PUBLIC HEALTH

*The World Health Organization has identified climate change as the **biggest global health threat of the 21st century**. Here in British Columbia, climate change is clearly observable and many people are already feeling its effects. With some degree of climate change now **"locked-in"** regardless of mitigation efforts, climate change adaptation is necessary to ensure British Columbia will fare well in the future.*

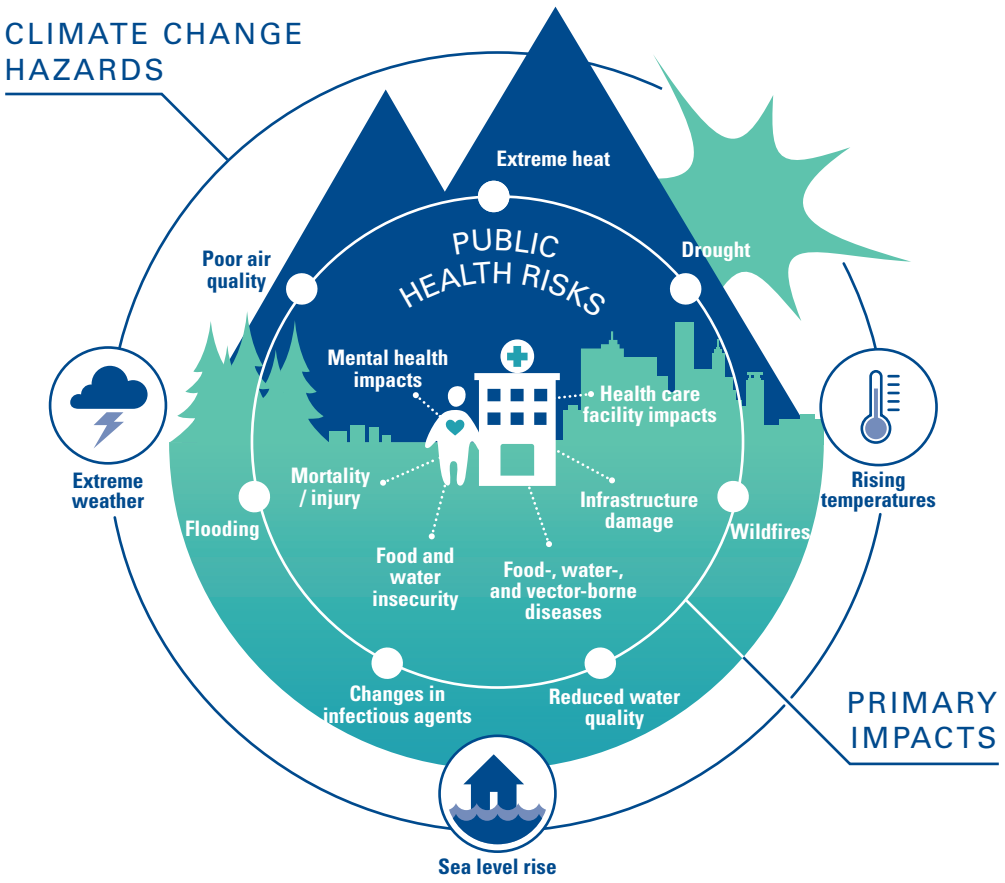
*The challenge is significant, but British Columbia is well positioned to respond given strong capacity across different sectors. There are many specific actions that **medical health officers, environmental health officers, research and surveillance groups and other public health practitioners** can take to adapt to climate change. These actions often fall within the day-to-day responsibilities of public health practitioners, and they also align with the goals of the larger health care community: improving health and well-being outcomes for all British Columbians.*

CLIMATE CHANGE AND HEALTH

Climate change is likely to impact most areas of our lives, including our health. Individual and population health are influenced by wider social, cultural, economic and environmental factors. These factors are commonly known as *health determinants*, and they are closely linked to a range of health outcomes. Increasingly, **climate change hazards are impacting health determinants**. These impacts in turn influence and affect physical and mental health outcomes.

Climate change affects public health in many ways. In British Columbia, recent heat waves, droughts and wildfires have generated or contributed to negative health outcomes, including stress-related mental health issues. Food and water security have also been impacted by the introduction of new pests affecting food/crop production and extreme weather, and increases in both water- and vector-borne illnesses have been observed. Some of these risks are illustrated in the figure.

Figure: *Impacts of climate change hazards on facilities and health risks*



By 2050, B.C. is projected to be at least 1.3° C warmer and may be as much as 2.7° C warmer than in recent history.

CLIMATE CHANGE ADAPTATION OPPORTUNITIES

Here are some actions that **public health practitioners** can take to prepare for current and future impacts of climate change, and in so doing, support better public health outcomes. Acting today will strengthen our health care system and improve the resiliency of our communities.

PLAN & PREPARE

Mainstream.

- Public health practitioners, particularly those in leadership roles, are uniquely positioned to mainstream climate adaptation into existing health plans, programs, and policies such as emergency response plans, strategic plans, and food security strategies.

Vulnerability assessments.

- Support development of local and regional vulnerability assessments to identify current and potential climate change-related public health risks and corresponding adaptation actions.

Embed an adaptive management lens.

- Effective planning for climate change demands a flexible, adaptive management approach that can respond to new information as it arises. For example, based on emerging research, it is possible that the Province's projection of a 1-metre sea level rise by 2100 could occur earlier.

EDUCATE

Support public outreach and education.

- Organize a joint community open house with local government partners on the linkages between climate change and health. Research indicates that the general public views climate change as primarily an environmental issue and not a public health issue.
- Seek opportunities to educate local government decision-makers on the co-benefits of applying a climate-health lens to local government planning.

Support internal education and capacity building.

- Encourage and support ongoing staff training and capacity building around climate change adaptation. While recent BC research found that there is some understanding of climate change as a health issue amongst BC health professionals, the same research indicated that there is limited awareness of, and a demonstrated need for, climate change adaptation actions that the health care community can pursue.

SURVEILLANCE & MONITORING

Expand and enhance observation programs.

- Work with federal, provincial and regional government partners to integrate health outcome data with climate data and other relevant data sets to improve population health surveillance.

- Work with other sectors and government agencies in your region to identify and implement environmental monitoring needed for measuring change and making informed decisions. This could include increasing water quality sampling of untreated source water, or the installation of additional permanent air quality monitoring stations to monitor climate-related air quality issues (e.g., ground level ozone).

PARTNER, COLLABORATE AND SUPPORT

Support local government adaptation and mitigation planning.

- Take advantage of the plan referral process by providing community planners with climate change and health information for relevant policy chapters in official community plans and regional growth strategies, such as health and well-being, agriculture and food security, and GHG emissions reduction.
- Encourage local governments to address potential climate change risks in emergency response planning.
- Support local government partners on healthy built environment initiatives and champion the co-benefits (e.g., improved community health and quality of life) that climate change adaptation can generate.
- Support water suppliers and local governments in the development of drought management plans. This could involve working with them to determine if water supply management protocols (e.g., leak detection programs) and infrastructure changes (e.g., developing alternative water sources) are needed.
- Support local governments in the development of food security plans.

This backgrounder is part of a five-part series developed by the Ministry of Health and the Provincial Climate Action Secretariat that aims to help people working in community and public health to prepare for the current and future impacts of climate change. Titles in the series are listed above.

BRITISH COLUMBIA | Ministry of Environment and Climate Change Strategy