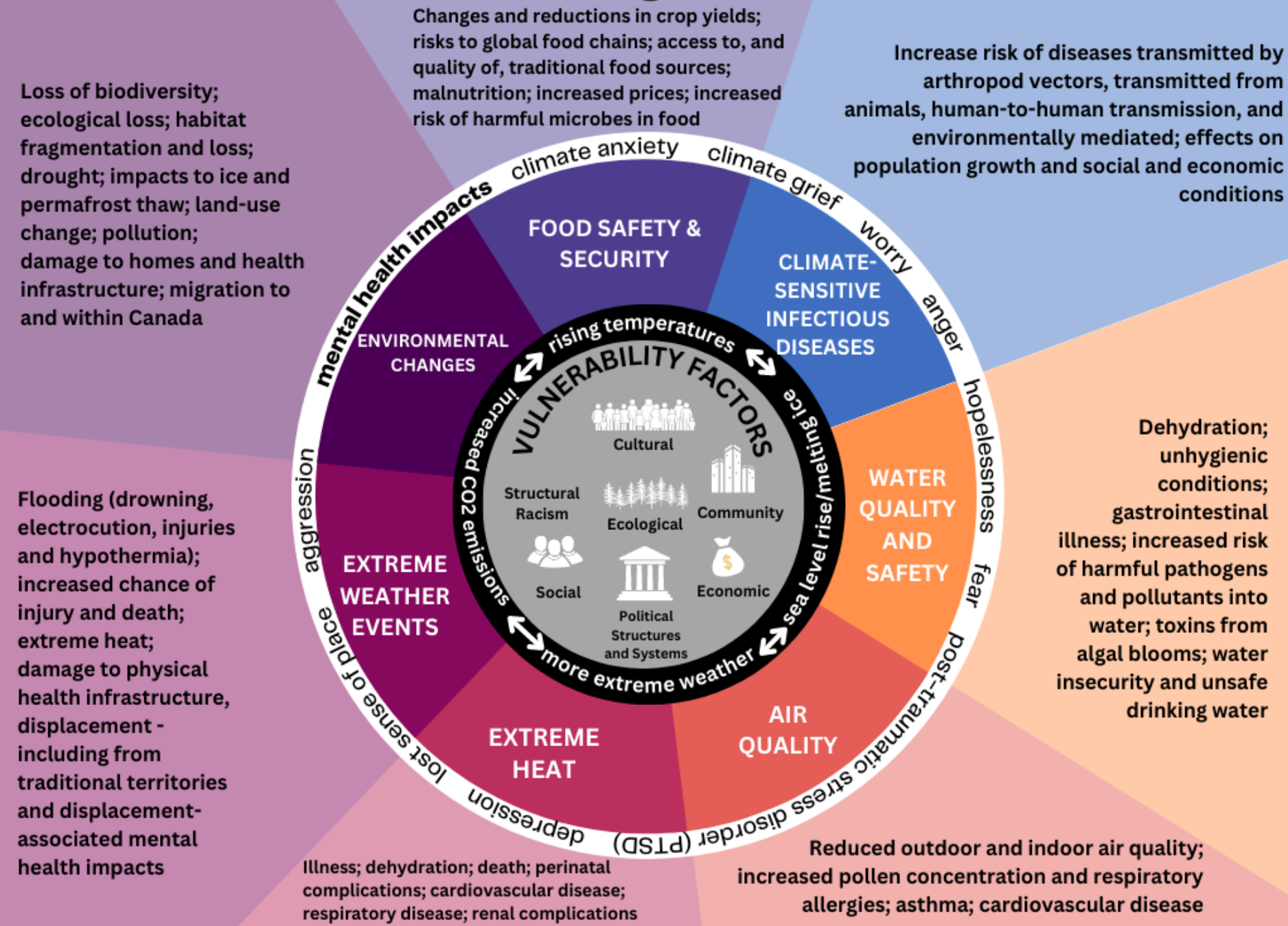
**Evidence-based
decision making is
critical to protect
health**



