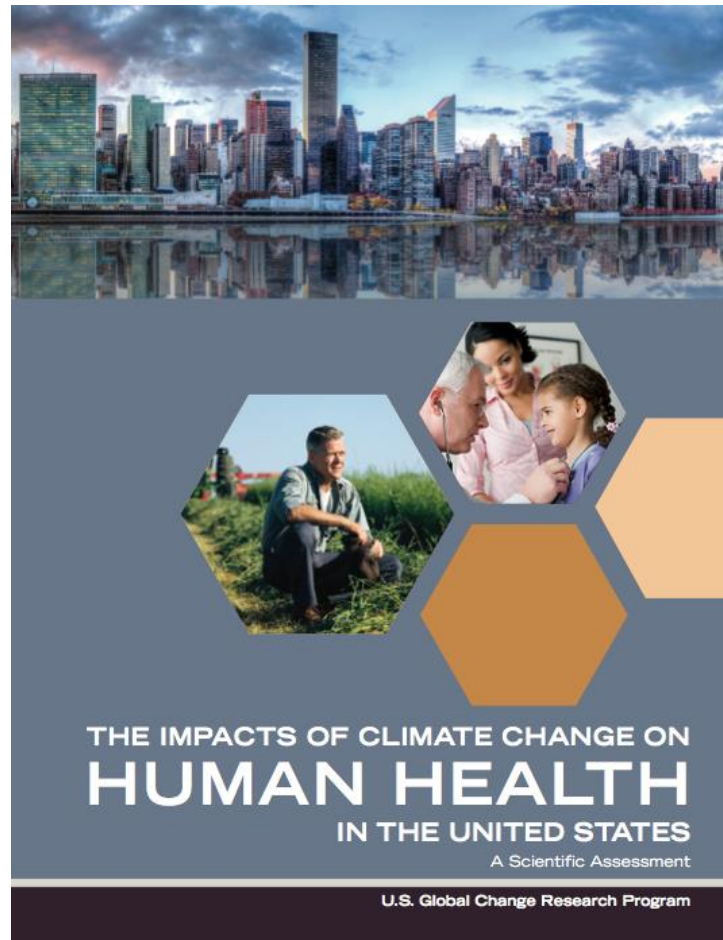
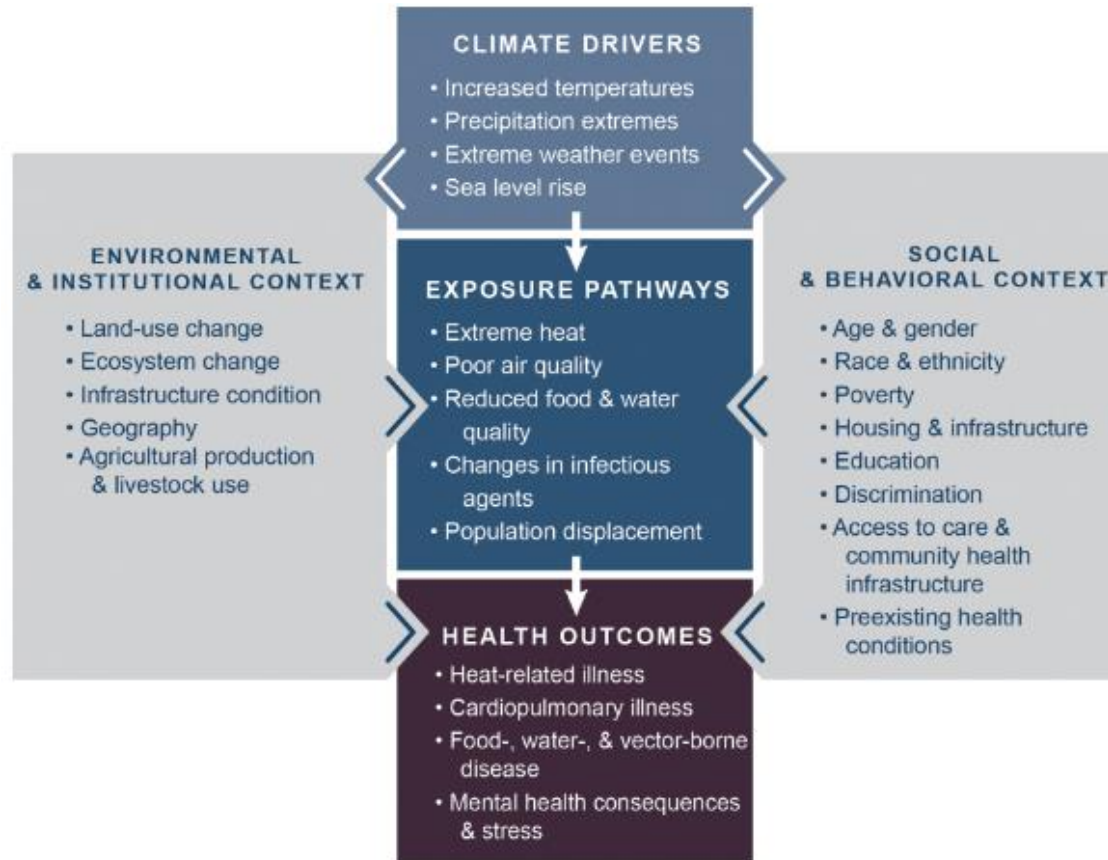


