Maryland Public Health Strategy for Climate Change

Baltimore City Health Department Site Visit

Clifford S. Mitchell, MS, MD, MPH
Director, Environmental Health Bureau
Prevention and Health Promotion Administration

August 6, 2014
Baltimore, MD

Site Visit Agenda

12:30 – 12:35 PM	• Welcome and Introductions
12:35 – 12:40 PM	• Overview of Site Visit Goals
12:40 – 12:55 PM	• Baseline Health Assessment
12:55 – 1:05 PM	• Climate Forecasts
1:05 – 1:20 PM	• Discussion of Data Usage and Local Priorities
1:20 – 1:25 PM	• Next Steps and Timeline
1:25 – 1:30 PM	• Wrap-Up

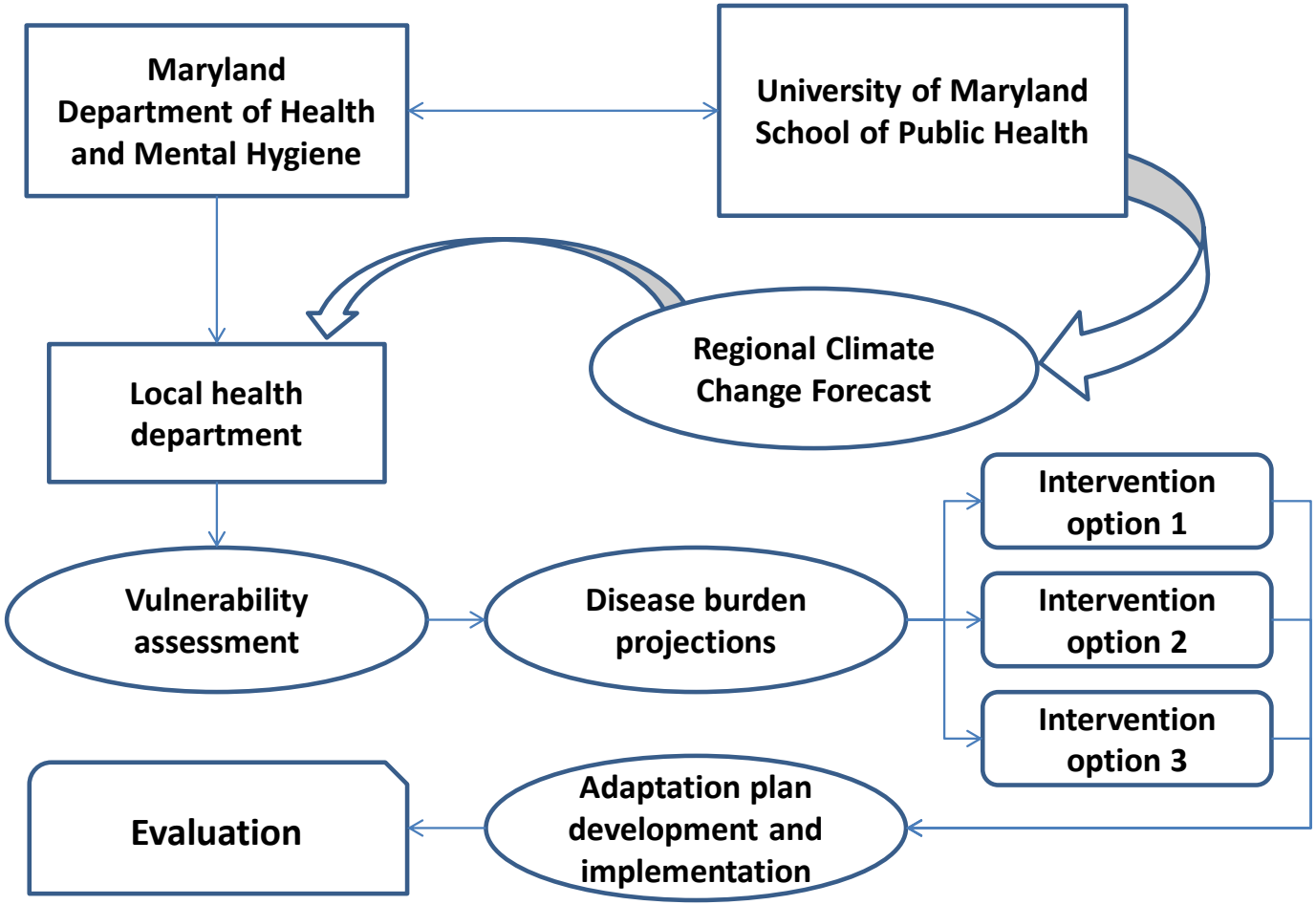
Goals of Meeting

- Recap of the project goals and current status
- Discuss what Baltimore City should expect from DHMH
  - Types of products
- Review climate forecasts and health data
- Discuss set priorities for composing interventions