Health
Canada

Santé
Canada

Risks of Climate Change to Health in Canada



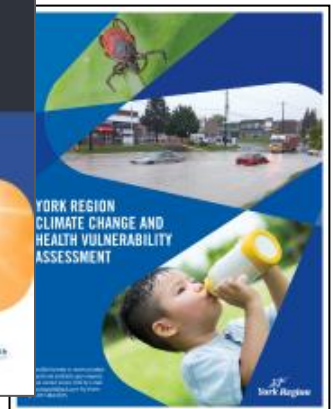
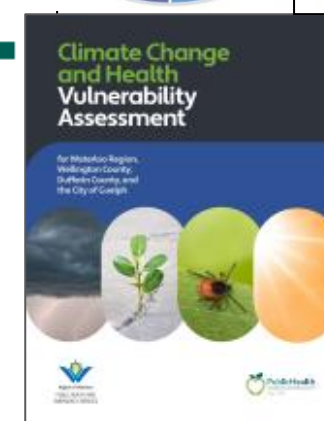
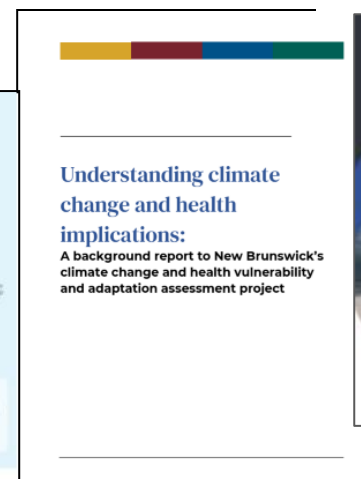