CLIMATE AND HEALTH

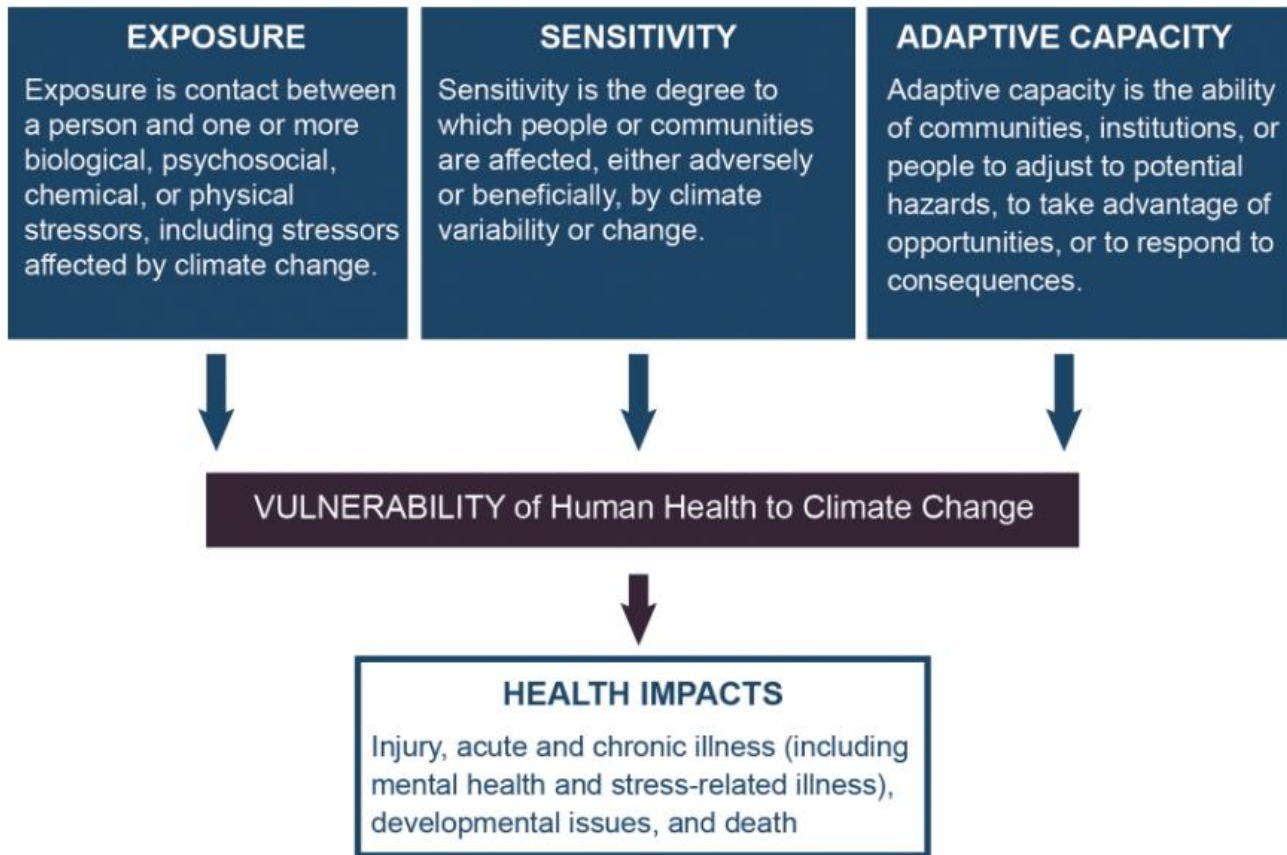
USGCRP CLIMATE AND HEALTH ASSESSMENT



CLIMATE CHANGE IS ONE OF MANY DETERMINANTS OF HEALTH



VULNERABILITY OF HEALTH TO CLIMATE CHANGE

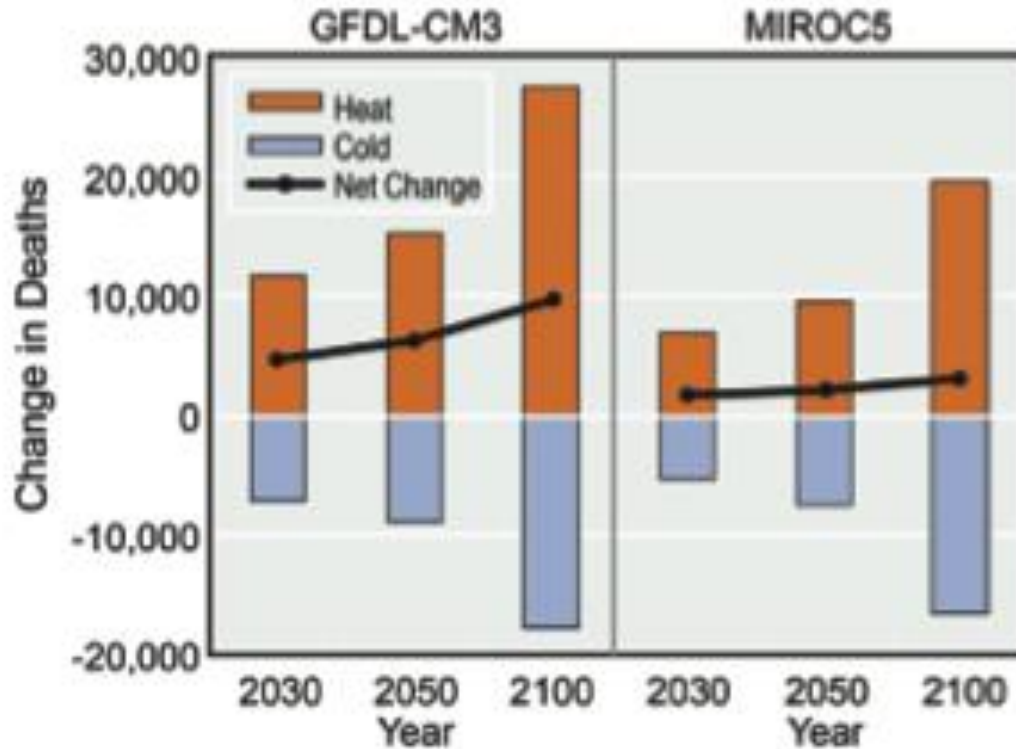


CLIMATE CHANGE AND HEALTH

- 1. Temperature-related death and illness**
- 2. Air quality impacts**
- 3. Impacts of extreme events on health**
- 4. Temperature-related death and illness**
- 5. Climate impacts on water-related illness**
- 6. Food safety, nutrition, and distribution**
- 7. Mental health and well-being**