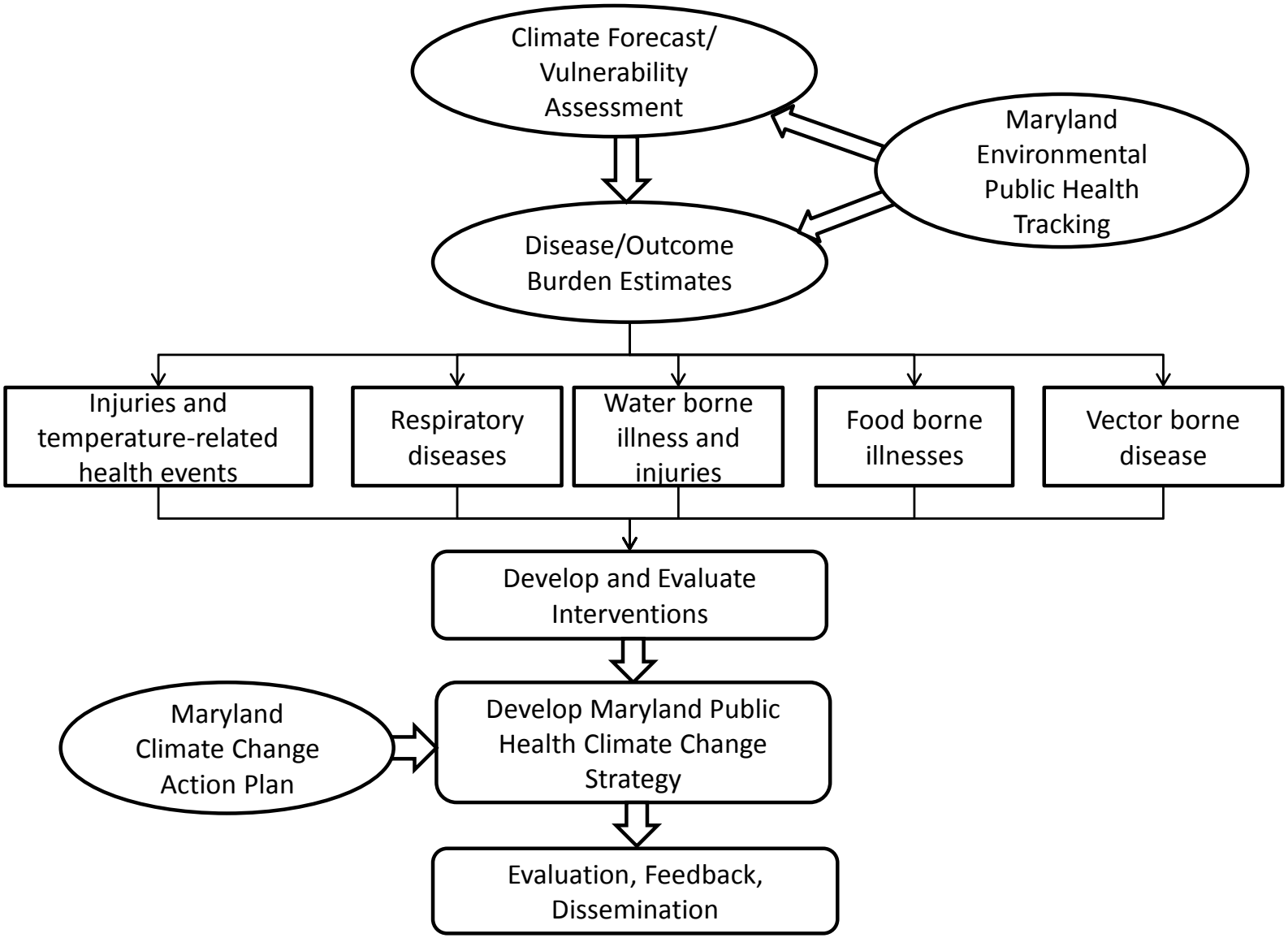
Welcome and Introductions

- PROJECT TEAM
  - Maryland Department of Health and Mental Hygiene
  - Local Health Departments
  - University of Maryland College Park
  - Centers for Disease Control and Prevention
  - Other Partners

Maryland Public Health Climate Change Strategy



MARYLAND
Department of Health and Mental Hygiene


Climate Forecast/ Vulnerability Assessment
Maryland Environmental Public Health Tracking
Disease/Outcome Burden Estimates
Injuries and temperature-related health events
Respiratory diseases
Water borne illness and injuries
Food borne illnesses
Vector borne disease
Develop and Evaluate Interventions
Maryland Climate Change Action Plan
Develop Maryland Public Health Climate Change Strategy
Evaluation, Feedback, Dissemination

Goals	Objectives	Timeline	Performance Metric(s)
1. Prepare a Climate Forecast and Vulnerability Assessment	1.1 Prepare climate forecast	9/1/2012 – 8/31/2013	Forecast products for selected regional, local jurisdictions
	1.2 Vulnerability assessment	11/1/2012 – 8/31/2013	Mapping of vulnerable populations, quantitative vulnerability assessment
2. Project Disease/ Outcome Burden	2.1 Injuries and Temperature-Related Health Events	9/1/2013 – 3/31/2014	Metrics for each selected disease or outcome
	2.2 Respiratory Diseases		
	2.3 Water Borne Illness		
	2.4 Food Borne Illness		
	2.5 Vector Borne Disease		
3. Develop and Evaluate Public Health Interventions	3.1 Develop interventions	1/1/2014 – 8/31/2014	Detailed written description of interventions
	3.2 Assessment of public health interventions using health impact assessment framework	3/1/2014 – 2/28/2015	Formal health impact assessment of strategies/ interventions
4. Develop Maryland Public Health Climate Strategy	4.1 Develop written strategy document within Maryland Climate Change Action Plan framework	3/1/2015 – 8/31/2015	Strategy document
	4.2 Obtain feedback from key stakeholders	9/1/2015 – 2/29/2016	Written feedback incorporated in strategy document
	4.3 Adopt and promulgate strategy	3/1/2016 – 8/31/2016	Promulgation on DHMH website, other media
5. Evaluation of Maryland Public Health Climate Change Strategy	5.1 Develop evaluation framework using common evaluation tools and framework	9/1/2014 – 8/31/2016	Evaluation using criteria adopted by DHMH, Maryland Climate Change Commission

Local Public Health Department Mini-grants

- Enable public health professionals in local health departments (LHDs) to utilize climate forecast projections
- Help LHDs implement climate mitigation and/or adaptation strategies necessary to protect public health
- Evaluate the mitigation and/or adaptation strategy used to determine the quality of improvement and to incorporate refined inputs

Local Public Health Department Projects

- Interim Reports due June 30, 2014
- Health Departments Involved
  - **Baltimore City**
  - Prince George's County
  - Washington County
  - Wicomico County

Local Priorities

- Promote Access to Quality Health Care for All
- Be Tobacco Free
- Redesign Communities to Prevent Obesity
- Promote Heart Health
- Stop the Spread of HIV and Other Sexually Transmitted Infections
- Recognize and Treat Mental Health Needs
- Reduce Drug Use and Alcohol Abuse
- Encourage Early Detection of Cancer
- Promote Healthy Children and Adolescents
- Create Health Promoting Neighborhoods

