



SUPPORTING CLIMATE CHANGE ADAPTATION AT LOCAL CANADIAN COMMUNITIES: CASE STUDIES FROM THE HEALTH SECTOR

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**CANADIAN
CENTRE FOR
CLIMATE
SERVICES**



Third International Climate Change and Adaptation
Platforms Meeting,
Nov 28th, 2019 – Tsukuba, Japan

OUTLINE

- Canada's Climate Change Plan – Overview on Adaptation
- Climate Action in Canada – Examples of Adaptation Actions
- Canadian Centre for Climate Services – Empowering Canadians with Evidence-based Information
- Climate Change Adaptation in the Health Sector – Examples of Actions at the Local Level

CLIMATE CHANGE: ADAPTATION FOCUS

- Translating scientific information and Traditional Knowledge into action
- Building climate resilience through infrastructure
- Protecting and improving human health and well-being
- Supporting particularly vulnerable regions (e.g. northern and coastal communities)
- Reducing climate-related hazards and disaster risks



Federal investments and leadership - key to supporting adaptation measures at the national, regional and local level.

CLIMATE ACTION IN CANADA (MITIGATION & ADAPTATION)

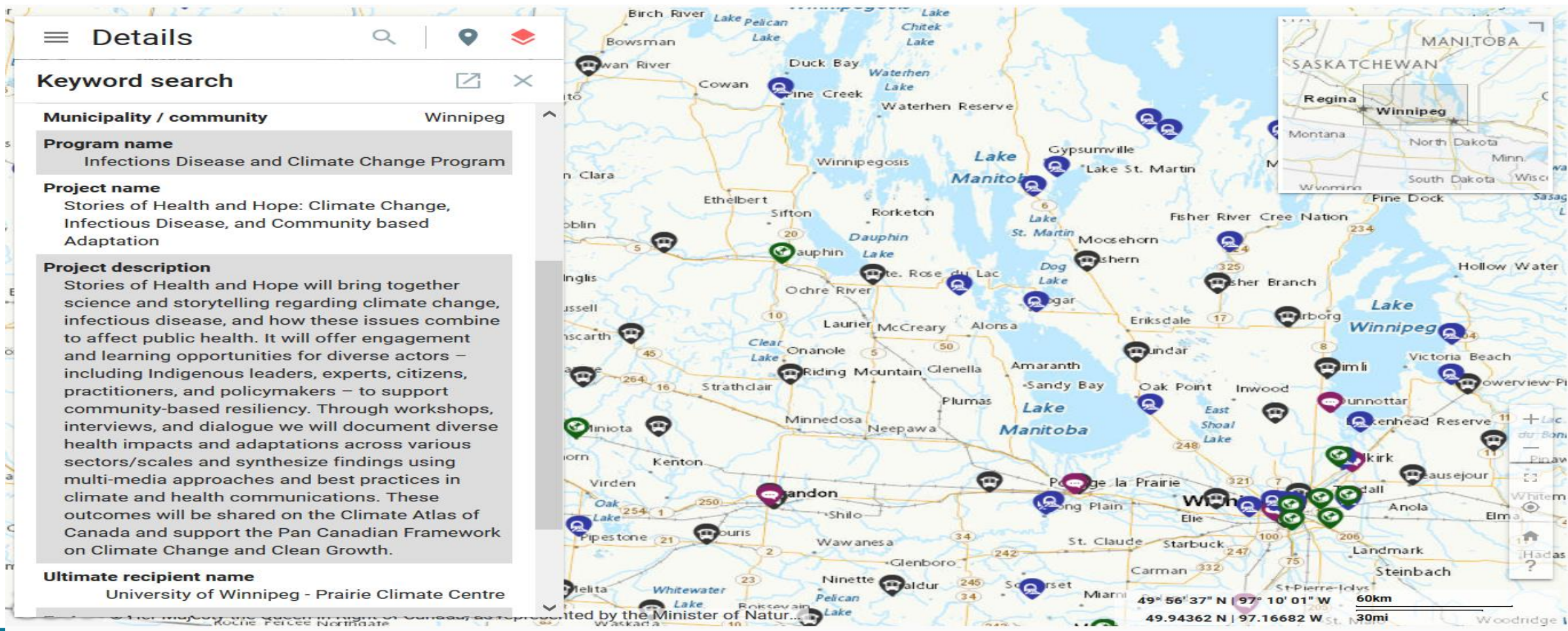
- Clean and renewable energy
- Energy efficiency in homes and businesses
- Made-in-Canada clean technologies
- Electric vehicle charging stations and alternative fuel infrastructure
- Public transit
- Investments in Indigenous, rural and remote communities to transition to cleaner energy sources
- **Support for communities to adapt to a changing climate**