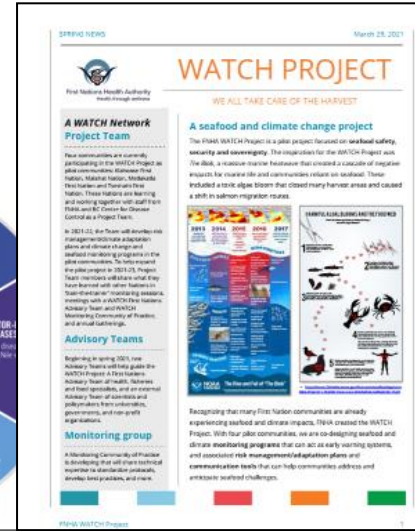
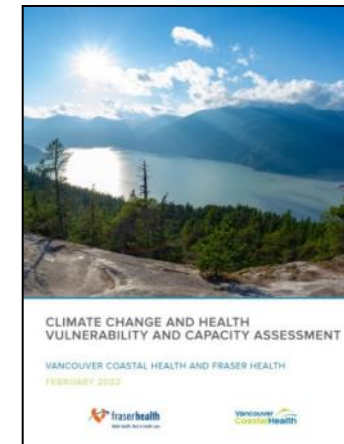
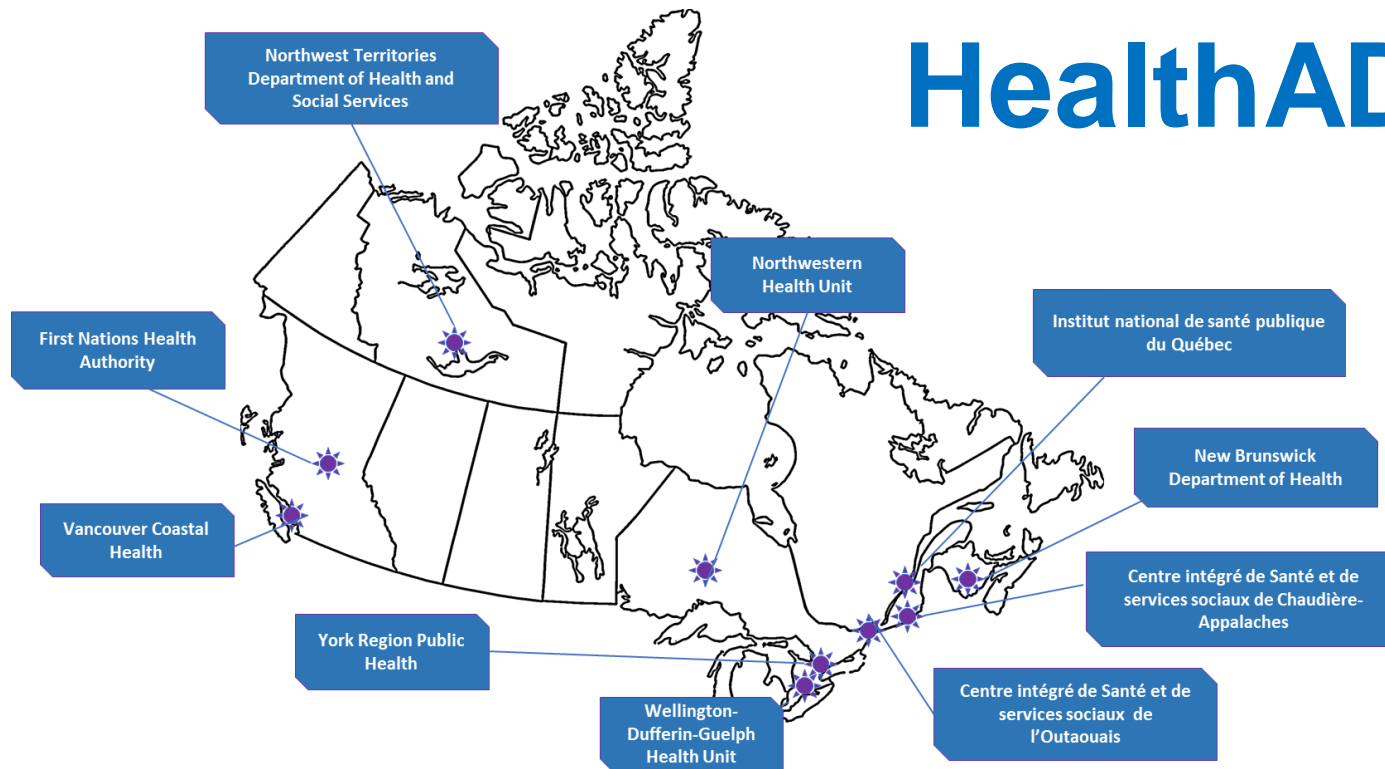
<https://changingclimate.ca/health-in-a-changing-climate/>