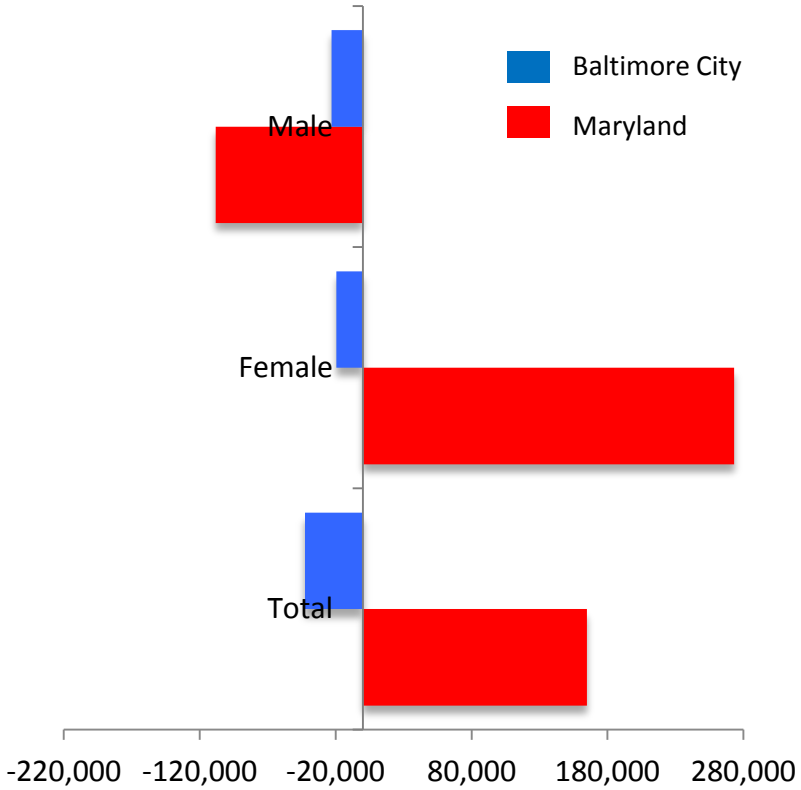
Provided by

Ann Liu, PhD, MPH

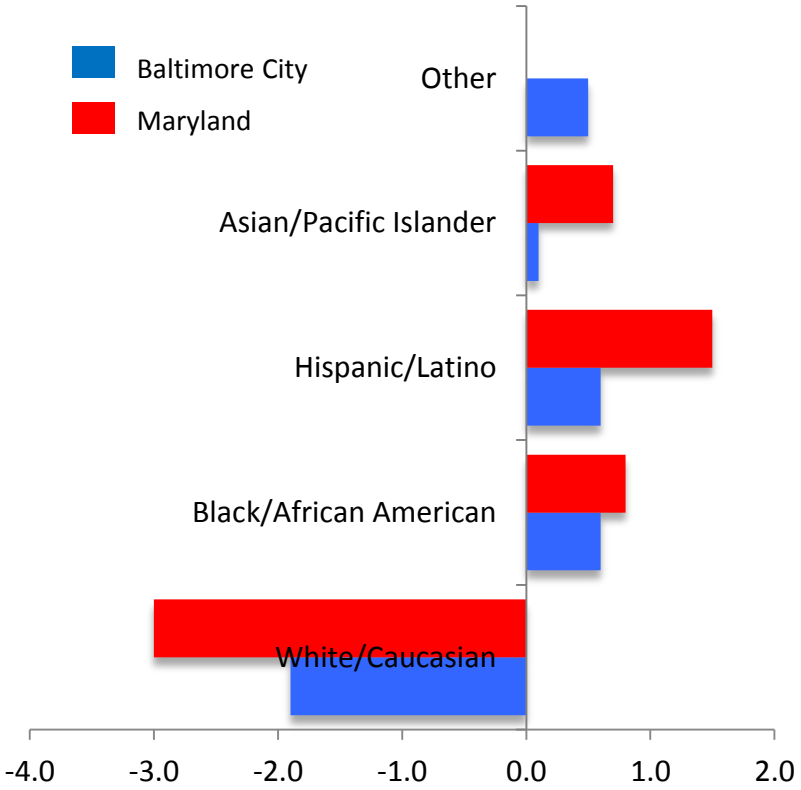
BASELINE HEALTH STATISTICS

Demographic and Social Determinants of Health (Δ 2005-2000)

Population



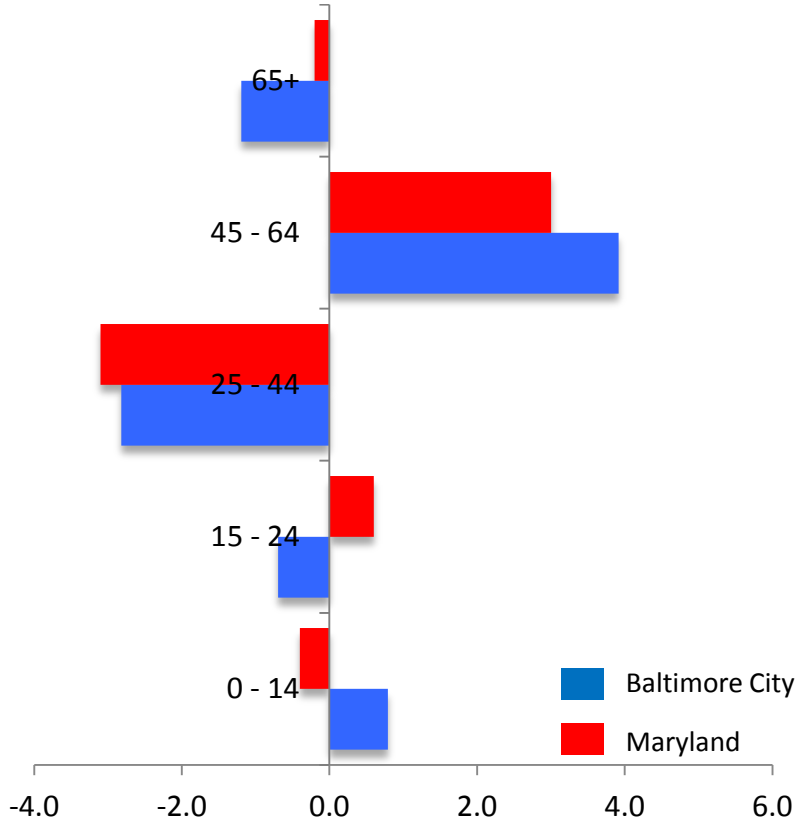
% Race/Ethnicity



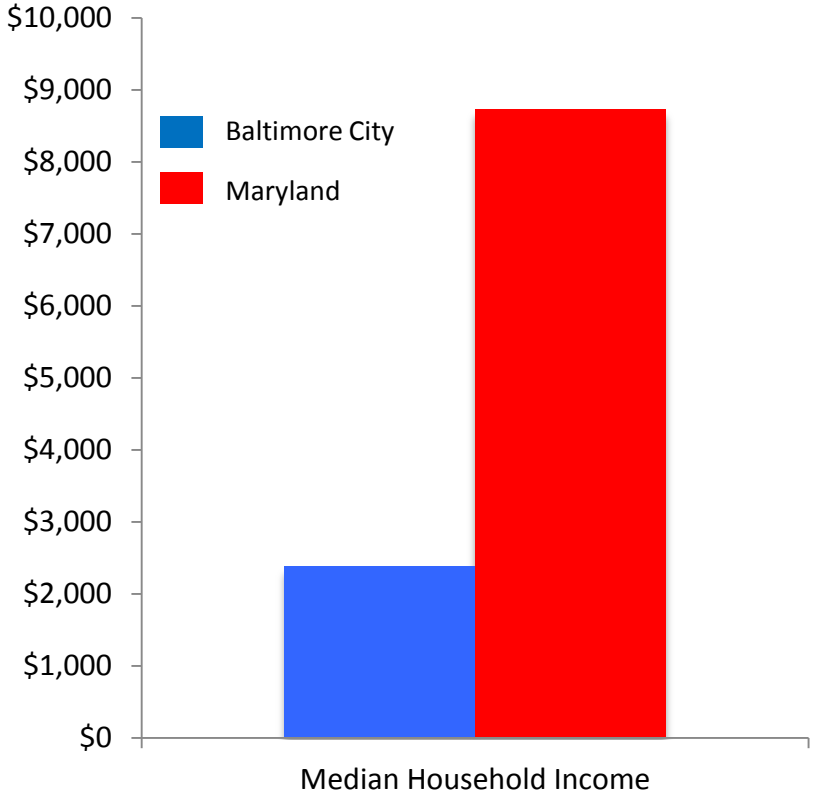
MARYLAND
Department of Health and Mental Hygiene

Demographic and Social Determinants of Health (Δ 2005-2000)