CLIMATE ACTION MAP – ADAPTATION ACTION



CLIMATE ACTION MAP – ADAPTATION ACTION



CANADIAN CENTRE FOR CLIMATE SERVICES

Canadian Centre for Climate Services



Library of climate resources

Datasets, tools, guidance and related resources



Climate information basics

Climate change concepts, trends and role of climate information in decision-making



Climate Services Support Desk

1-833-517-0376
Get help from our climate experts to find, understand and use climate information



Display and download climate data

View selected climate datasets on maps or download data



About the Canadian Centre for Climate Services

The climate is changing. Understand how. We're here to help.

Featuring: changing temperature

- Learn more about [trends and projections in temperature change](#).
- View the [Canadian Drought Monitor](#) from Agriculture and Agri-Food Canada.
- Explore the Prairie Climate Centre's [Climate Atlas of Canada](#).

INCREASING TEMPERATURE IN CANADA

Average temperature in Canada has increased by 1.7°C



- **People** to talk to & help answer your questions (Support Desk)
- Website with:
 - ✓ **Access** to ECCC climate datasets and a **suite of climate data portals** including [Climatedata.ca](#)
 - ✓ Links to **>300 resources**
 - ✓ Intro to **climate information concepts**
- **Training**
- **Outreach and engagement**
- **Co-development** of products
- **Collaboration** with regional climate organizations to co-deliver services with locally-relevant information to users
- **Whole of government** approach