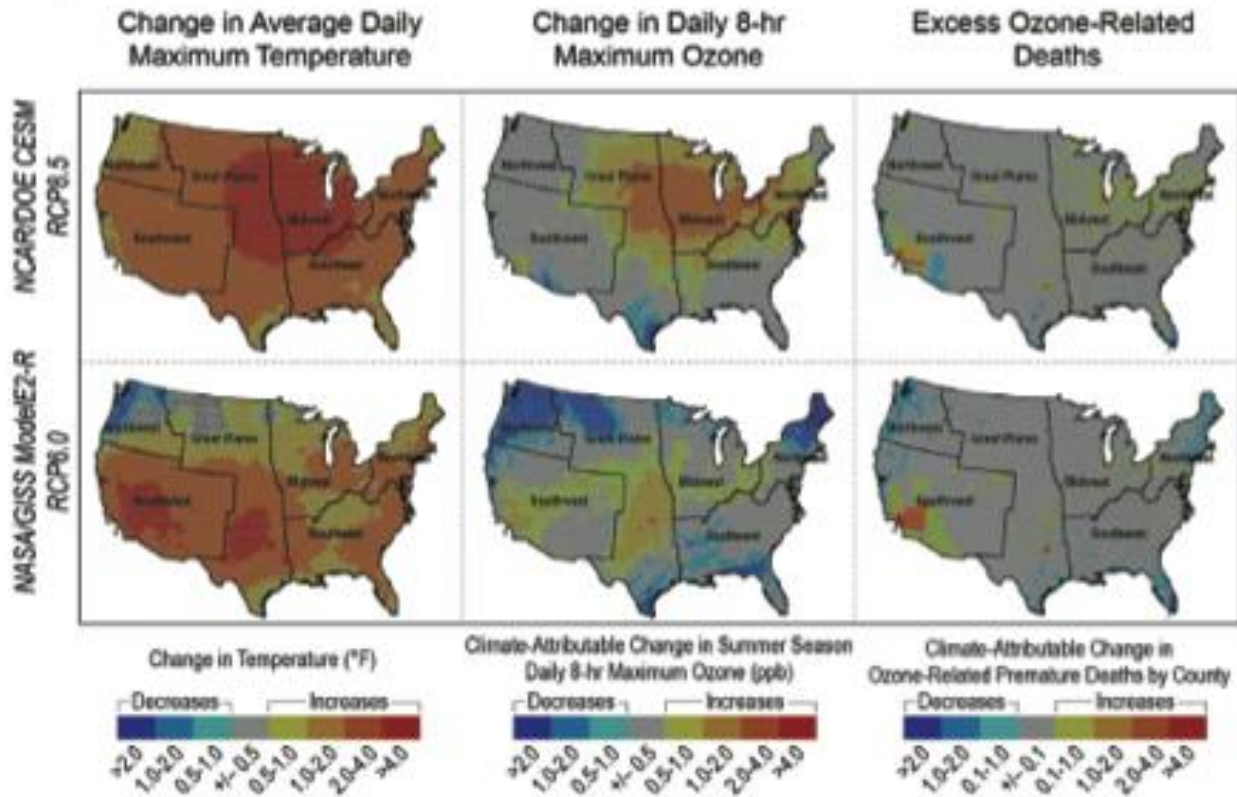
TEMPERATURE-RELATED DEATH AND ILLNESS

Projected Changes in Deaths in U.S. Cities by Season



AIR QUALITY IMPACTS

Projected Change in Temperature, Ozone, and Ozone-Related Premature Deaths in 2030