% Population Aged



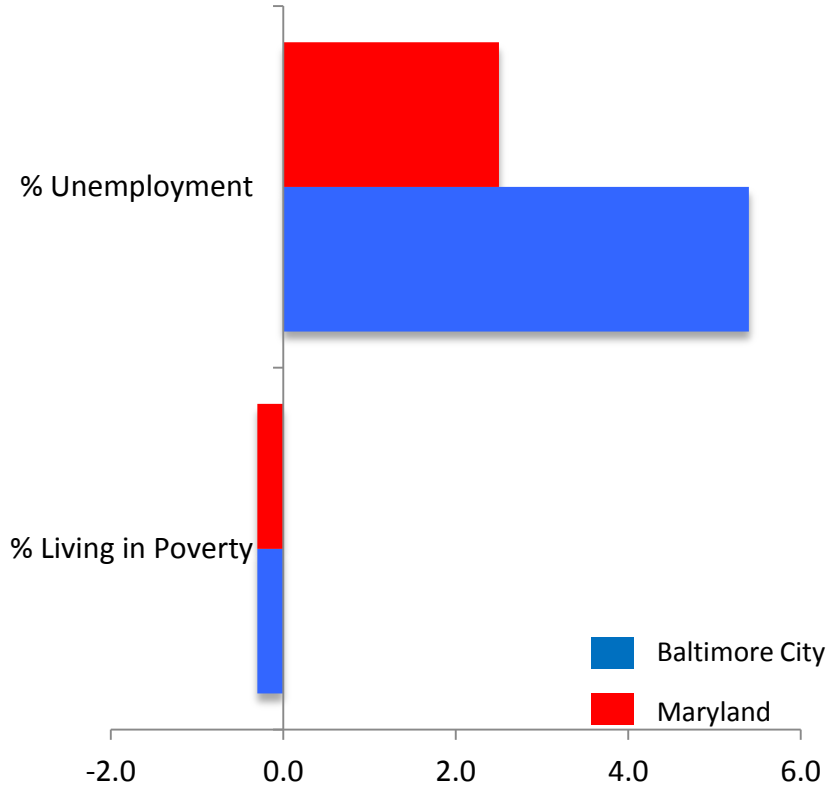
Household Income



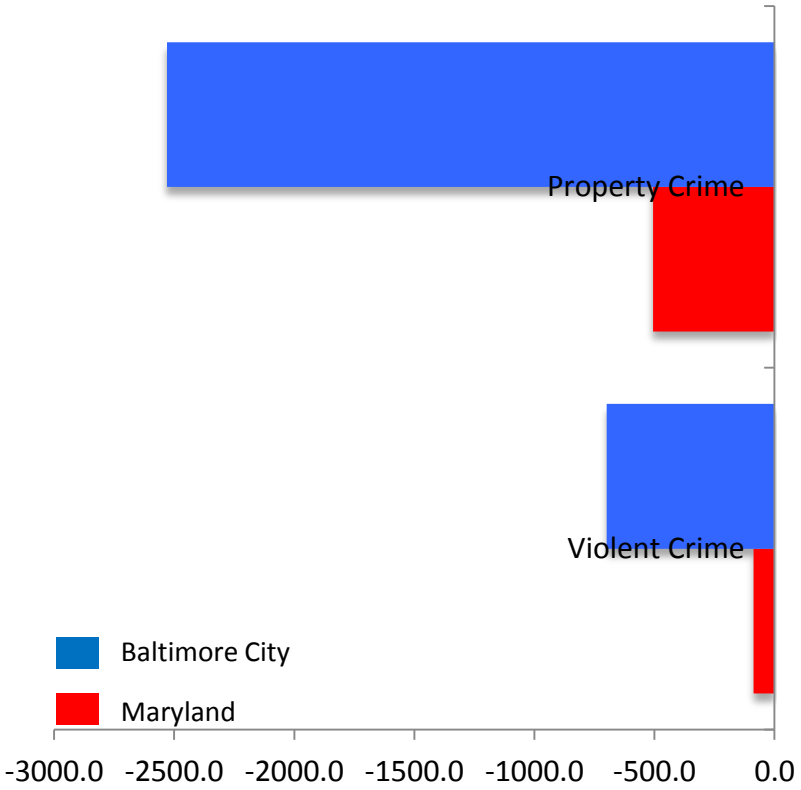
MARYLAND
Department of Health and Mental Hygiene

Demographic and Social Determinants of Health (Δ 2005-2000)

Socioeconomic Status



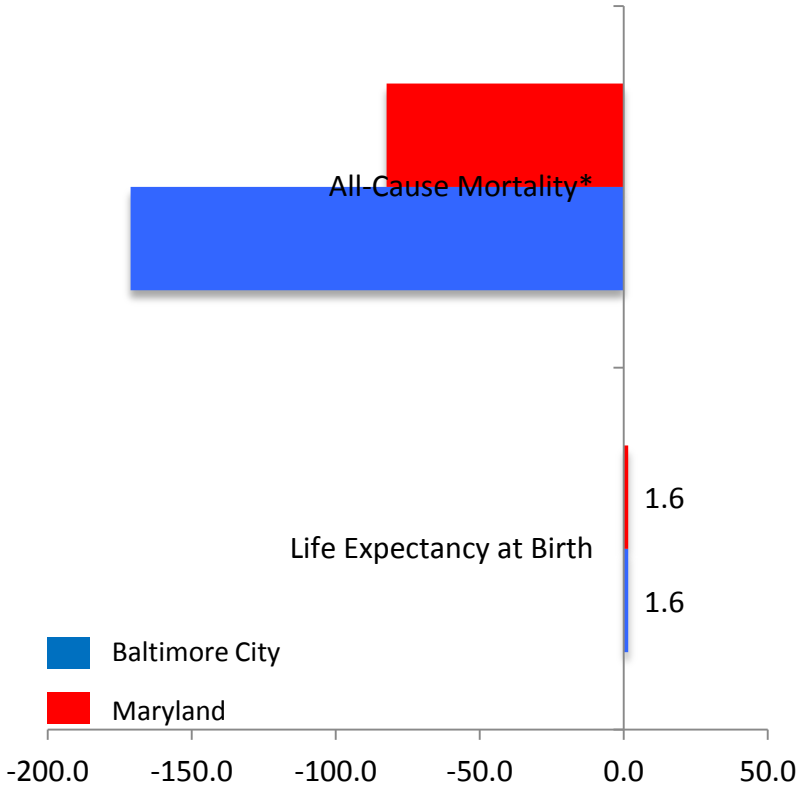
Crime Rate per 100,000 residents



MARYLAND
Department of Health and Mental Hygiene

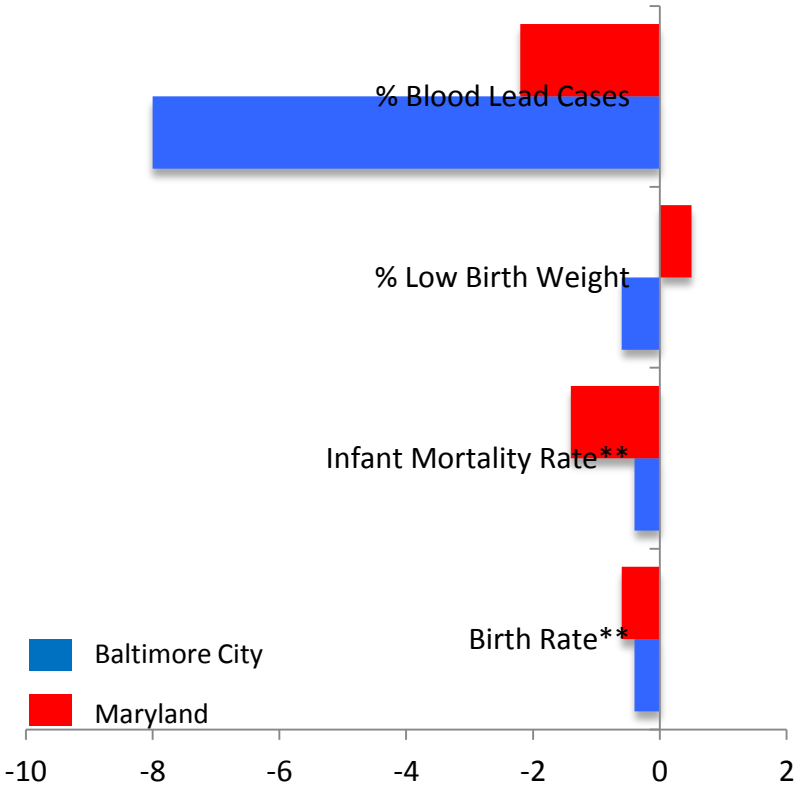
Demographic and Social Determinants of Health (Δ 2005-2000)