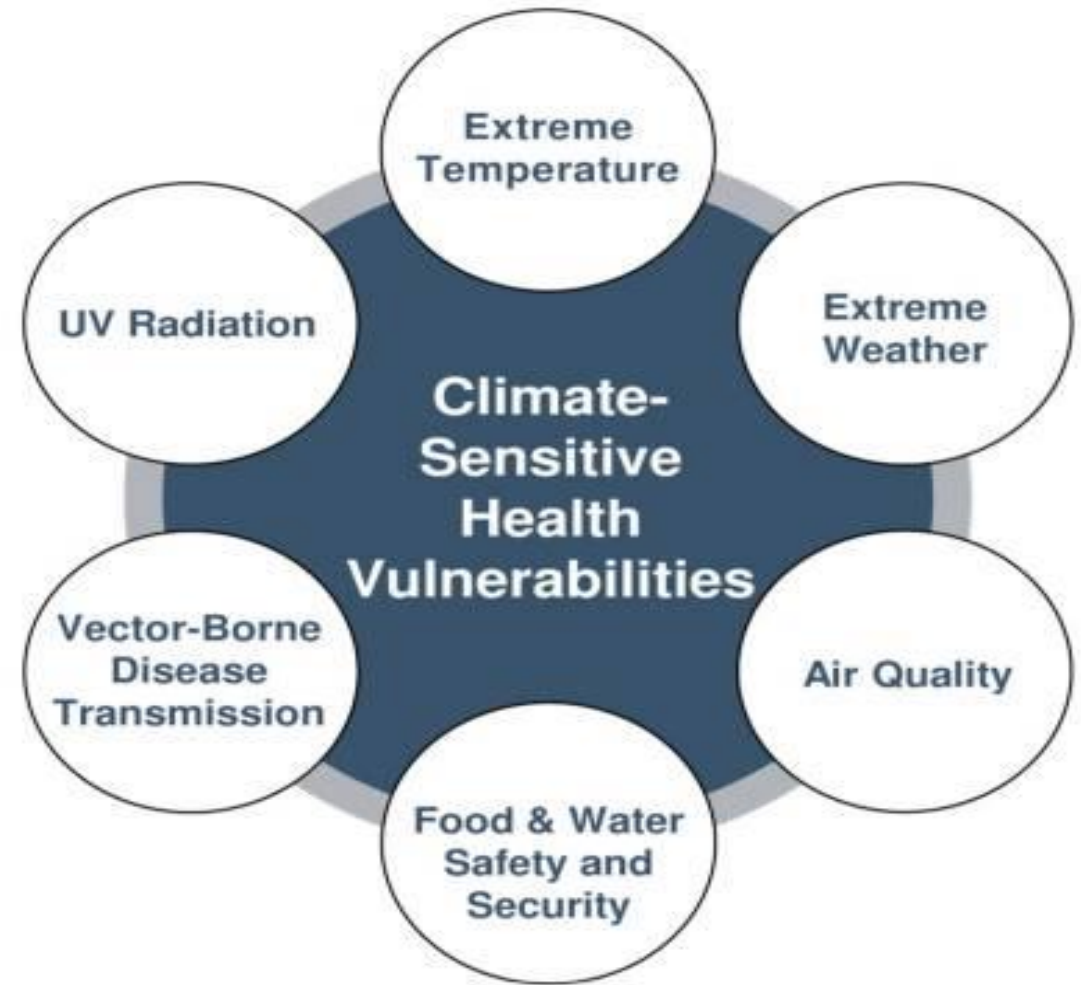


PUBLIC HEALTH VULNERABILITY TO CLIMATE CHANGE

Climate change is increasing risks to human health and to the health care systems.

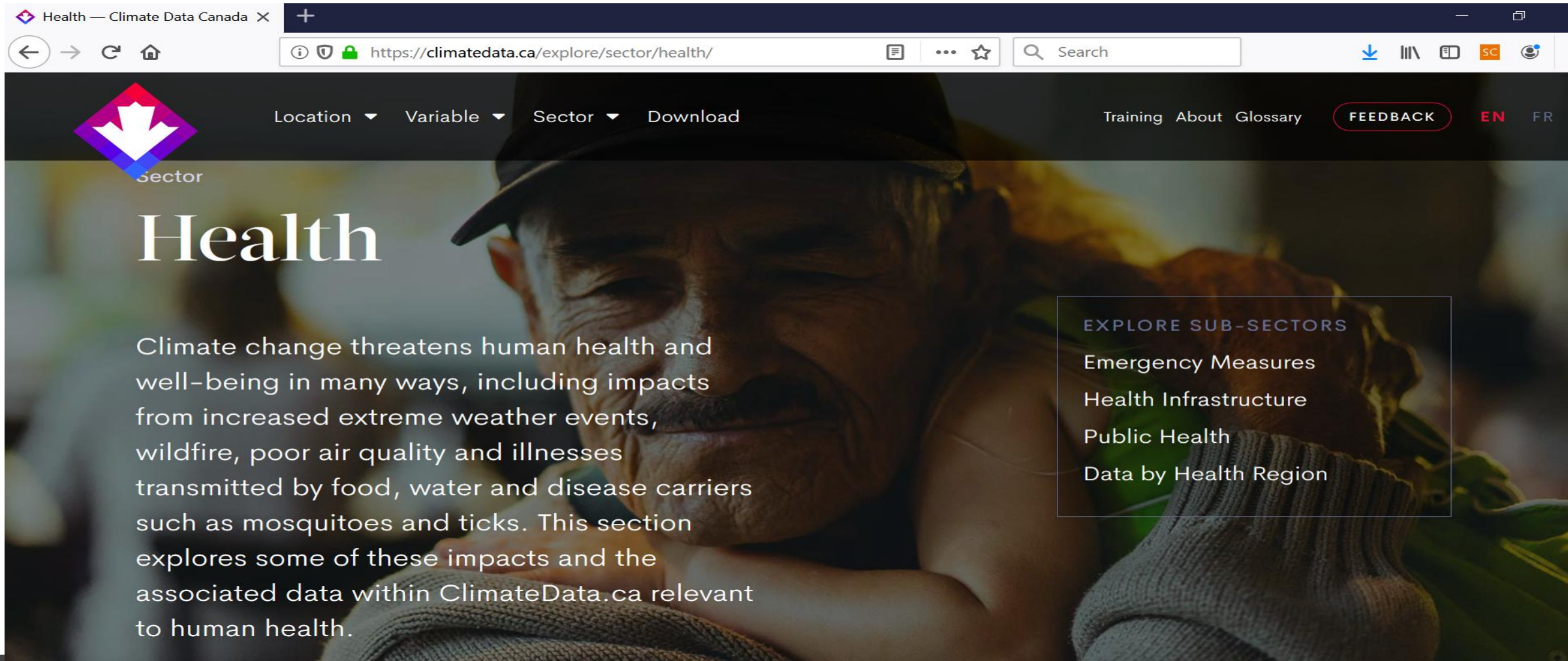
Public health adaptation measures (from WHO, 2018):

- Strengthening health systems.
- Primary health care.
- Warning systems.
- Action plans and preparedness.
- Monitoring and surveillance.
- Integrating health in all policies.



