

The background of the slide is a scenic landscape featuring a range of mountains, some with snow-capped peaks, and dense evergreen forests. The sky is filled with soft, white clouds. A semi-transparent, light brown overlay covers the entire image, providing a backdrop for the text.

CLIMATE CHANGE AND HEALTH EQUITY

October 17, 2023

Building Climate Resilient Health Systems in the Americas: Workshop for Health Sector Decision Makers

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ACKNOWLEDGING WITH GRATITUDE

The Lək'wəŋən Peoples, known today as the Songhees and Esquimalt Nations, and the Métis Chartered Community of Greater Victoria

PRESENTATION OBJECTIVES

- Understand the linkages between climate change and health equity
- Identify resources, tools, and approaches to help center health equity into climate change activities
- Identify examples of climate change adaptation and mitigation measures that promote and advance health equity

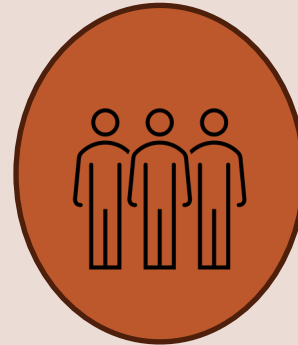
INEQUITIES ARE SYSTEMATIC, AVOIDABLE, UNFAIR, AND UNJUST

Inuit Nunangat

All Canadians

72.4 years

The Average life expectancy for residents in Inuit Nunangat

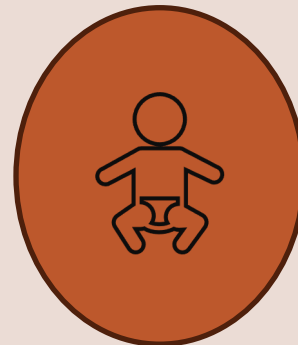


82.9 years

The average life expectancy for all Canadians

12.3

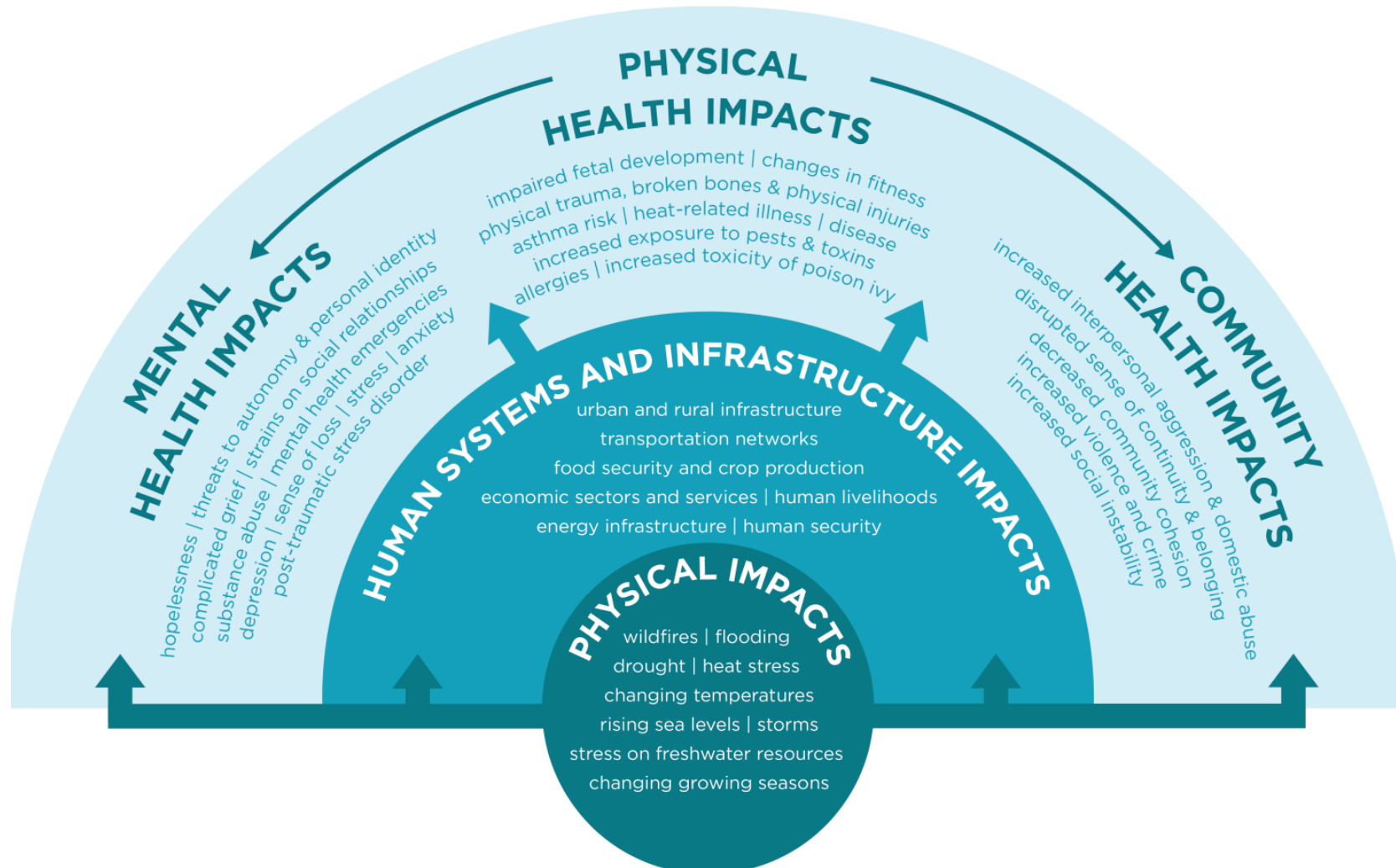
The infant mortality rate per 1000 for Inuit infants in Canada