Overall Health



*Rate per 100,000 residents

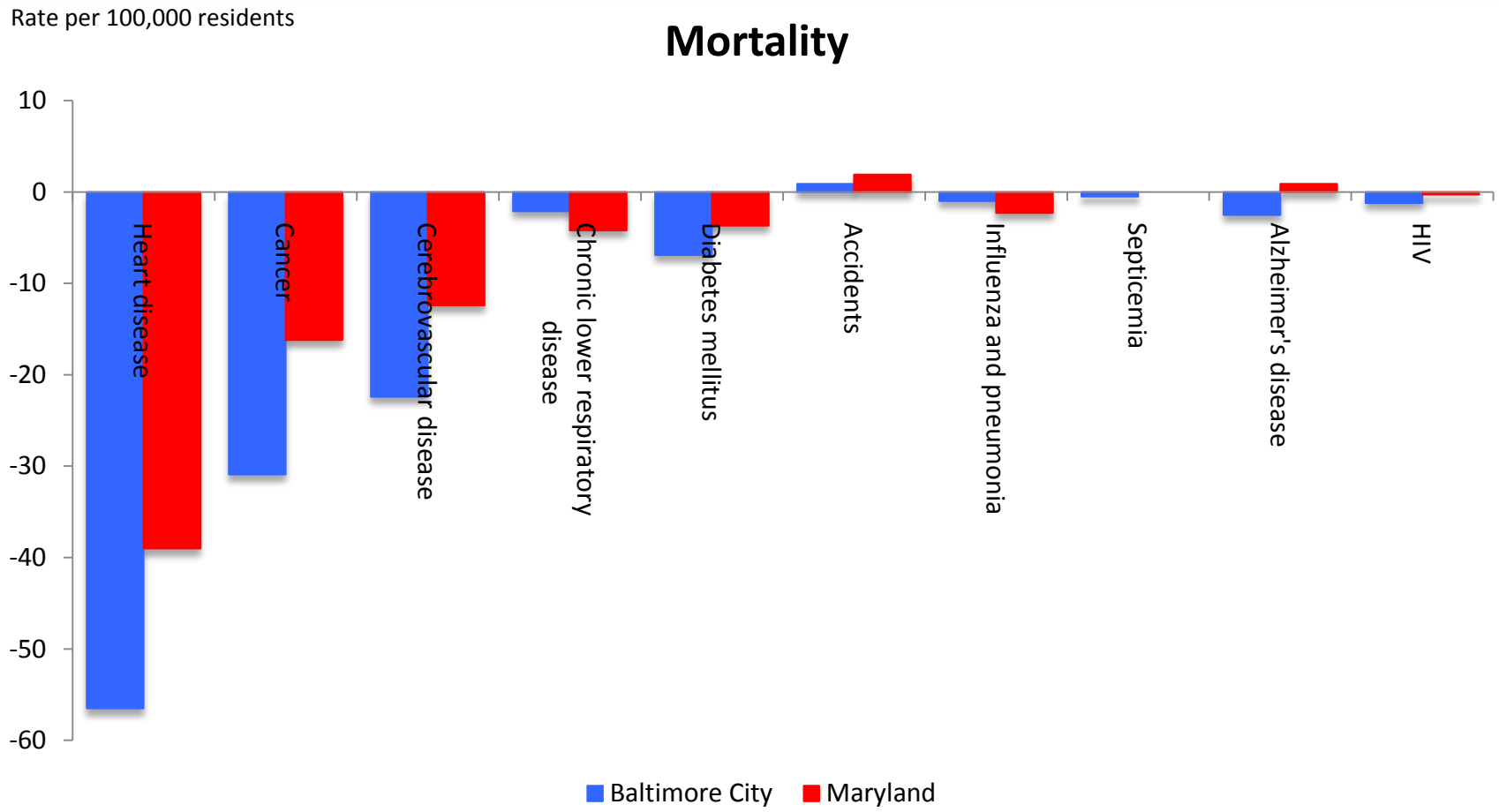
Maternal/Child Health



**Rate per 1,000 births

MARYLAND Department of Health and Mental Hygiene

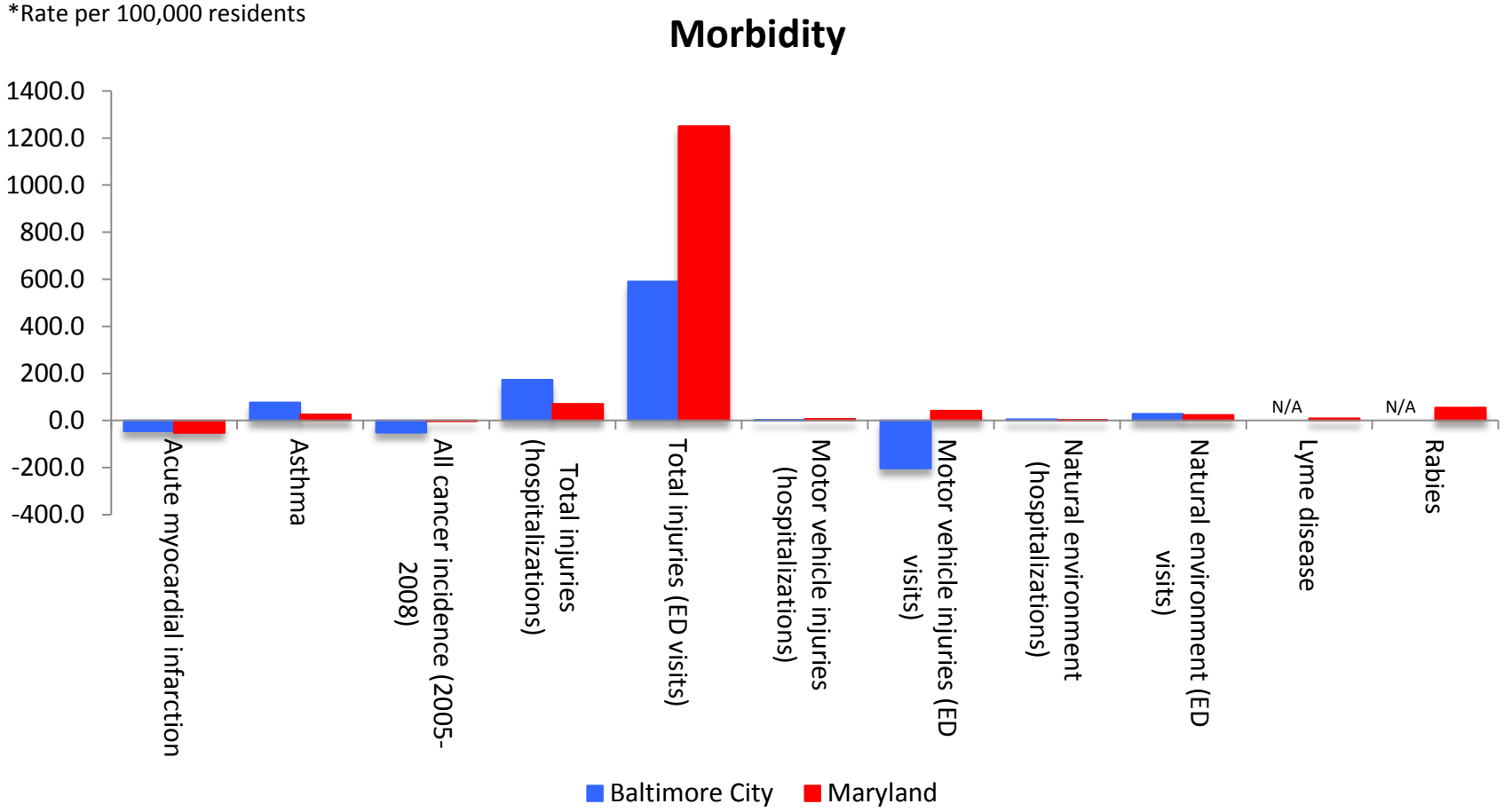
Demographic and Social Determinants of Health (Δ 2005-2000)