Charness et al., 2023

Building Capacity to Understand and Address Local Vulnerabilities and Adaptation Needs

HealthADAPT

Vulnerability & Adaptation Assessments



<https://www.fnha.ca/Documents/FNHA-WATCH-Project-Newsletter-Spring-2021.pdf>
<https://www.canada.ca/en/health-canada/programs/health-adapt.html>
<https://www.york.ca/newsroom/campaigns-projects/climate-change-and-health>
<https://wdgpublichealth.ca/reports/climate-change-and-health-vulnerability-assessment>
<https://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/HealthyEnvironments/yourhealthR1.pdf>

**Health systems must
become climate
resilient and
environmentally
sustainable to protect
health**



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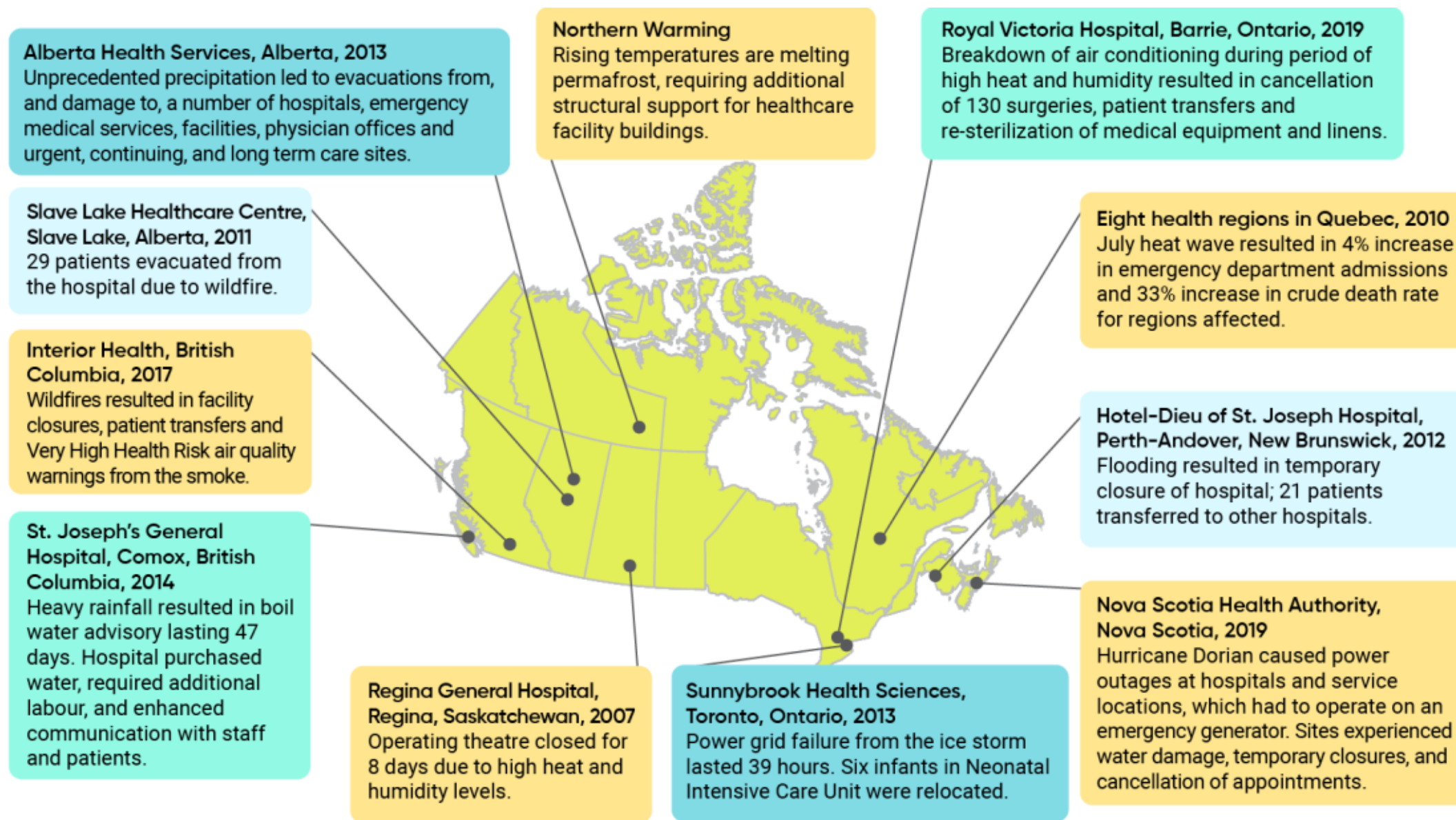
Adaptation and Health System Resilience

- **There is currently a health adaptation gap in Canada. Canadian health authorities are undertaking a range of measures to adapt to climate change but are lagging in the development of concrete climate change and health actions** in response to growing risks to Canadians.
- **Efforts to adapt to climate change impacts on health can significantly reduce impacts** from current climate hazards and from future climate change on individual Canadians, communities and health systems.



Health infrastructure, operations, health financing, health care, public health programming, supply chains, and the health workforce can be impacted by extreme weather events and by chronic stresses from longer term warming, reducing access to and quality of care to Canadians.