4.4

The non-Indigenous infant mortality rate per 1000 for Canada

CLIMATE CHANGE IS ALREADY NEGATIVELY IMPACTING THE HEALTH OF PEOPLE AND OUR HEALTH SYSTEMS

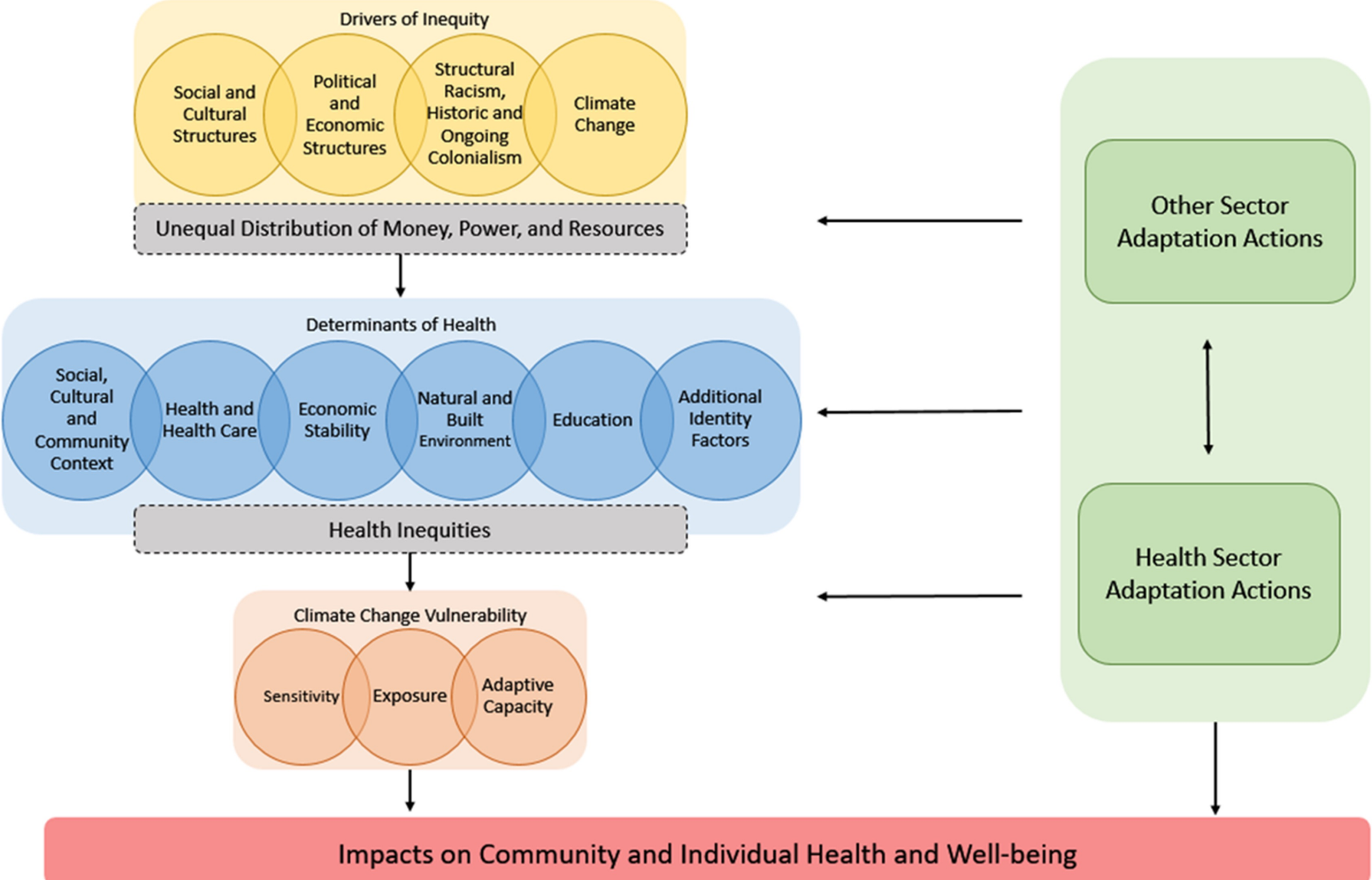


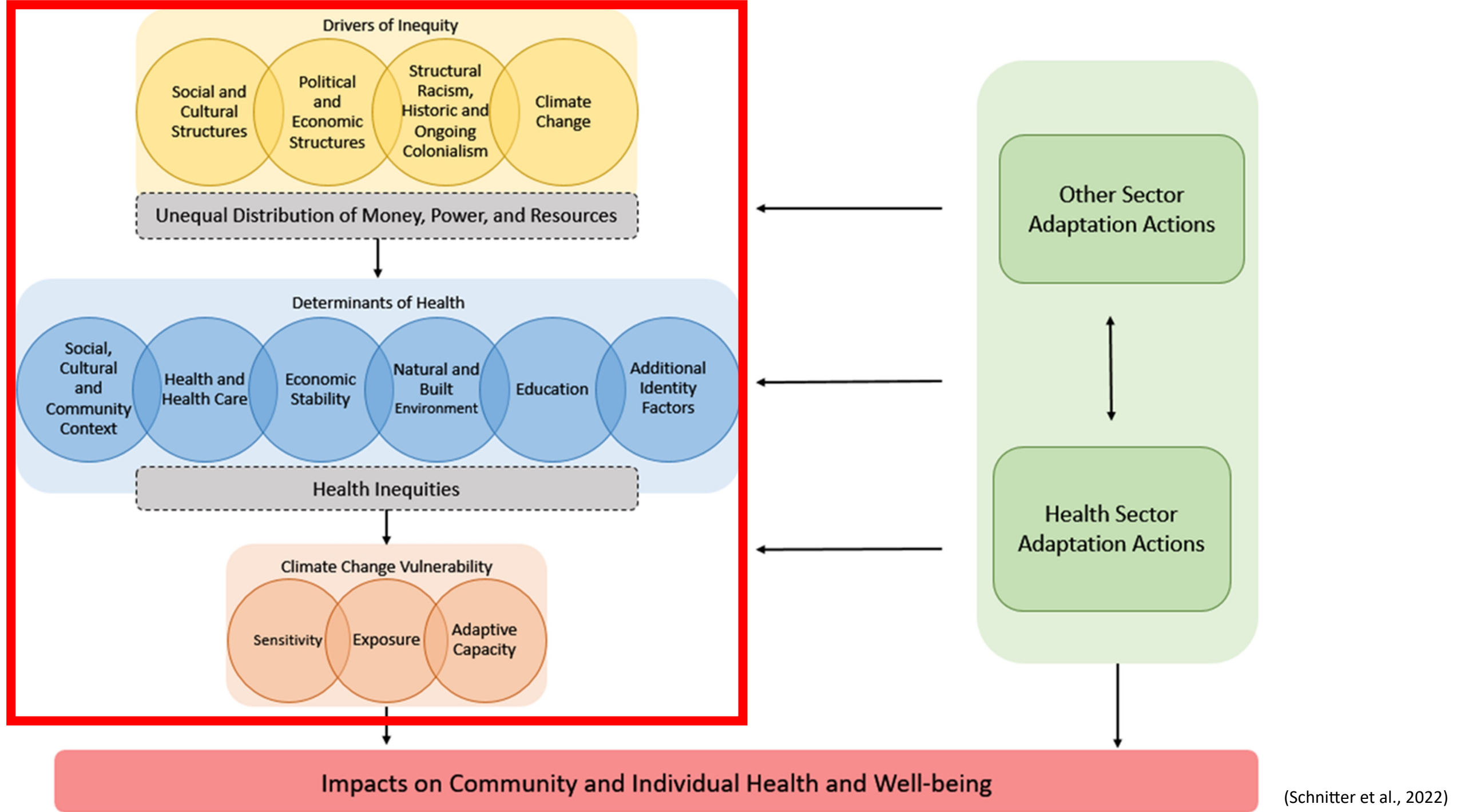


(Svetka K)

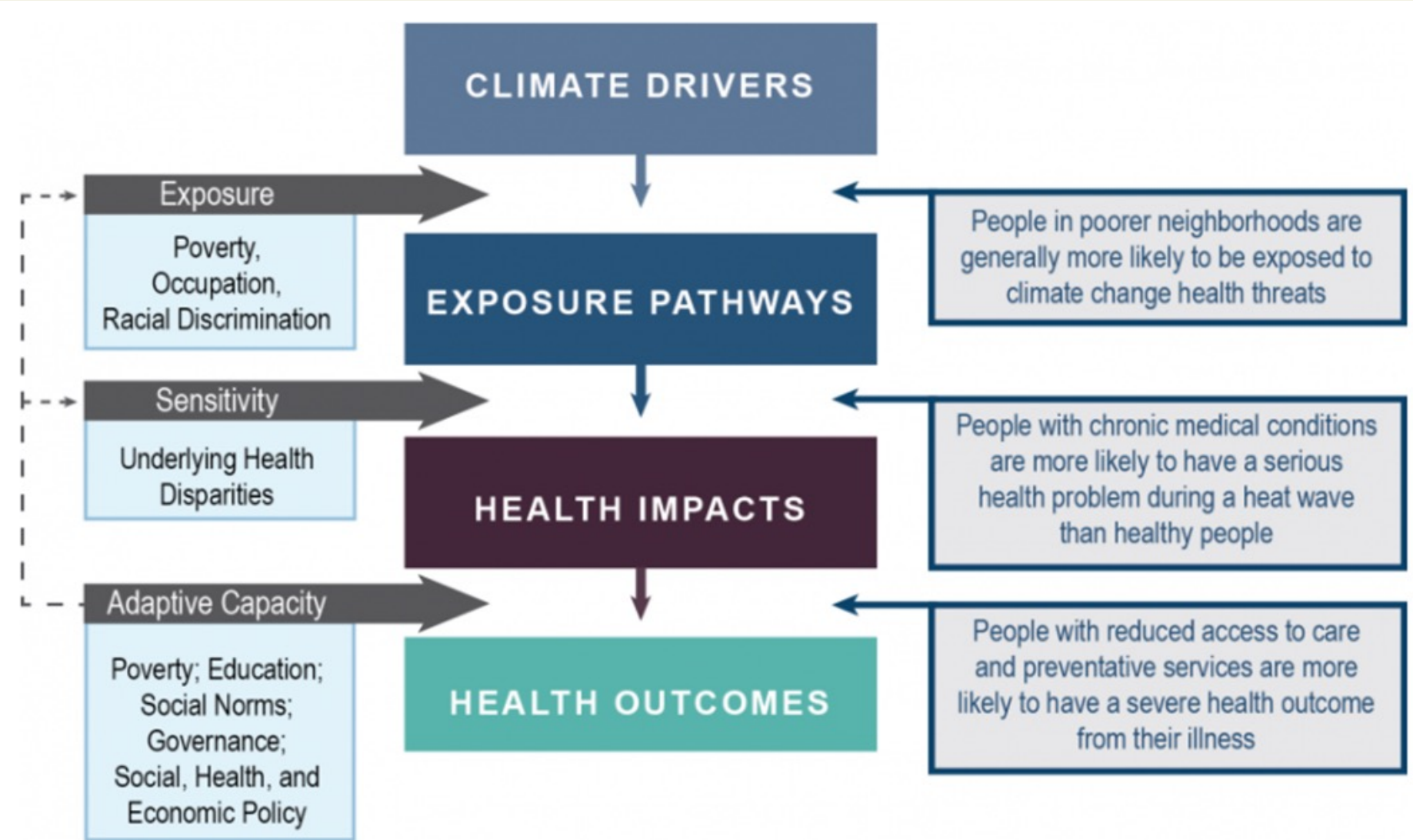
THE INTERSECTION OF CLIMATE CHANGE AND HEALTH EQUITY IS COMPLEX

- Those at highest risk are typically least responsible
- Differential and disproportionate experiences of climate vulnerability due to health inequities
- Differential outcomes of adaptation and mitigation actions
- Inequitable participation in adaptation planning