MARYLAND
Department of Health and Mental Hygiene

Demographic and Social Determinants of Health (Δ 2005-2000)

*Rate per 100,000 residents

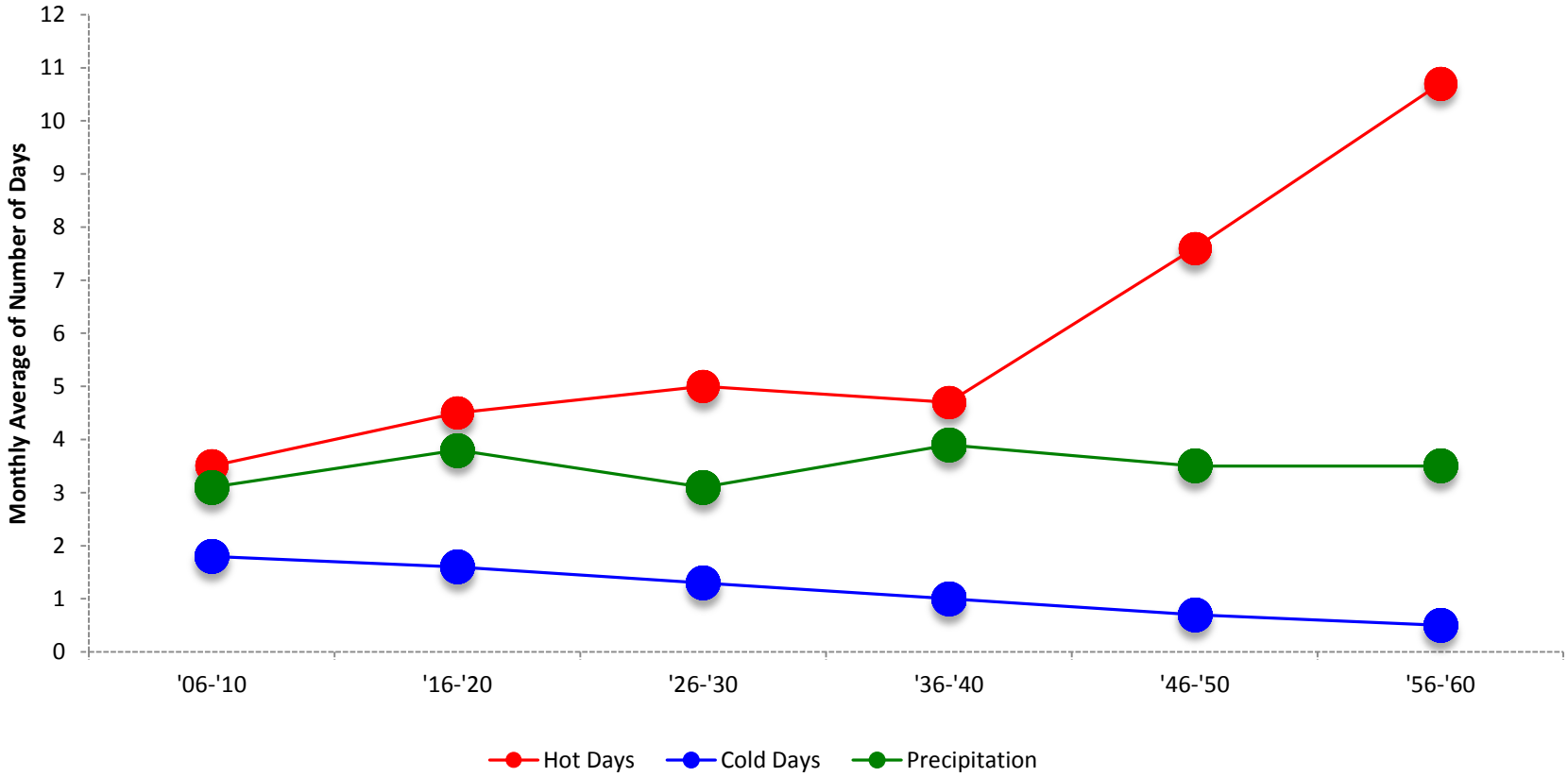


MARYLAND
Department of Health and Mental Hygiene

Provided by University of Maryland School of Public Health
Amir Sapkota, PhD
Chengsheng Jiang, PhD

CLIMATE CHANGE FORECASTS

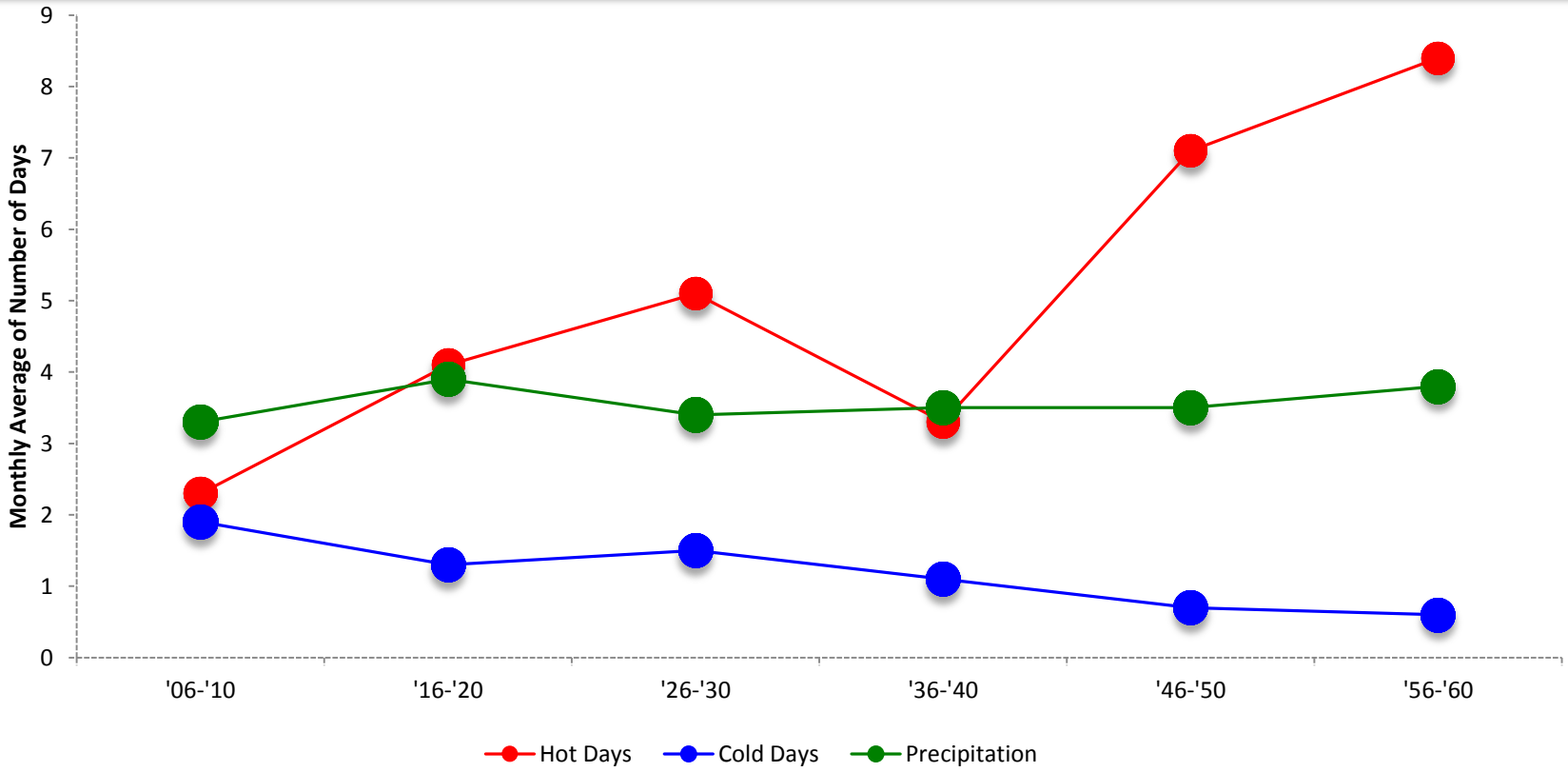
Climate Forecasts
(10th Percentile)