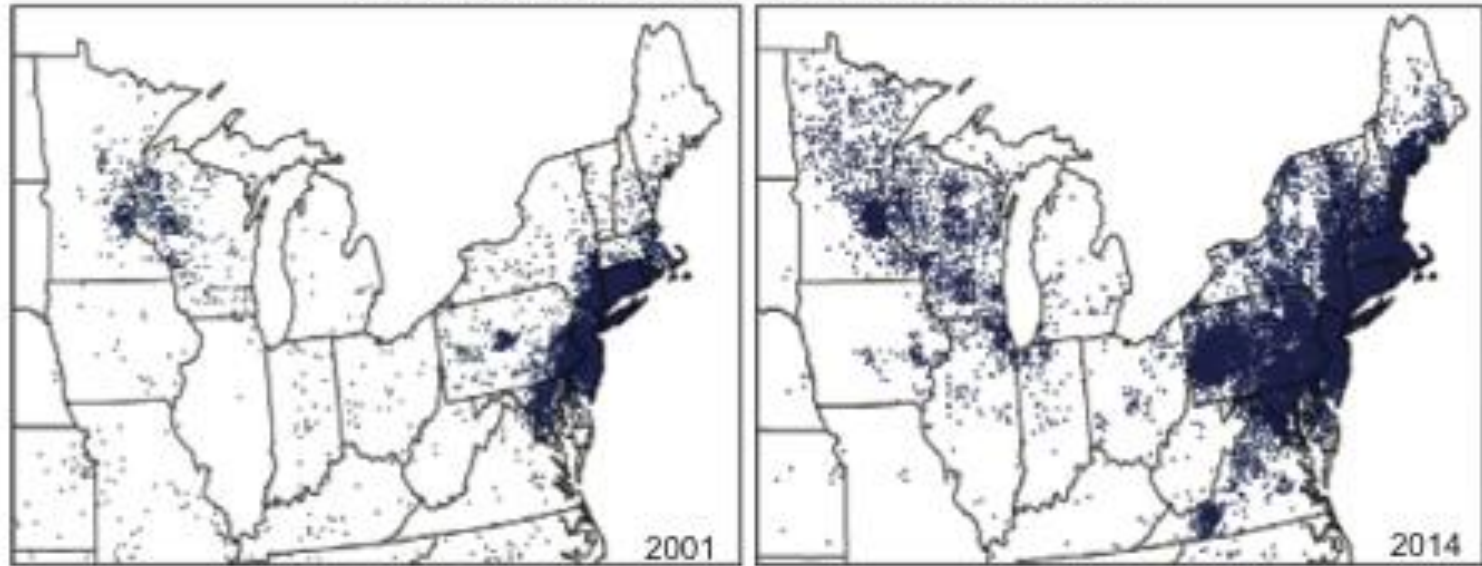


IMPACTS OF EXTREME EVENTS ON HEALTH



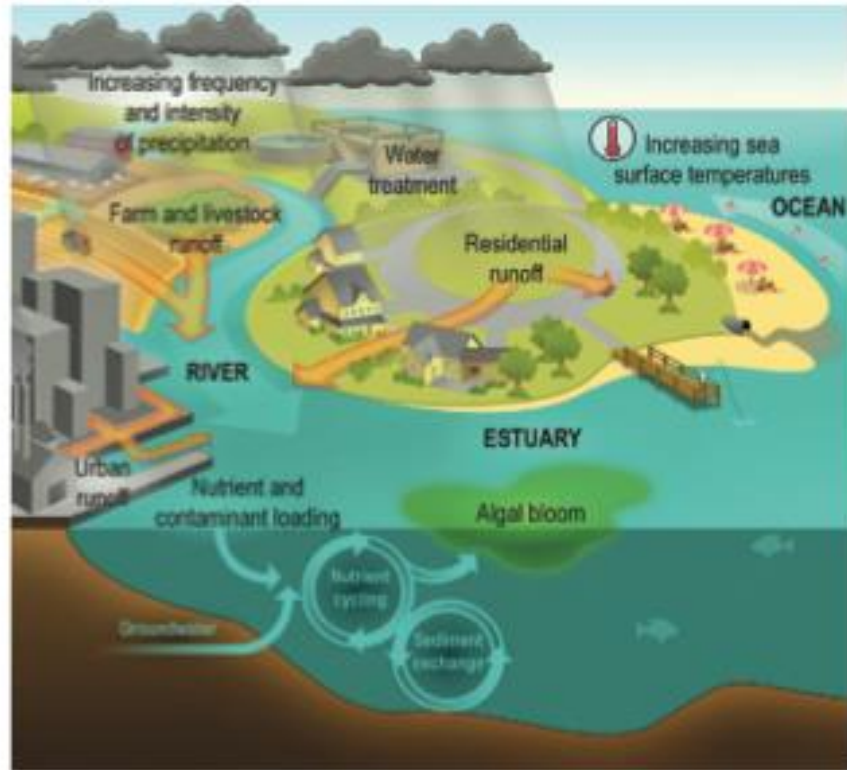
VECTOR-BORNE DISEASES

Changes in Lyme Disease Case Report Distribution



WATER-RELATED ILLNESS

Links between Climate Change, Water Quantity and Quality, and Human Exposure to Water-Related Illness



FOOD SAFETY, NUTRITION, AND DISTRIBUTION

