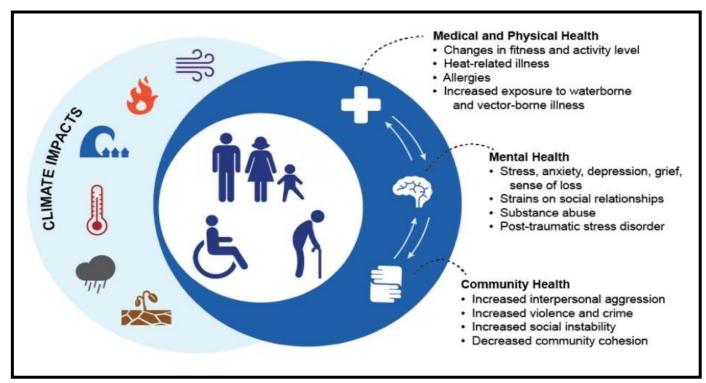


Step 1: Learn about the intersections of climate change hazards and health in your community.

Section 1 of this toolkit provides links to web resources that may be of particular interest to MVP communities and their partners seeking to develop an MVP project that addresses the intersection of climate change and health. These resources include: general information on climate change impacts on public health and healthcare, guides for local health departments and health professionals, example resilience projects that include public health components, and suggestions for locating community-specific health information.

Climate change hazards experienced in communities across the Commonwealth impact our health and our healthcare sector's ability to provide necessary services. Some of these impacts are illustrated in the graphic below (found on page 3-8 in the **Massachusetts State Hazard Mitigation and Climate Adaptation Plan**). A history of systemic injustices means that climate change hazards disproportionately impact high-minority low-income neighborhoods (as defined in EEA's **2017 EJ Policy**), which further means that climate change hazards disproportionately degrade the health of these communities. For more information on the ways in which rising temperatures, changes in precipitation, extreme weather and sea level rise generally impact public health across the Commonwealth, please visit the "Public Health Sector" page on the MA Climate Change Clearinghouse available **here**.



The impacts of climate change on human health in the United States. Source: U.S. Global Change Research Program (2016)

Step 1: Learn about the intersections of climate change hazards and health in your community.

General information on climate change impacts, public health and healthcare:

- US CDC video, How Climate Affects Community Health
- US CDC's Health Harm Cards
- US CDC's Climate and Community Health Infographic
- American Psychiatric Association's Climate Change and Mental Health Connections webpage
- George Mason University Center for Climate Change Communication's Conveying the Human Implications of Climate Change
- Harvard T. H. Chan School of Public Health's C-CHANGE: Center for Climate, Health and the Global Environment Resources
- U.S. Climate Resilience Toolkit, Building Healthcare Sector Resilience
- The Kresge Foundation's Climate Change, Health & Equity Resources and Materials



"Extreme Heat" graphic from U.S. Center for Disease Control's "Health Harm Cards" series. Other cards include climate hazards such as air pollution, extreme weather, and increased stress and anxiety. Source: US CDC (2019)

EXTREME HEAT CASE STUDY

San Francisco Department of Public Health (SFDPH), Climate and Health Program

Problem: San Francisco is a built for a cool coastal climate. Many buildings lack air conditioning, making the city particularly vulnerable to the health effects of extreme heat. Rising temperatures are expected to increase heat-related illnesses unless adaptation measures are undertaken.

Approach: SFDPH established a Heat Vulnerability Index to identify factors that make neighborhoods more vulnerable to extreme heat such as the amount of heat-absorbing concrete and tree density. SFDPH used this information to develop eight adaptations for extreme heat, including establishing emergency cooling centers and alerts.

Results: SFDPH engaged San Franciscans around the health risks of extreme heat, supported the development of an extreme heat annex in the City Emergency Operations Plan, and built capacity at the city level to plan future climate and health adaptations and interventions.