Source: Health Canada, 2008

CLIMATEDATA.CA - FROM CLIMATE DATA TO ADAPTATION MEASURES



The screenshot shows a web browser window with the URL <https://climatedata.ca/explore/sector/health/>. The page features a dark header with a navigation menu including 'Location', 'Variable', 'Sector', and 'Download'. On the right, there are links for 'Training', 'About', 'Glossary', a 'FEEDBACK' button, and language options 'EN' and 'FR'. The main content area has a background image of an elderly man wearing a hat. The word 'Sector' is followed by 'Health' in large white text. Below this, a paragraph explains that climate change threatens human health through various impacts like extreme weather, wildfires, and air quality issues. To the right, a box titled 'EXPLORE SUB-SECTORS' lists: 'Emergency Measures', 'Health Infrastructure', 'Public Health', and 'Data by Health Region'. A small Canadian flag is visible in the bottom left corner of the browser window.

Health — Climate Data Canada X

https://climatedata.ca/explore/sector/health/

Location Variable Sector Download

Training About Glossary FEEDBACK EN FR

Sector

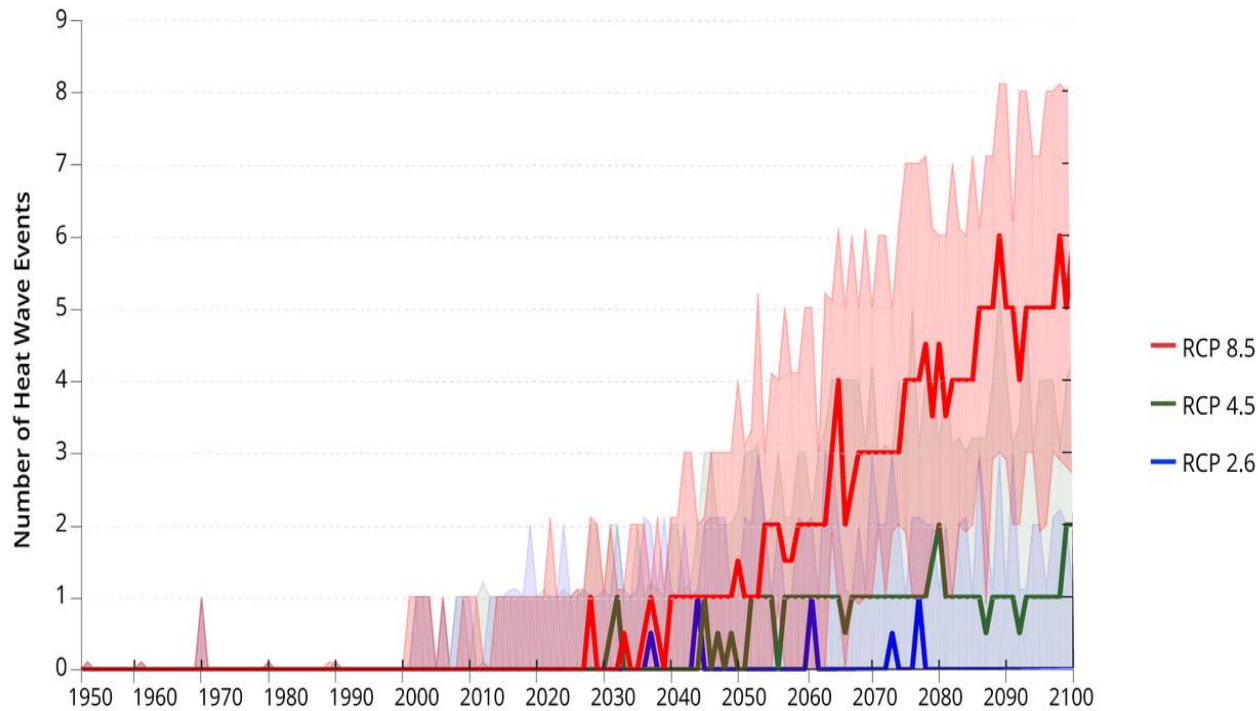
Health

Climate change threatens human health and well-being in many ways, including impacts from increased extreme weather events, wildfire, poor air quality and illnesses transmitted by food, water and disease carriers such as mosquitoes and ticks. This section explores some of these impacts and the associated data within ClimateData.ca relevant to human health.