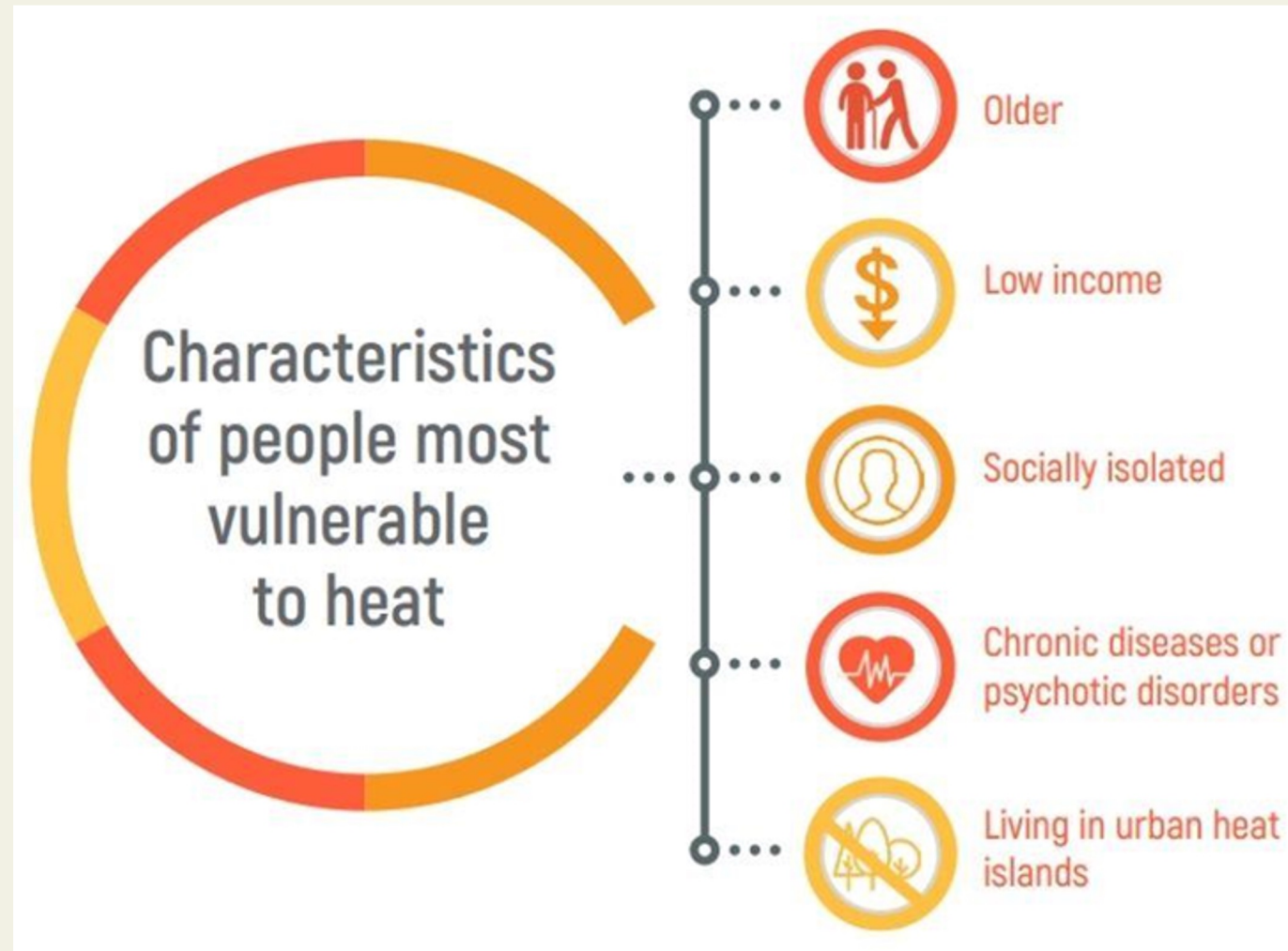
Differences in exposure, sensitivity and adaptive capacity result in some people being more severely affected by climate change



BC HEAT DOME 2021

Extreme heat event in B.C. resulted 619 deaths between June 25–July 1, 2021

- 98% of deaths occurred indoors
- 67% were 70 years of age or older
- More than half lived alone (56%)
- Many lived in socially or materially deprived neighborhoods
- More than 80% of decedents were on three or more chronic disease registries
- Many deaths were in urban areas with low greenness (fewer trees) surrounded by large roads, large buildings, and high density



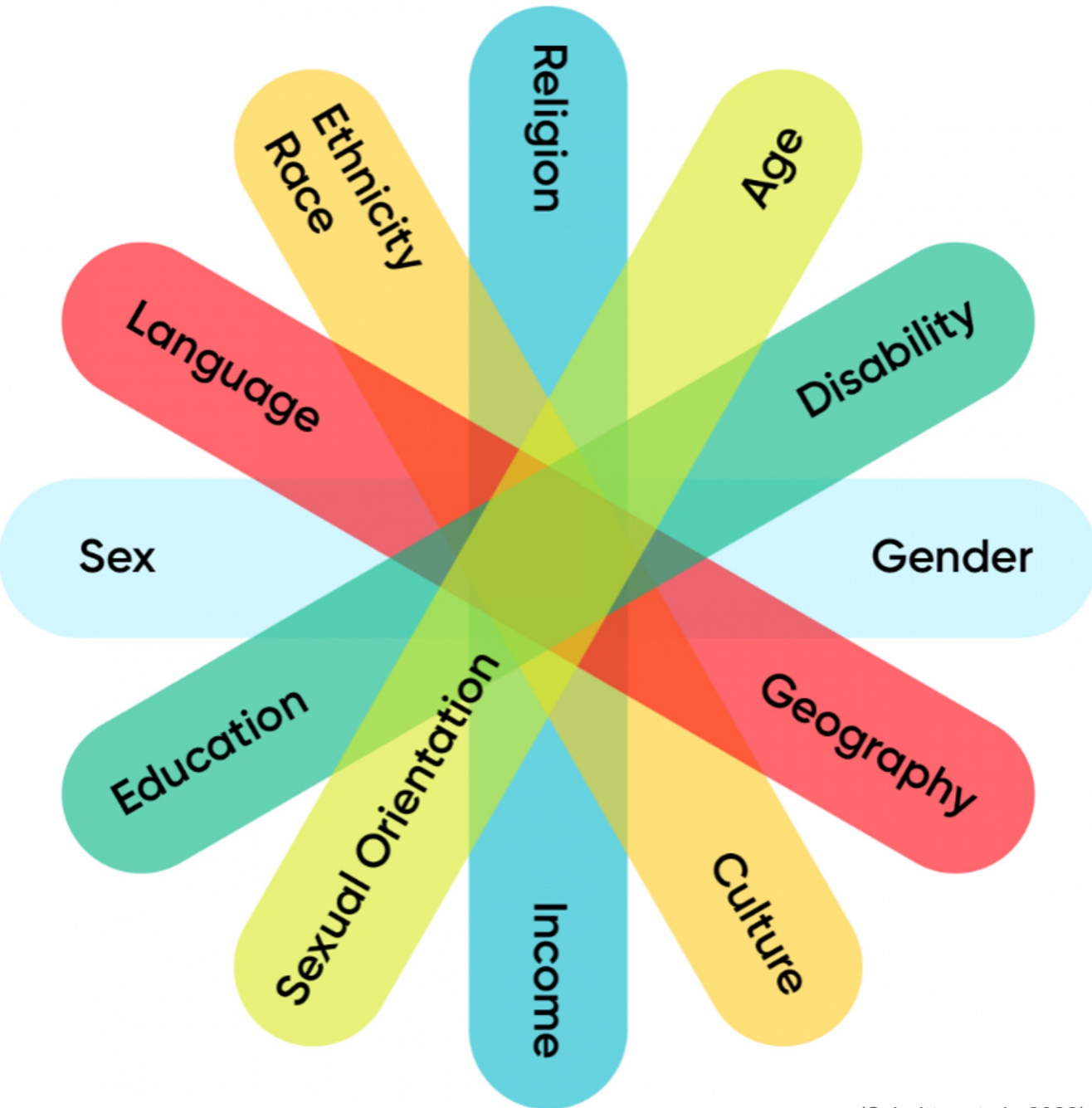
WHO IS MOST AT RISK?