Annual

MARYLAND
Department of Health
and Mental Hygiene

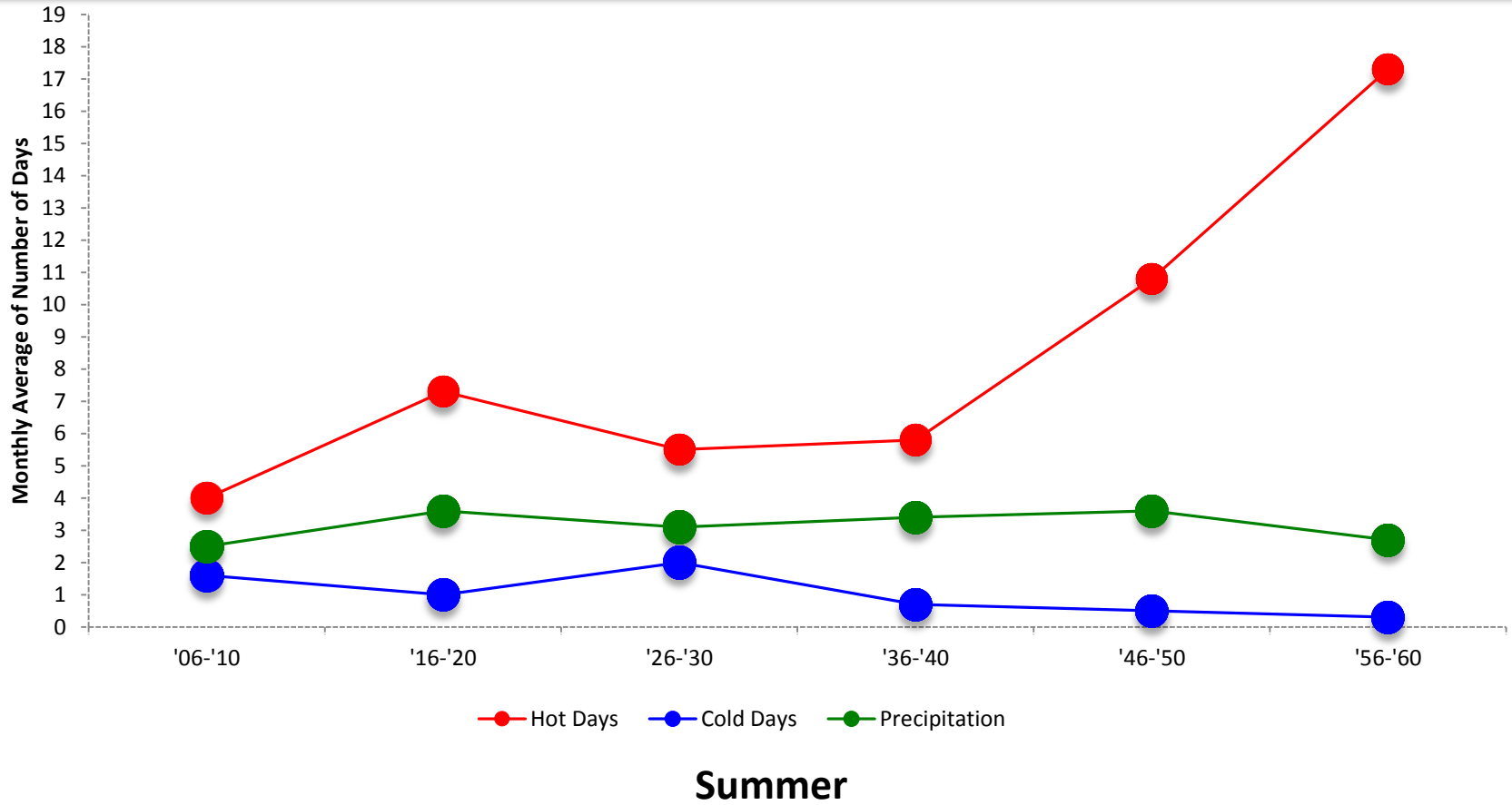
Climate Forecasts
(10th Percentile)