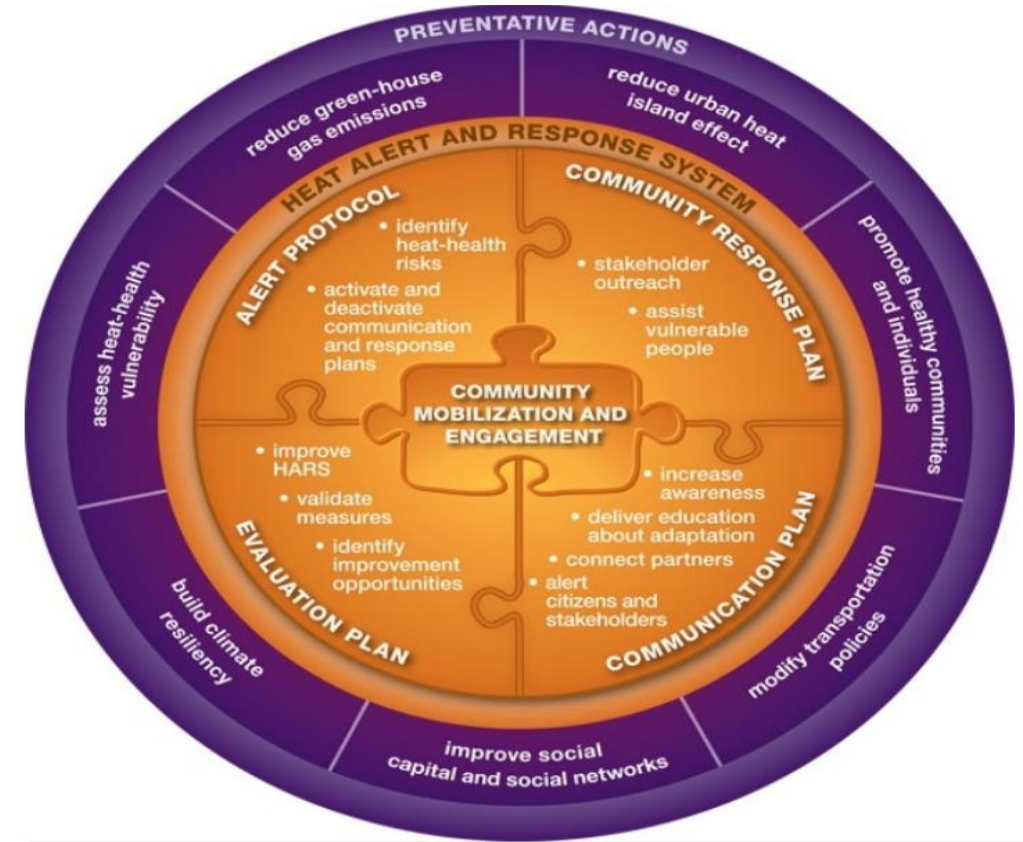
EXPLORE SUB-SECTORS

- Emergency Measures
- Health Infrastructure
- Public Health
- Data by Health Region