POPULATIONS COMMONLY IDENTIFIED AS AT HIGHER RISK INCLUDE:

- seniors and children
- pregnant people
- people with chronic medical conditions
- low-socioeconomic status
- racialized populations
- Indigenous peoples



INTERSECTIONAL APPROACH TO UNDERSTANDING CLIMATE VULNERABILITY



- Population groups are not homogenous
- Individuals have a variety of vulnerability and resilience factors

INDIGENOUS PEOPLES ARE UNIQUELY SENSITIVE TO THE IMPACTS OF CLIMATE CHANGE

- Relationships with and dependence on land, waters, animals, plants, and natural resources for their sustenance, livelihoods, cultures, identities, health and wellbeing
- Greater existing burden of health inequities
- Historic and ongoing effects of colonization
- Socio-economic and political marginalization

Indigenous knowledge systems and practices are key to First Nations, Inuit, and Métis peoples' ability to observe, respond, and adapt to climate and environmental changes.





(Ryoji Iwata)

Climate change adaptation measures, which are meant to protect human health, are not experienced in the same way across populations and communities

In the absence of careful planning, adaptation measures may have unintended outcomes that adversely impact some population groups or exacerbate existing inequities

Urban green space example:

- Low income and racialized communities have less access to tree canopy cover and public green spaces
- Increase in green spaces could also perpetuate gentrification and increase property values, which may lead to the displacement of low-income residents and small local businesses





Health equity should be an important focus of climate change and health activities

The absence of equity considerations in climate change and health activities could result in undesirable outcomes

- Inadvertently reinforce, redistribute, or create new inequities
- Overlook critical vulnerabilities and needs
- Inequitable outcomes and maladaptation
- Significant impacts on the health system

\$230 billion of direct medical care costs and \$1 trillion of indirect costs associated with illness and premature death could have been saved in the US between 2003-2006 if health disparities were eliminated



Tools and resources can enhance the integration of health equity considerations in V&As and adaptation and mitigation measures

Health Equity Impact Assessments & Sex and Gender-Based Analysis Tools

Health Equity Assessment Toolkit (PAHO)

Health Equity Impact Assessment Tool (OMHLTC, 2012)

Gender Based Analysis Plus (Government of Canada, 2019)

Resiliency and Asset Mapping

Climate Change, Health, and Equity: A Guide for Local Health Departments (Rudolph et al., 2018)

Asset Mapping Toolkit (UCLA, n.d.)

Vulnerability Mapping





Vancouver Coastal Health's climate vulnerability index and mapping project (VCH, 2020)

California Department of Public Health's California Building Resilience Against Climate Effects: Climate Change and Health Vulnerability Indicators (CalBRACE, 2018)