Farm to Table
The Potential Interactions of Rising CO₂ and Climate Change on Food Safety



MENTAL HEALTH AND WELL-BEING

The Impact of Climate Change on Physical, Mental, and Community Health



CLIMATE CHANGE AND HEALTH: CAMBRIDGE, MA



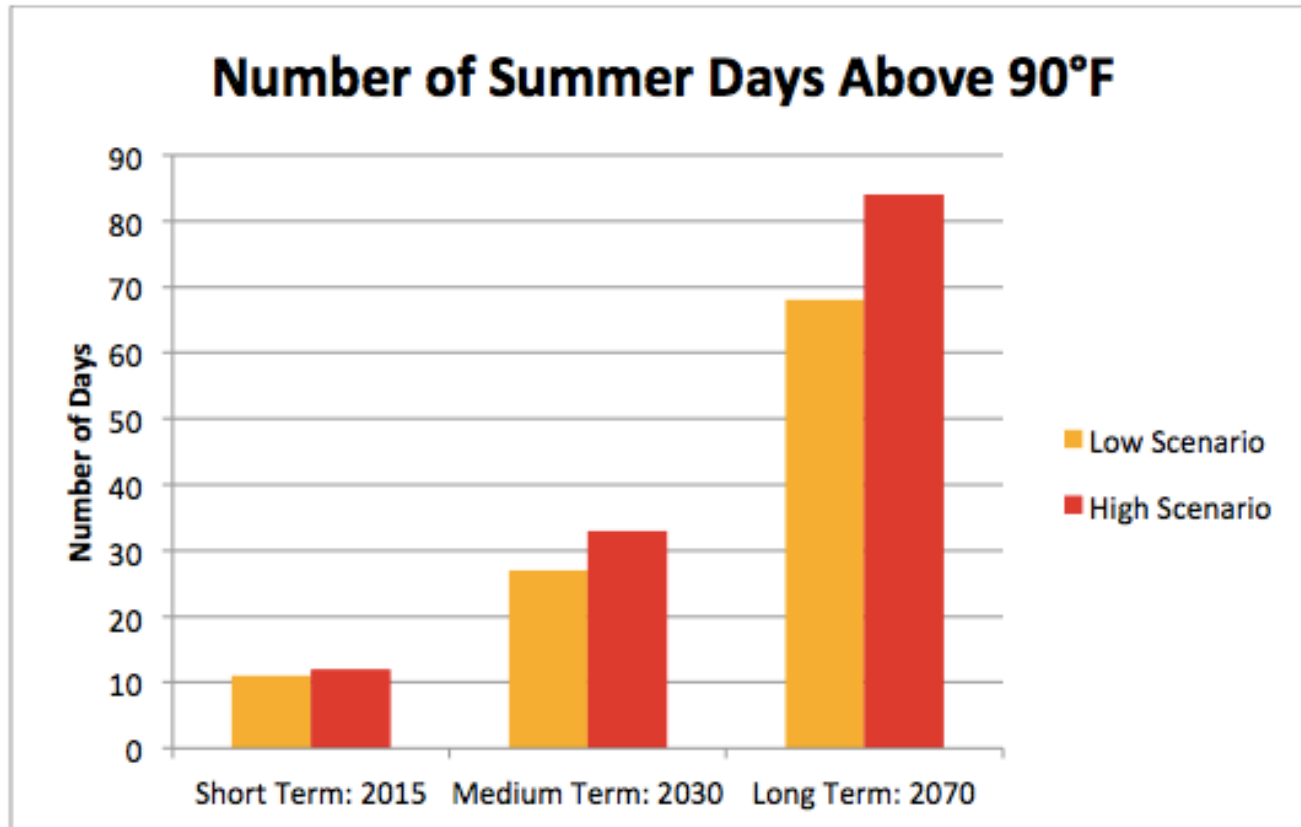
CAMBRIDGE'S CLIMATE CHANGE VULNERABILITY ASSESSMENT