Climate variability and change impacts on Canadian health facilities



Health System Operations, Products and Services are at Increasing Risk

- The health system relies on a wide-range of **interconnected services** – many of these are vulnerable to climate-related impacts.
- **Supply chain disruptions** for **food, drugs, and essential medical supplies** could result from transportation disruptions, international events, or increases in global demand.
- **Climate change may increase the need for new, or greater quantities of pharmaceuticals** to deal with new illnesses in Canada (e.g., new infectious diseases). Impacts of heat on pharmaceuticals.



**Cross-sectoral
collaboration is
required to protect
health**



Opportunities for Enhance Intersectoral Collaboration

- Communication and engagement
- Institutional coordination and collaboration
- Science and research

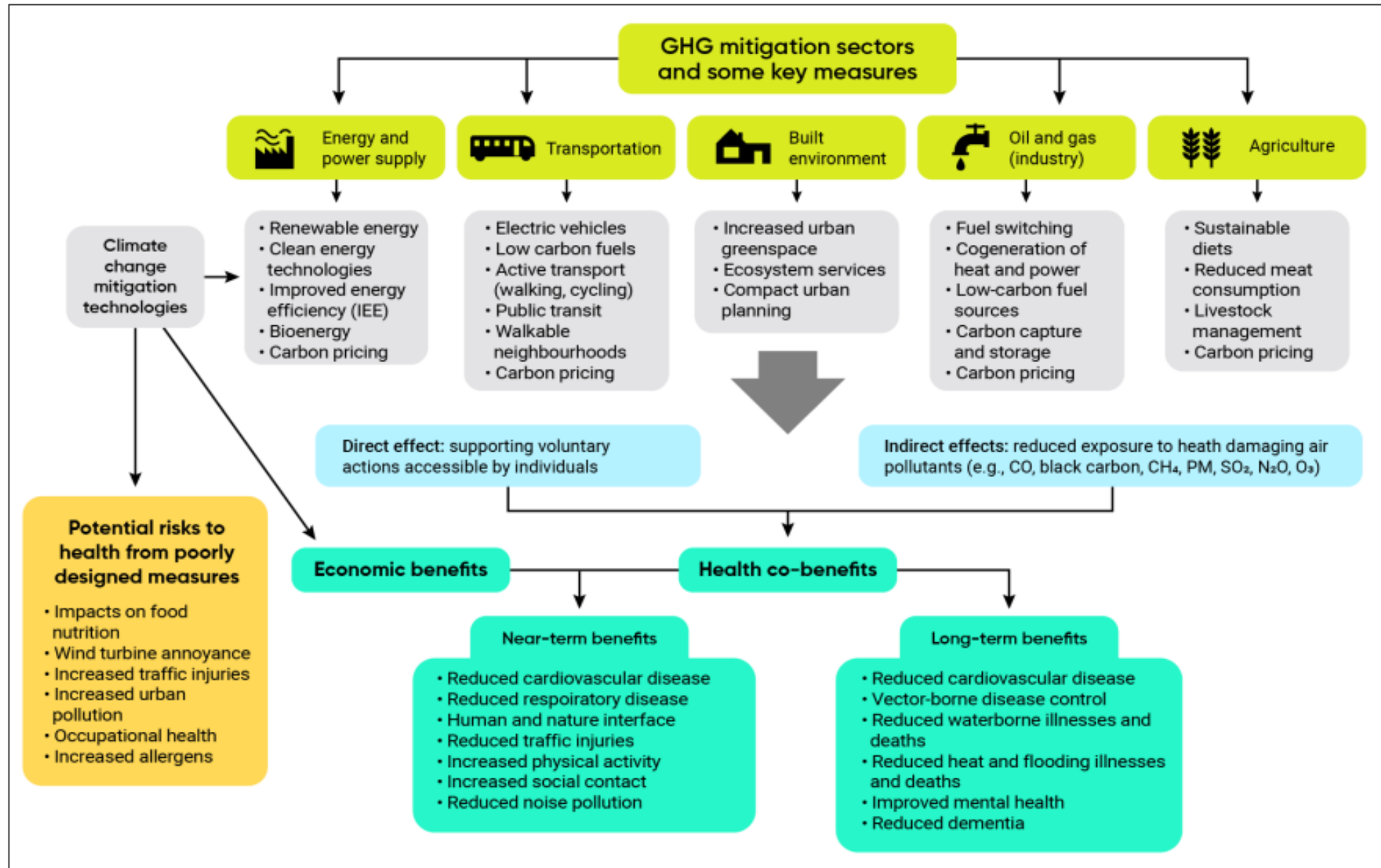
ACTIONS CAN BE TAKEN ACROSS MULTIPLE SECTORS TO ADDRESS CLIMATE CHANGE AND ACHIEVE VERY LARGE MULTIPLE HEALTH CO-BENEFITS