Community Engagement

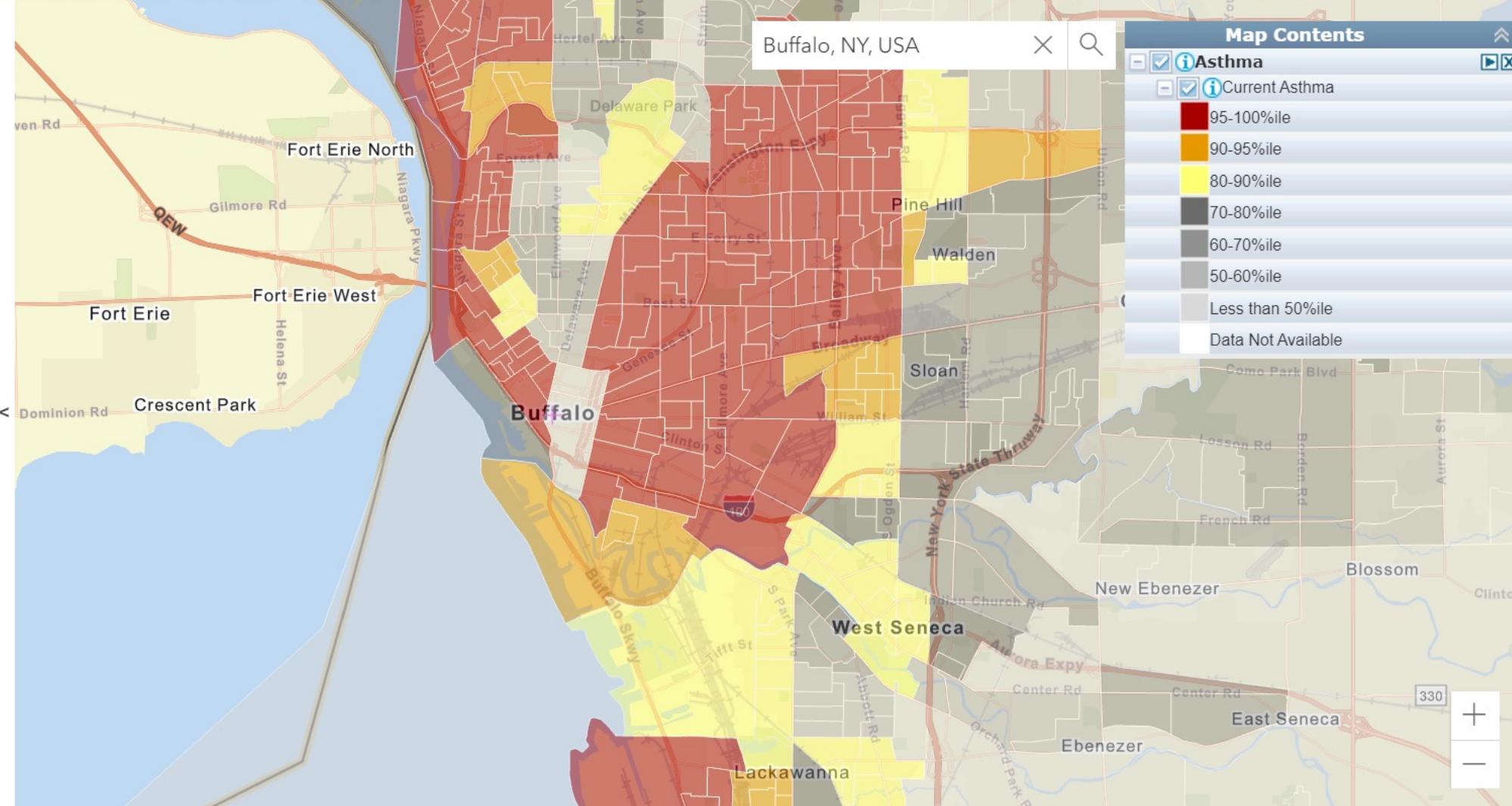
Equitable Climate Adaptation: Considerations for Local Governments (ICLEI, 2022)

Please note: Territory data (except Puerto Rico) is not available as comparable to the US. It is only comparable to the territory itself by using the 'Compare to State' functionality. Likewise, some of the indicators may not be available for

Compare to US Compare to State

-  Environmental Justice Indexes
-  Supplemental Indexes
-  Pollution and Sources
-  Socioeconomic Indicators
-  Health Disparities**
 - Low Life Expectancy
 - Heart Disease
 - Asthma**
 - Cancer
 - Persons with Disabilities
-  Climate Change Data
-  Critical Service Gaps
-  Additional Demographics
-  Threshold Map





Ensuring inclusive, equitable, and community-based participation in the adaptation process is critical for effective adaptation actions

Equitable participation and the inclusion of diverse voices

Residents and community based organizations have important knowledge of:

- the assets and resources available in their community
- local and traditional knowledge
- past health interventions and campaigns (successes and challenges)
- can leverage their networks to help with communication and outreach of V&A results





Health equity can be advanced, and determinants of good health strengthened, through adaptation

Increasing a “health in all policies” approach to climate adaptation and NDC’s

- consideration of health across all sectors can lead to improvements in health, health equity, and sustainable development
- the Americas have a high level of consideration of health in NDCs, with over 90% of NDCs referencing health
- spending on health and health-related adaptation efforts in the Americas far exceeds that of other regions and has increased over time, reaching over USD\$30 per capita in 2018–2019

Taking action against climate change will benefit health and advance health equity in the Americas



InosiKatigeKagiamik Illumi: Healthy Homes in Nunatsiavut



- Project aimed to develop climate-resilient housing infrastructure that was culturally-relevant, affordable, energy efficient, and reduced the health impacts from overcrowded dwellings and mold
- Community-driven housing design process
- Addresses key climate risks and contributes to strengthened determinants of health

Nurses for Cool and Healthy Homes

Fresno County, California

- one of the hottest parts of the county (92 days each year over 40°C)
- 22% of the population live in poverty
- racialized populations comprise 62.5% of the population
- Incorporate heat risk assessments into nurse home visits
- Energy assistance and health referrals are made including utility payment assistance, home energy improvement, and heat health information

(Rudolph et al., 2015)



Reflecting on actions to address climate change in the context of established public health roles to improve health equity