Step I: Climate Scenarios

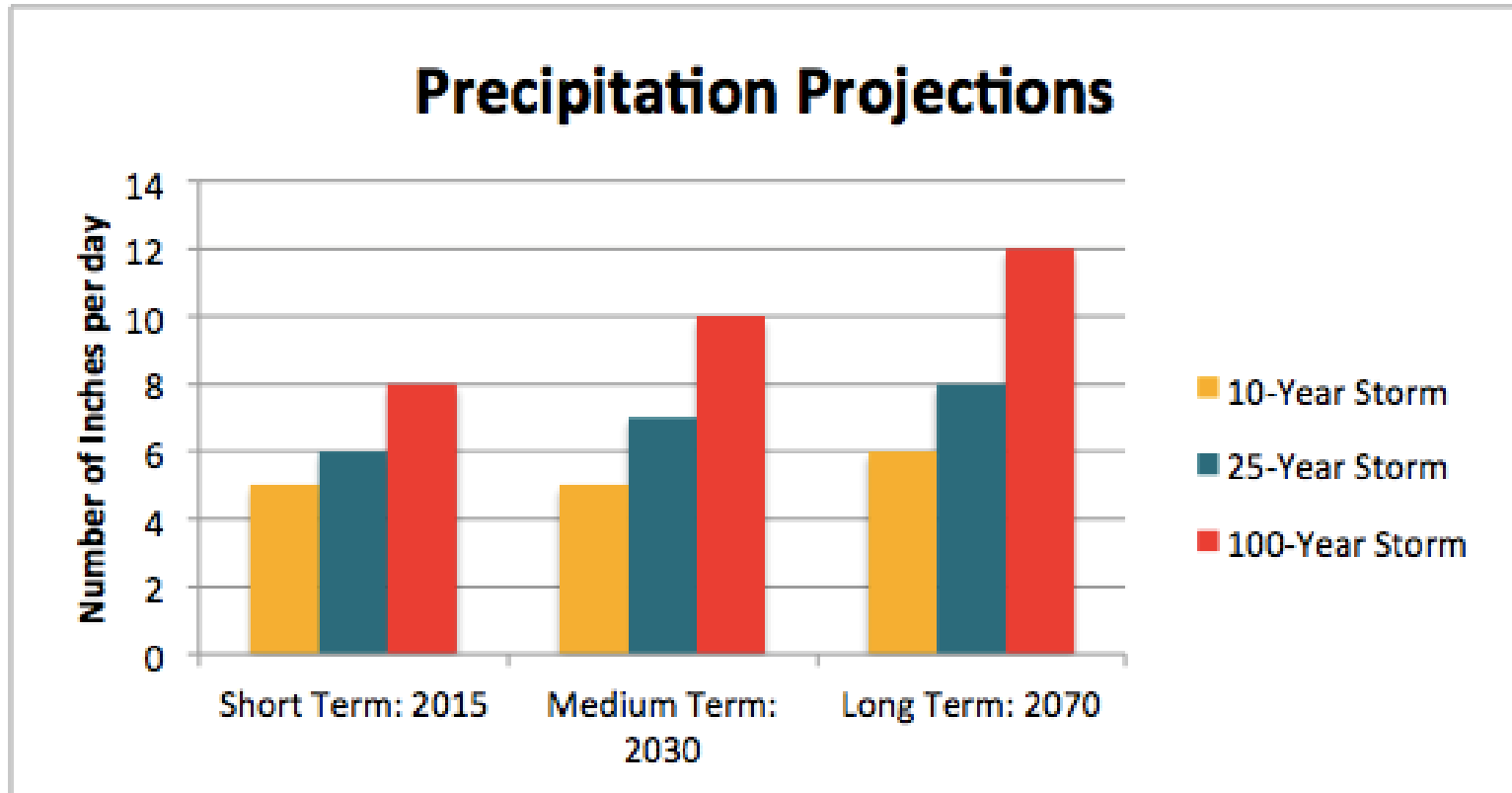
Step II: Vulnerability and Risk Assessment