The potential health co-benefits of climate action are so significant that the Lancet Commission on Climate and Health has called climate change the “greatest global health opportunity of the 21st Century”

HEALTH OF CANADIANS IN A CHANGING CLIMATE
CLIMATE CHANGE AND HEALTH LINKAGES CHAPTER

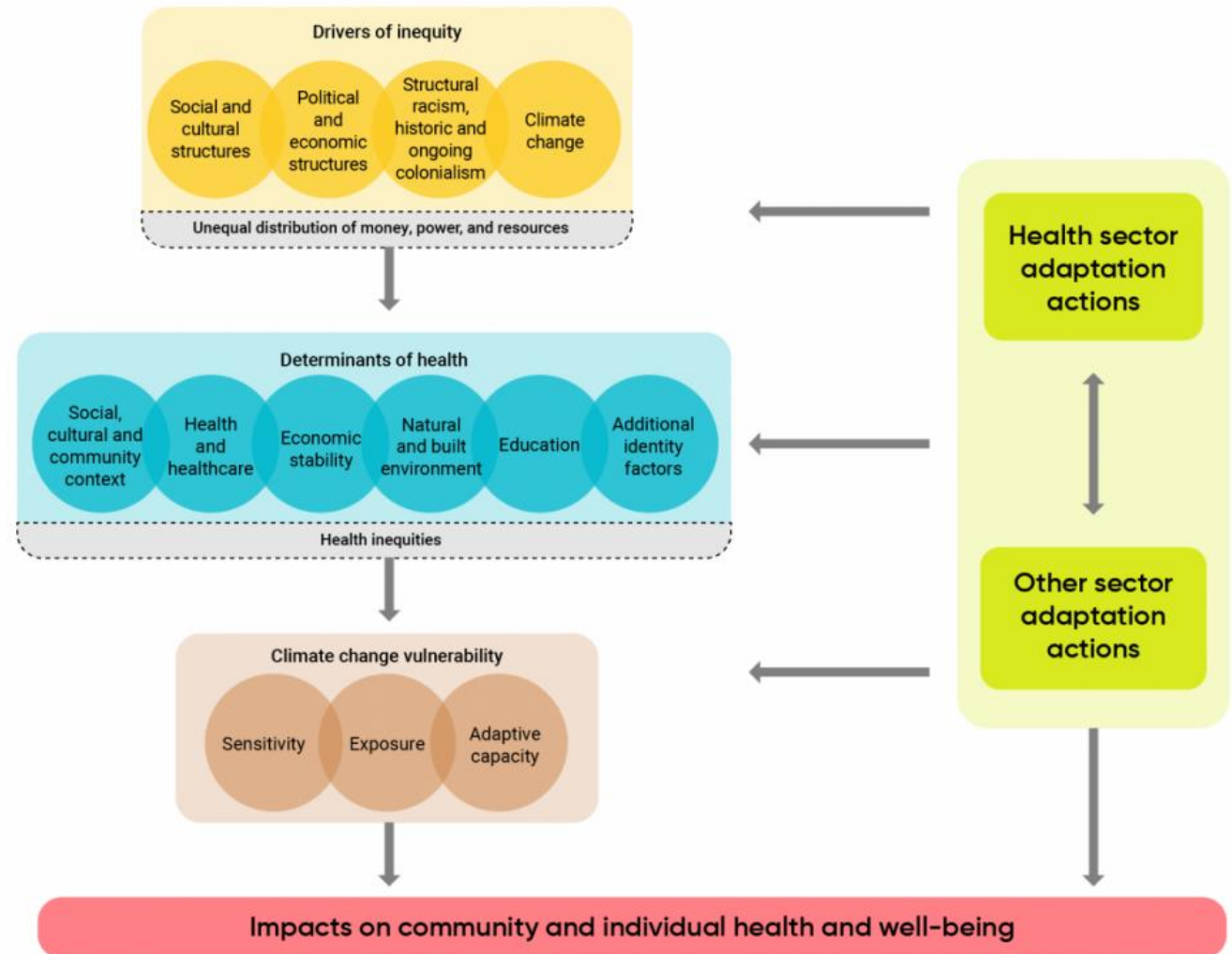
Potential Health Co-benefits and Risks of GHG Mitigation Measures