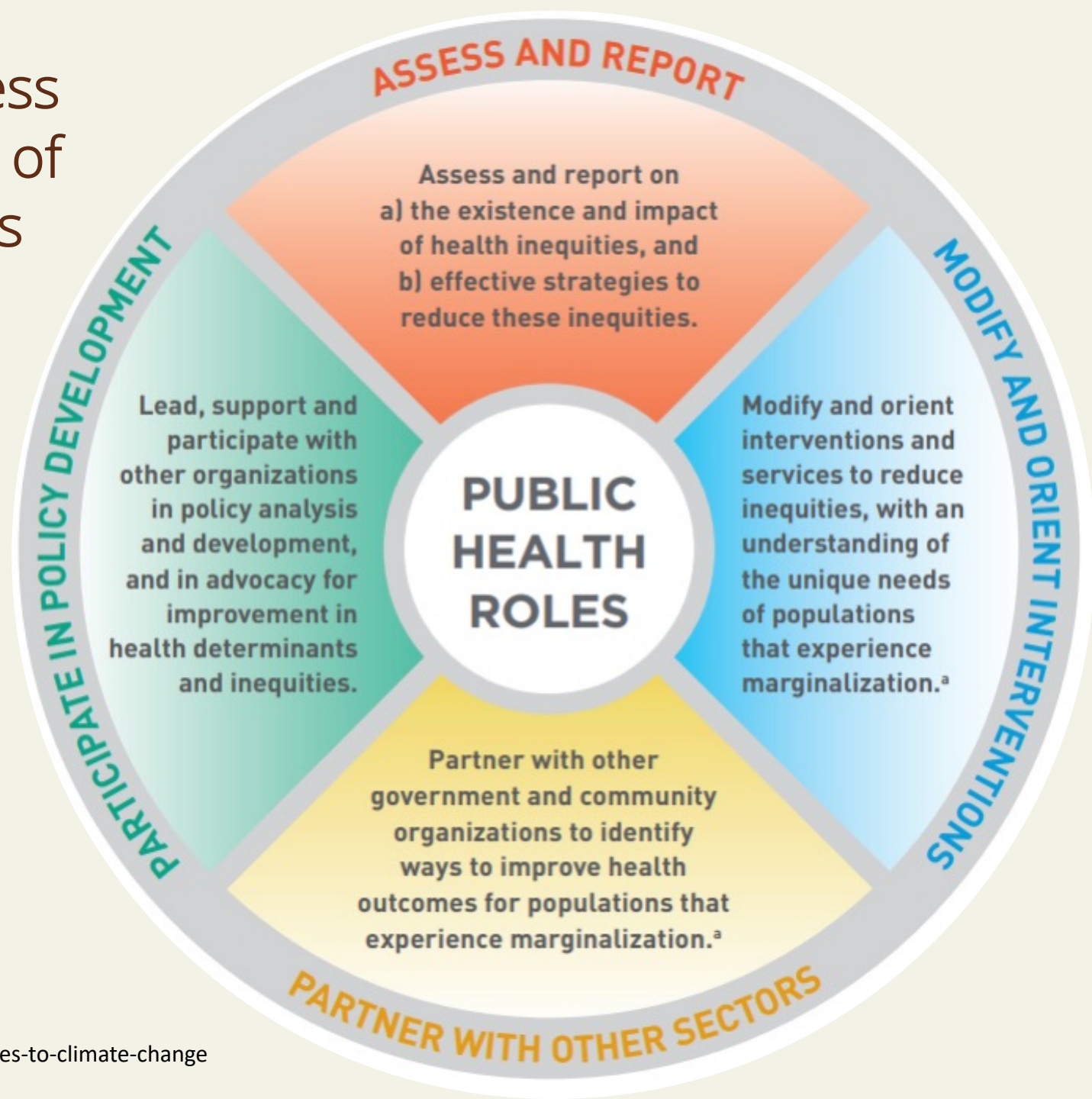
Centring equity in emerging public health responses to climate change

By Pemma Muzumdar



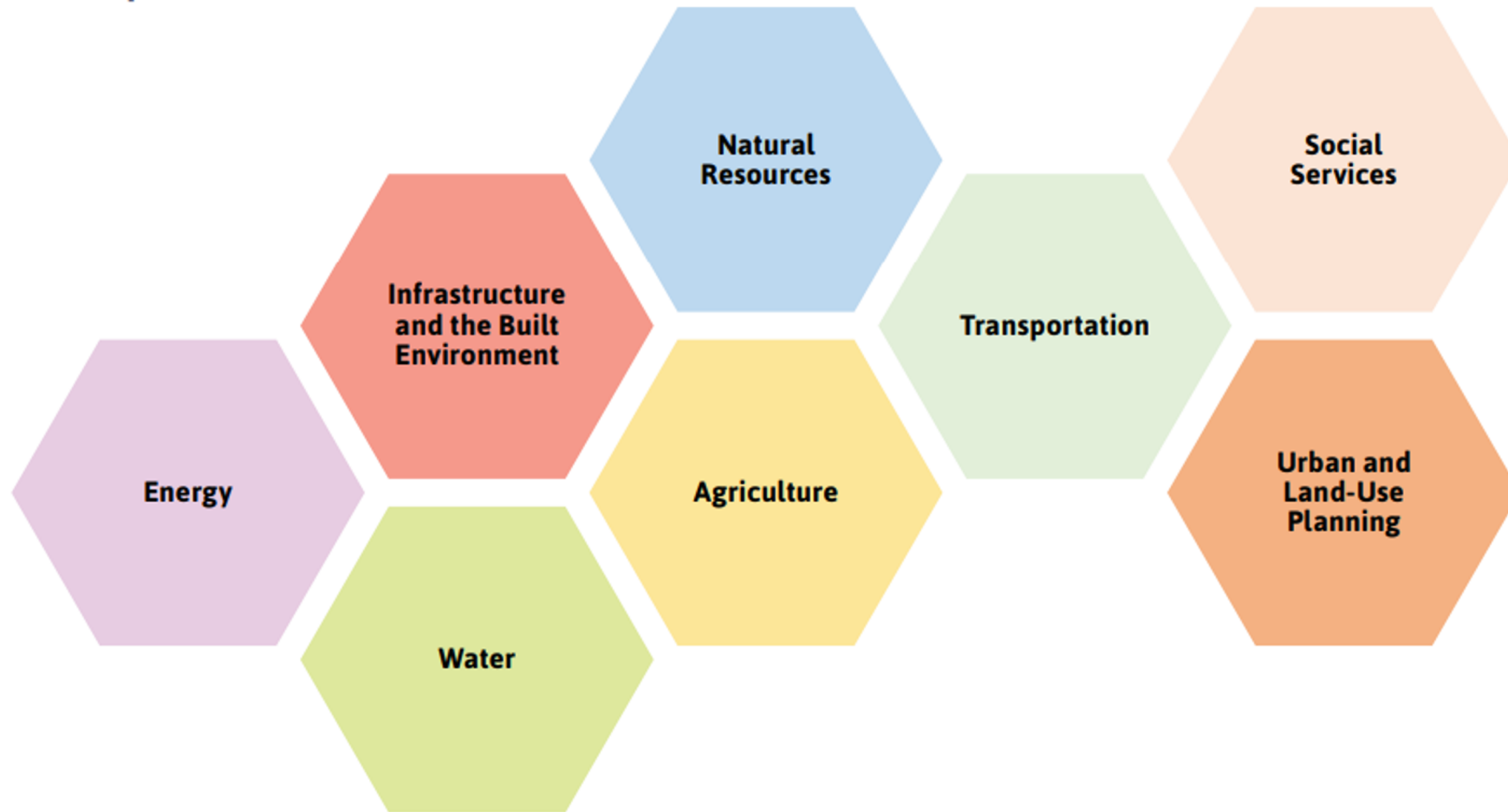
on March 08, 2020

This is the second blog in a series that explores the connections between climate change, health equity and public health. [Click here to read the first blog in this series.](#)