FROM CLIMATE DATA TO ADAPTATION MEASURES – EXTREME HEAT

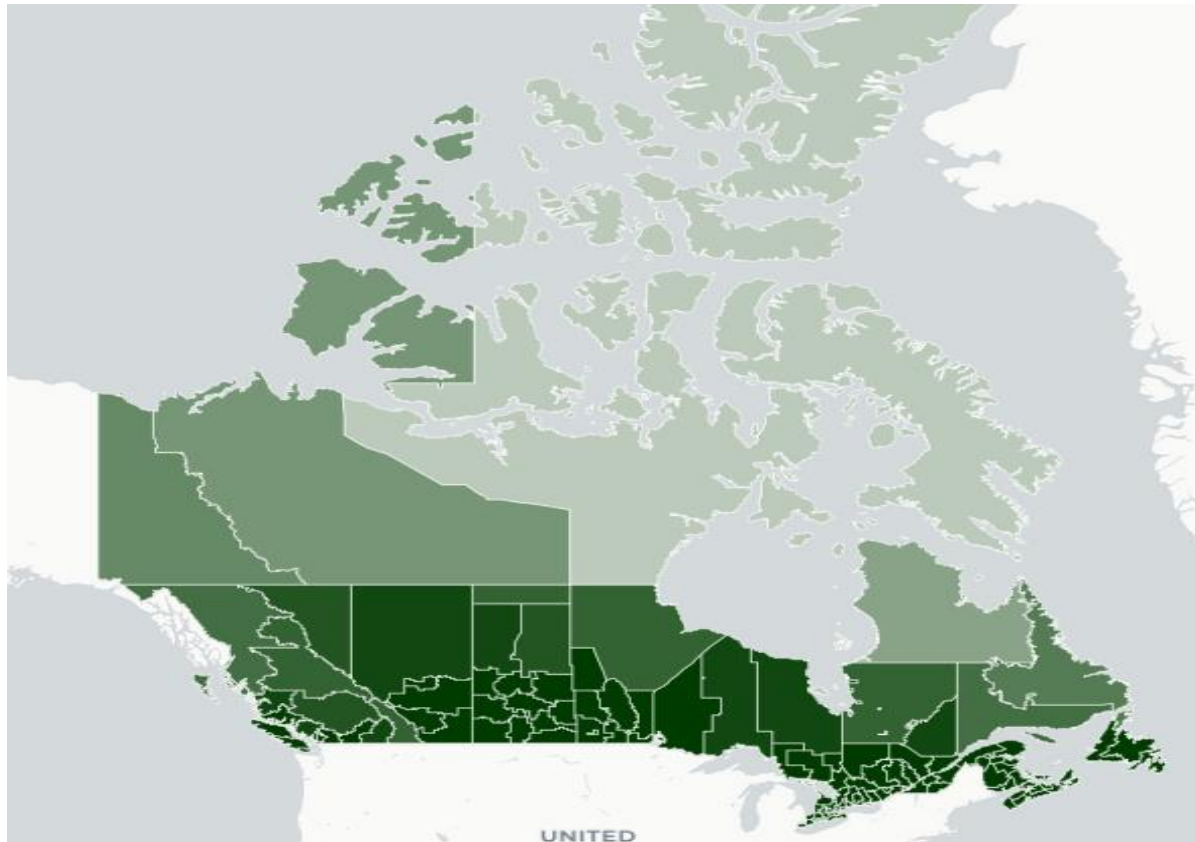


Number of heat wave events, 1950-2100, for Montreal
(source, climatedata.ca)