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

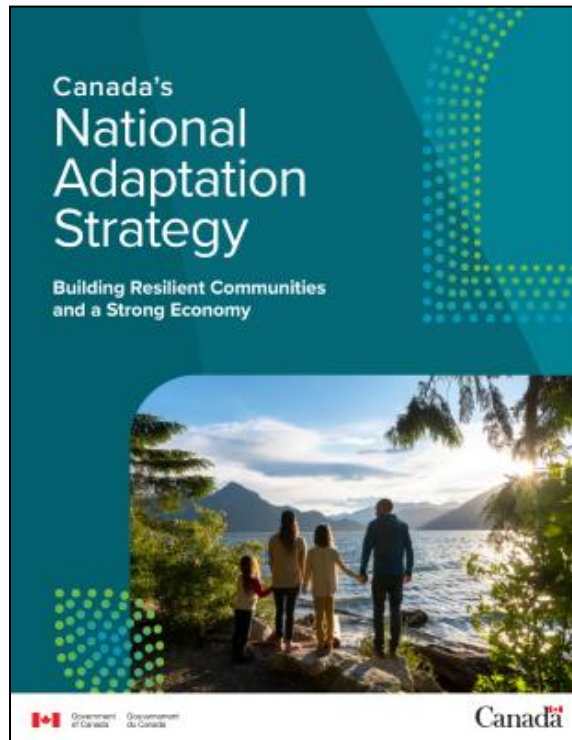
Climate change can **exacerbate** existing **health inequities** among Canadians, which can **increase vulnerability** to the health risks from climate change for some individuals and populations.

Adaptation and GHG mitigation reduction measures within and outside the health sector – and the need to be developed with health equity considerations in mind



Canada's NATIONAL ADAPTATION STRATEGY

Health and Well-being



<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy/full-strategy.html>

Guiding Principles



Respect jurisdictions and uphold Indigenous rights



Advance equity and climate and environmental justice



Take proactive, risk-based measures to reduce climate impacts before they occur



Maximize benefits and avoid maladaptation

Goal

The health of all people in Canada is safeguarded and supported by a climate-resilient and adaptive health sector that has robust and agile systems and services that account for and support the diverse components of well-being.



Objectives

Objectives in this system aim to reflect the breadth of action to protect health and well-being in the face of various climate change impacts. This includes both minimizing climate change risks to health, collaborating with the diverse actors who improve health in Canada, and better preparing the health system to manage the increased demand for health services and the added burden of new climate risks.



- 1 Health systems have the expertise, knowledge, and resources needed to identify climate change-related risks and take equitable, evidence-based action to protect health.
- 2 Health authorities have identified the extent to which climate change is impacting health and have established methods for tracking future health impacts and evaluating progress towards protecting health and reducing risks.
- 3 People are protected from urgent climate-related health risks such as extreme heat, infectious diseases, wildfire smoke, foodborne hazards and impacts to traditional foods, poor mental health outcomes, and others.
- 4 Climate action across all sectors promotes good health and prioritizes measures that have multiple benefits (e.g., protecting health and improving environmental sustainability).

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy.html>

Contact Information

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