CLIMATE-READY STATES AND CITIES INITIATIVE cdc.gov/climateandhealth Communities are developing a coordinated response to health risks by using CDC's Building Resilience Against Climate Effects (BRACE) framework, a five-step process for climate adaptation.

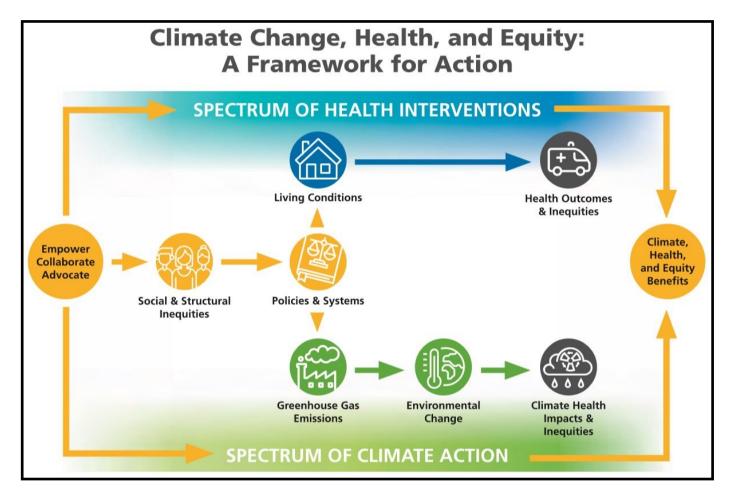




Step 1: Learn about the intersections of climate change hazards and health in your community.

Guides for local health departments:

- US CDC Climate Program's Assessing Health Vulnerability to Climate Change: A Guide for Health Departments
- American Public Health Association (APHA)'s Climate Change, Health and Equity: A Guide for Local Health Departments
- NACCHO's Essential Actions for Climate Resilience in Local Health Departments Fact Sheet



An infographic demonstrating their framework for promoting health and equity in the face of climate change and other environmental challenges from APHA's 2018 Report. Source: American Public Health Association (2018).

Guides for health professionals:

- Canadian Association of Physicians for the Environment's Climate Change Toolkit for Health Professionals
- Canadian Association of Physicians for the Environment's Factsheet: Preparing for Climate Change in our Communities

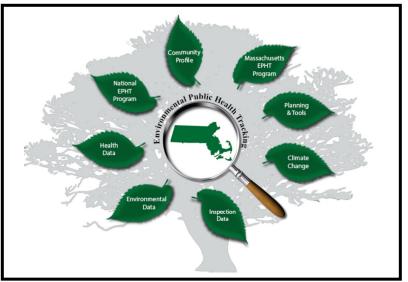


Resources with example resilience projects that include public health components:

- Antioch University's overview of a climate and health adaptation plan created in Monadnock, NH
- American Public Health Association's Adaptation in Action Part II: Updated Grantee Success Stories from CDC's Climate and Health Program
- George Mason University Center for Climate Change Communication's Climate Action for Healthy People, Healthy Places, Healthy Planet: Urban Greening & Green Infrastructure, Climate Change and Health Fact Sheet
- On US EPA's **Climate Change: Resilience and Adaptation in New England Program** website, you can **search adaptation plans and projects** implemented throughout New England that focus specifically on public health.

Community-specific resources:

- Explore the MA Environmental Public Health Tracking tool, which provides community profiles for each municipality in the Commonwealth, as well as additional health and environmental data.
- The Massachusetts Healthy Aging Collaborative provides municipallevel health data on the older adult population for every city and town across the Commonwealth.
- If there is a non-profit hospital that serves your community, it will have completed a



The MA Environmental Health Tracker offers a variety of tools and resources for climate change planning at the local level. Source: MA Environmental Health Tracker.

Community Health Needs Assessment and/or a Community Health Improvement Plan that includes local health data. **Search these assessments here**.

- Your regional planning agency may also have public health data that they can share about your region.
- The Massachusetts State Hazard Mitigation and Climate Adaptation Plan details the impacts of climate change hazards on Commonwealth residents.