THE NEED FOR MULTISECTORAL INTERVENTIONS AND COLLABORATION

Sectors important to health



MONITORING AND EVALUATING ADAPTATION ACTIONS

Article

Justice and Equity Implications of Climate Change Adaptation: A Theoretical Evaluation Framework

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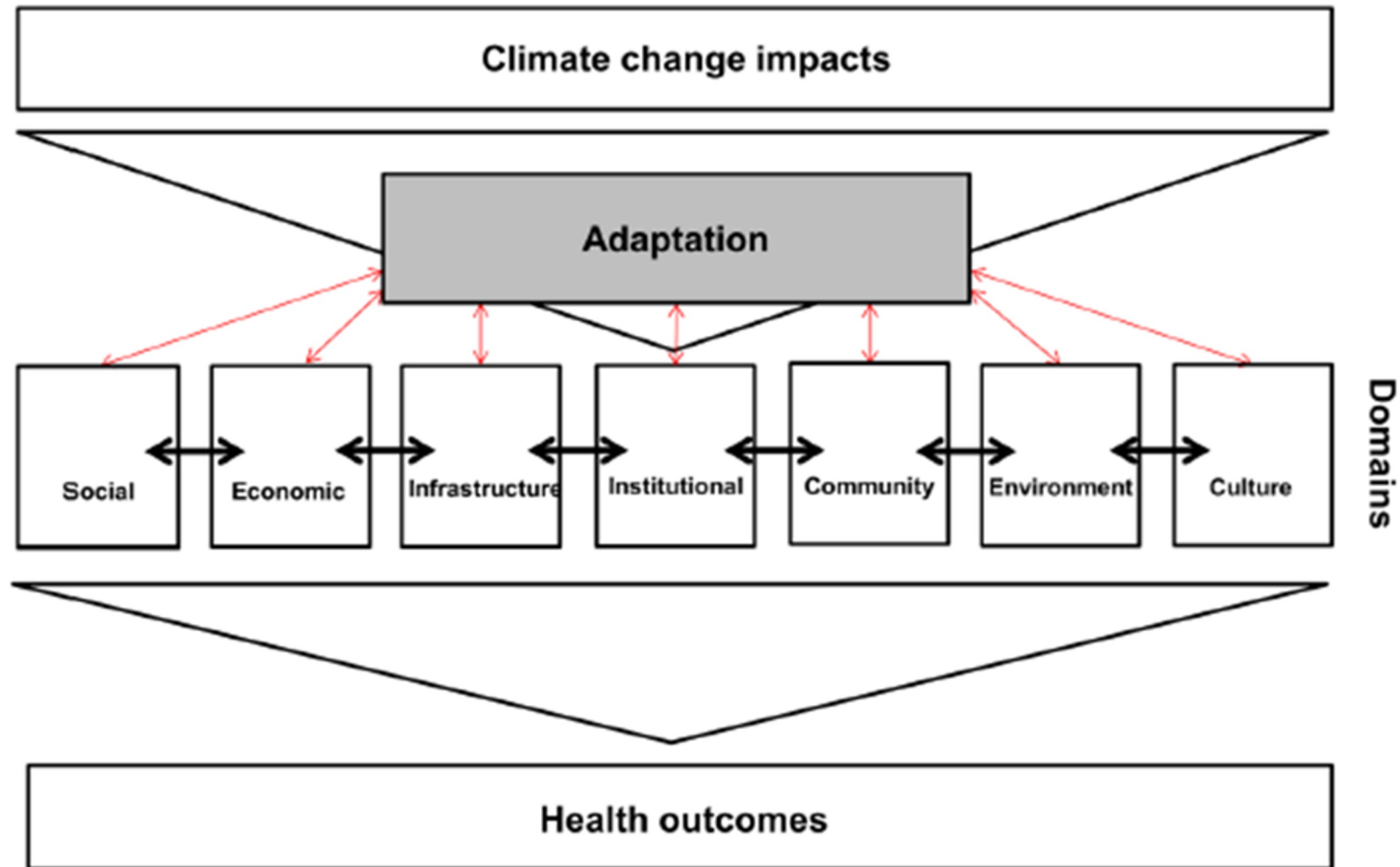
Abstract: Climate change affects human health, and climate change adaptation aims to reduce risks through infrastructural, behavioral, and technological measures. However, the impact of climate change adaptation on human health is difficult to measure, causing an ethical dilemma. The need for evidence of strategies and their precautionary implementation before such measures are implemented has been generated. In the absence of conclusive evidence for individual adaptation strategies, a theoretical framework and a set of guiding questions to assess effect strategies on seven domains of health determinants, including social, economic, institutional, community, environmental, and cultural determinants of health. Its focus is on gender equity and environmental justice concurrently with the implementation of adaptation could serve as a template for policymakers and researchers.

Keywords: climate change; Public Health; social inequalities; environmental adaptation; environmental justice

1. Introduction: Climate Change Affects Human Health

Climate change is expected to adversely affect human health through direct and indirect effects. Direct effects of global environmental change include increased exposure to extreme temperature events, comprising heat waves, cold spells, storms, and floods [1–3], which are mediated through natural and social systems [1]. Natural systems mediate climate change through vector distribution, increased air pollution, and pollen distribution, as well as a higher risk of food- and water-borne infections. Social systems, on the other hand, influence human health through effects on crop production and distribution, mental health, and occupational health. Worldwide and within societies, exposure risks and vulnerability to negative health effects are unequally distributed [1,4–6]. Beyond the natural distribution patterns of hazards, humans' abilities to withstand shocks and the extent of damages caused by them are determined by social, cultural, and economic capital and power [7–12], making climate change related policies—beyond other concerns—an ethical issue [4].

Using extreme heat events as an example, studies have shown that risks of heat stroke, or excess cardiovascular and respiratory mortality during extreme events are of particular concern for people living in inner city, heat island-prone areas [13], for the elderly [14], and for people with pre-existing health conditions [15].





THANK YOU!

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