Step III: Preparedness Plan

EXTREME HEAT



PRECIPITATION-DRIVEN FLOODING



POTENTIAL POLICY APPROACHES

Policy Approach	Description	Public Health Benefits
Information Provision	<p>Aimed at public outreach to share information on how to remain safe during a climate emergency. Potential activities include public awareness campaigns on the link between climate change and health or a mobile alert system during emergencies.</p>	<p>Discourages community members from engaging in hazardous activities, preventing unnecessary injuries.</p> <p>Notifies community members with chronic illnesses of health advisories during extreme climate events</p> <p>Provides information on protecting health during extreme heat and flooding</p>
Emergency Preparedness	<p>Focused on improving response time and services to help people in need during climate-related emergencies. Activities include evacuation drills, organizing emergency medical response teams, and emergency responder trainings for current public health staff, first responders, and neighborhood residents.</p>	<p>Reduces length of time for emergency response by health care providers, reducing the number of deaths.</p> <p>Helps first responders identify climate-related health risks and know how to respond effectively.</p> <p>Trains residents on how to assist their neighbors and communicate urgent medical needs to first responders, insuring that those in most need are helped first.</p>
Resource Allocation	<p>Ensures that city officials have the funding and capacity to address short-term emergencies and long-term public health impacts of climate change. Activities include hiring consultant and program coordinators, and supporting climate adaptation programs.</p>	<p>Provides ongoing research into viable policy solutions for climate-related illnesses</p> <p>Facilitates coordination between various city agencies to implement policies that prevent climate-related illness, providing wide-scale health benefits.</p> <p>Creates long-term strategy for city to manage public health issues of climate change.</p>
Rules and Regulations	<p>Enforces and adds legislation and regulations to ensure the safety of city infrastructure during extreme weather events. Includes changes to building codes and zoning laws. Places requirements on private property.</p>	<p>Reduces risk of personal injury within the home or workplace during flooding.</p> <p>Cool design and green infrastructure reduces heat index within and surrounding buildings, limiting heat stroke and dehydration.</p> <p>Reduces risk of water damage to buildings and improves indoor air quality, reducing risk of worsening respiratory illnesses</p>