Spring

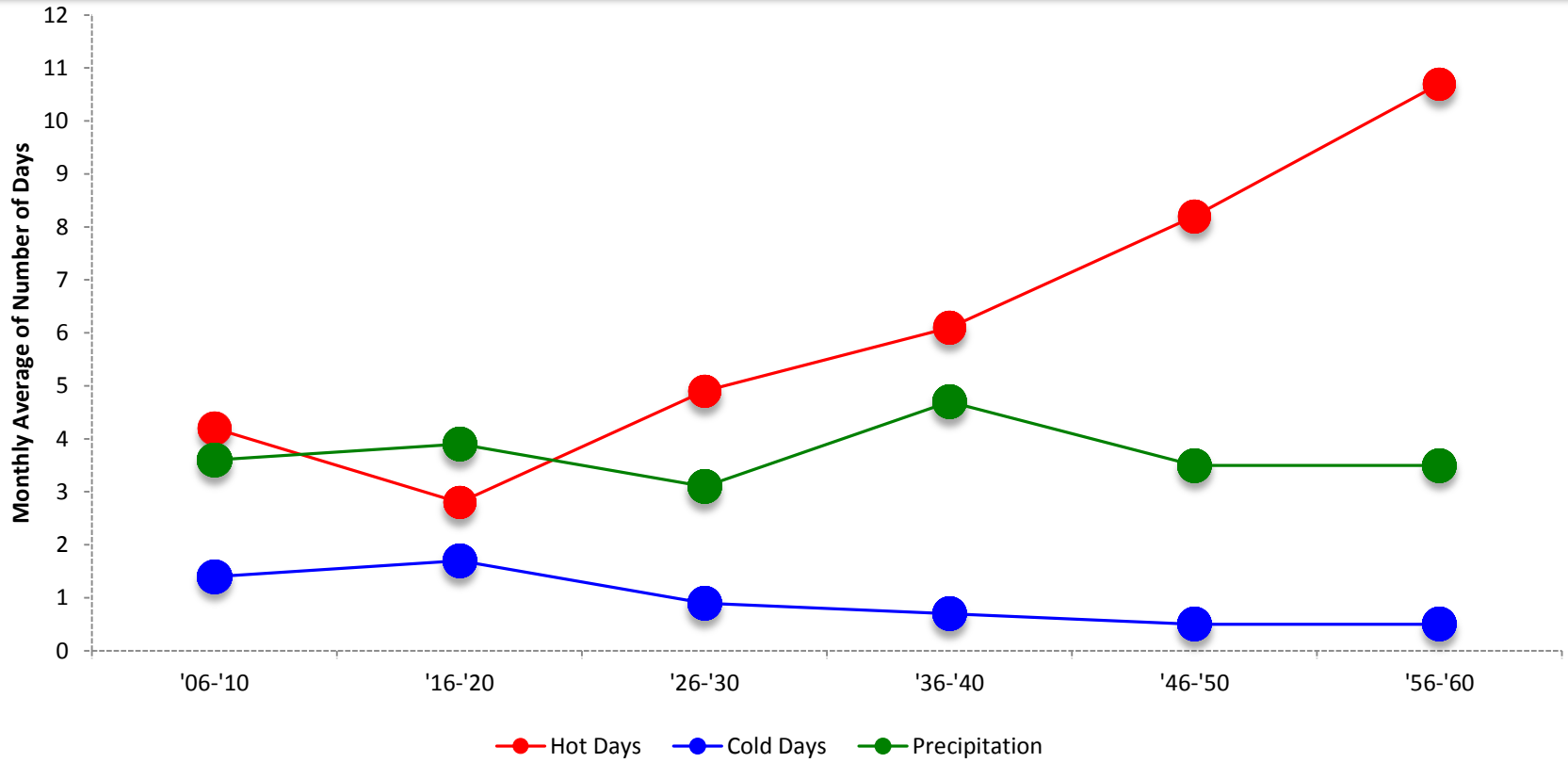
MARYLAND
Department of Health
and Mental Hygiene

Climate Forecasts
(10th Percentile)



MARYLAND
Department of Health
and Mental Hygiene

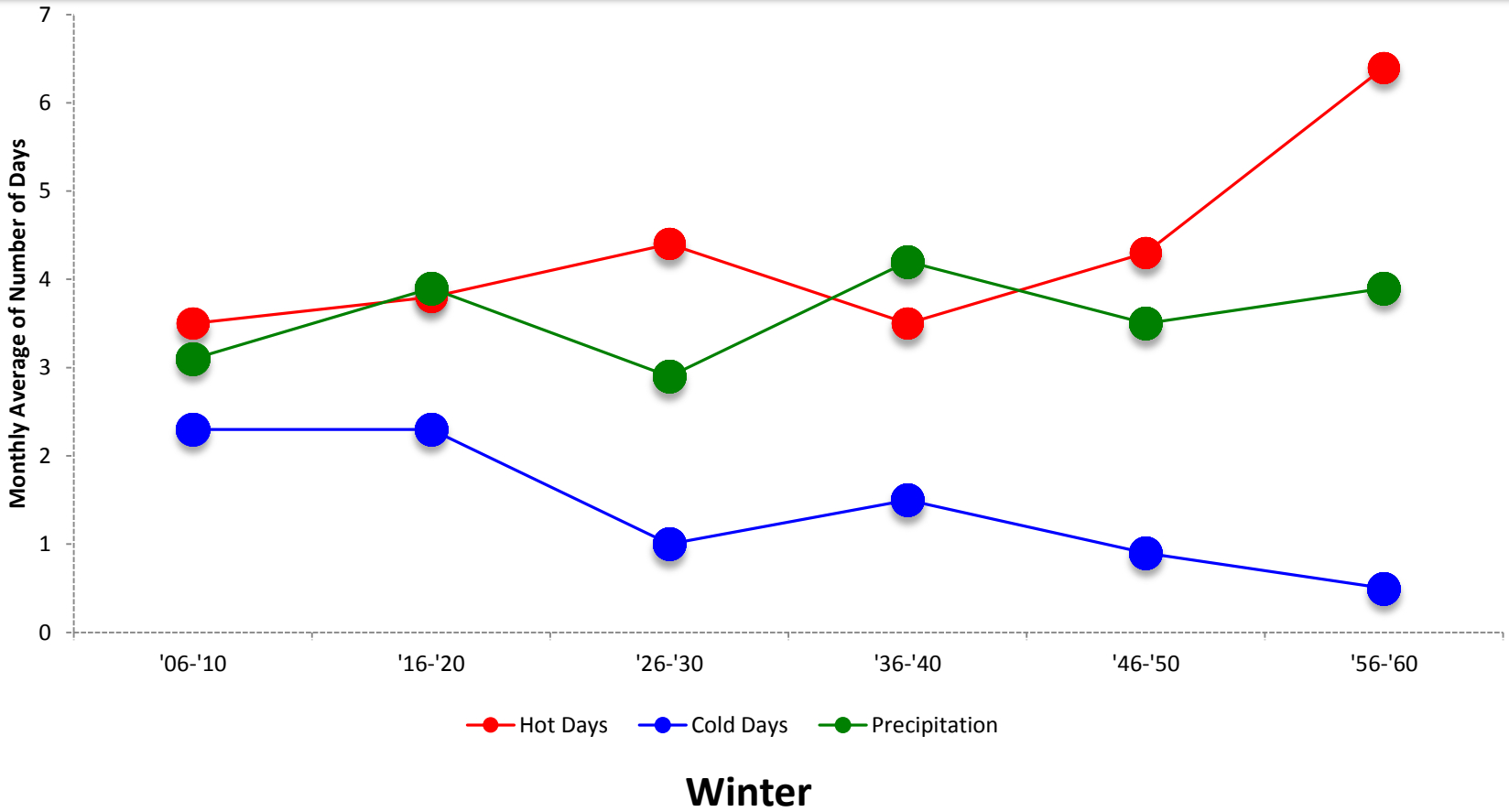
Climate Forecasts
(10th Percentile)



Autumn

MARYLAND
Department of Health
and Mental Hygiene

Climate Forecasts
(10th Percentile)



MARYLAND
Department of Health
and Mental Hygiene

PUTTING IT ALL TOGETHER

Distributions of Yearly Extreme Events from 1979 to 2060

- In what way can the data be used to develop a set of priorities and interventions based on those priorities?
- What is the process by which Baltimore City can complete the objectives?
- Who are some community partners that are:
  1. Interested in climate change
  2. Vulnerable populations that lack foresight
  3. Health cares systems and health providers
  4. Business community
  5. Academic community

Timeline

October '14	January '15	April '15	July '15
Title	**Title**	**Title**	**Title**
• List of activities • Bullet 1 • Bullet 2 • Bullet 3 • Bullet 4	• List of activities • Bullet 1 • Bullet 2 • Bullet 3 • Bullet 4	• List of activities • Bullet 1 • Bullet 2 • Bullet 3 • Bullet 4	• List of activities • Bullet 1 • Bullet 2 • Bullet 3 • Bullet 4
• Outcome 1 • Outcome 2 • Outcome 3	• Outcome 1 • Outcome 2 • Outcome 3	• Outcome 1 • Outcome 2 • Outcome 3	• Outcome 1 • Outcome 2 • Outcome 3

Closing Remarks

Thank you!