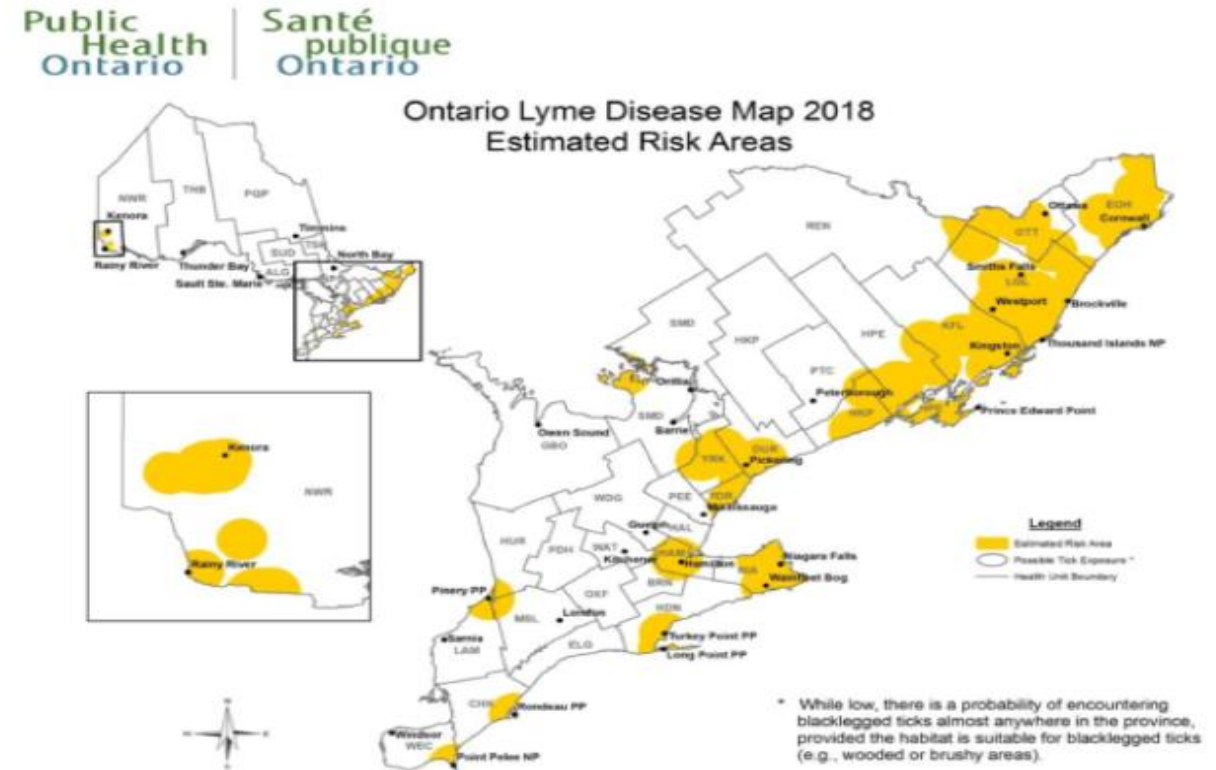


Source: Health Canada, 2011

FROM CLIMATE DATA TO ADAPTATION MEASURES – LYME DISEASES

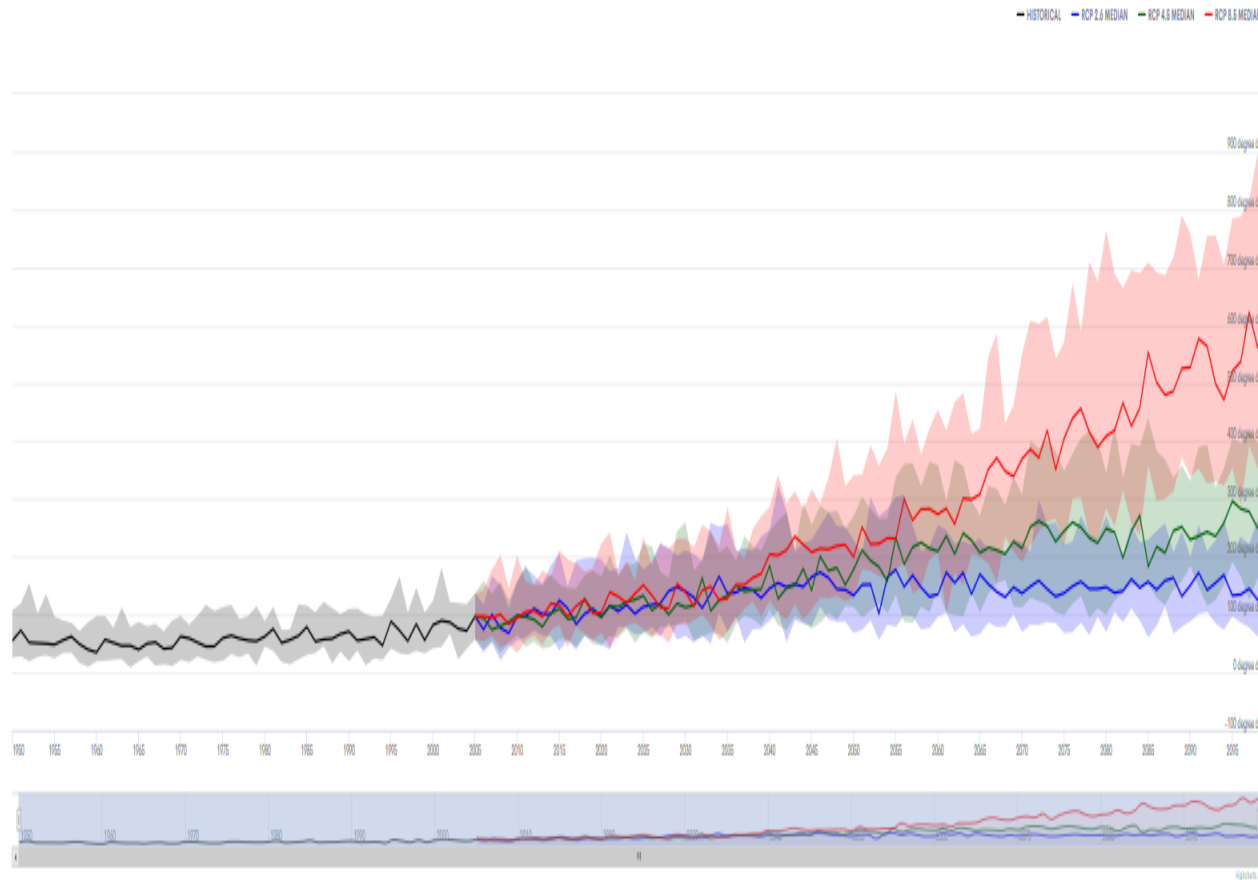


Projection of cumulative degree-days above zero –
Horizon 2060, RCP 8.5 (source: climatedata.ca)

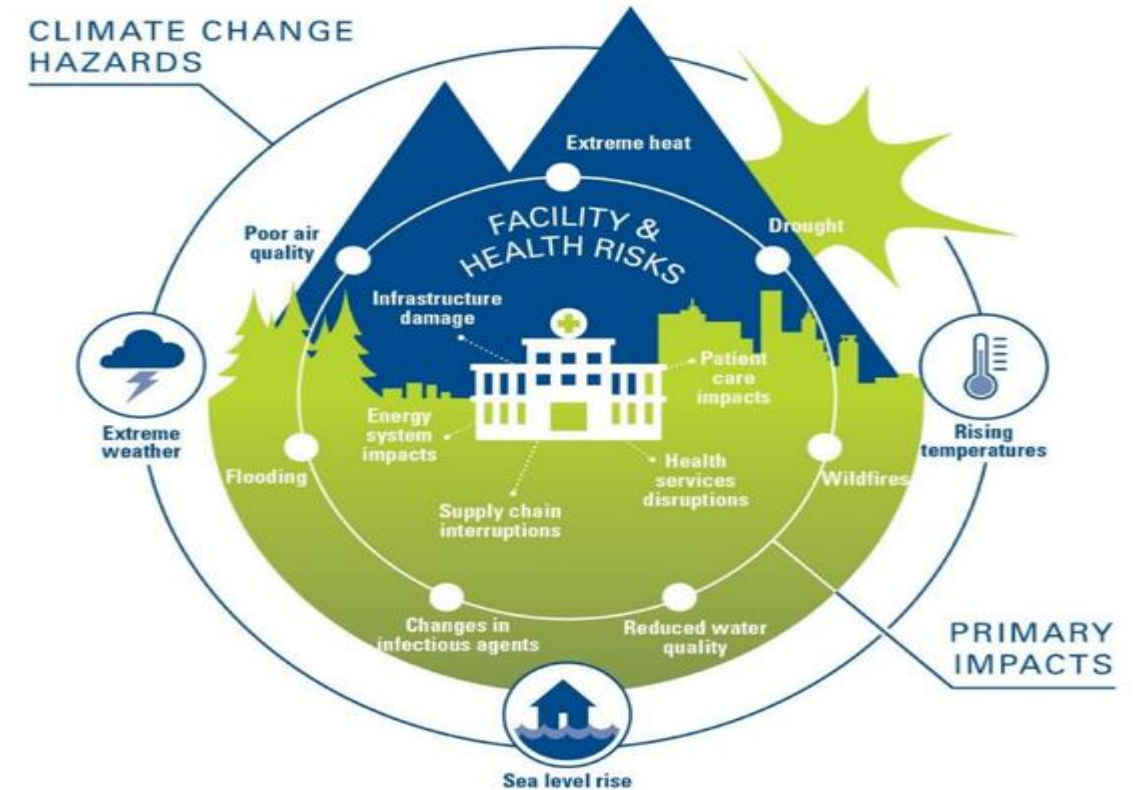


Lyme disease risk map in Ontario, Canada (source:
PHO, 2018)

FROM CLIMATE DATA TO ADAPTATION MEASURES – RESILIENT HOSPITALS



Evolution of the number of cooling degree days for Nanaimo, British-Columbia (Canada), 1950-2100 (source: climatedata.ca)



Impacts of climate change on Health infrastructure and access to care (source: Aubie et al., 2018)

THANK YOU

ANY QUESTIONS?



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