

Climate Change and Public Health Planning in Maryland

February 7, 2017

Healthy Communities Task Force

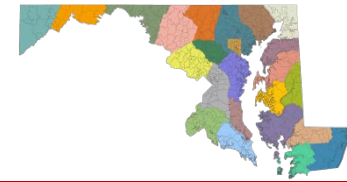
Delaware Valley

9:00am - 12:00



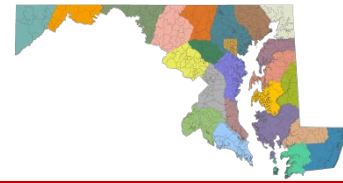
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GOALS FOR TODAY

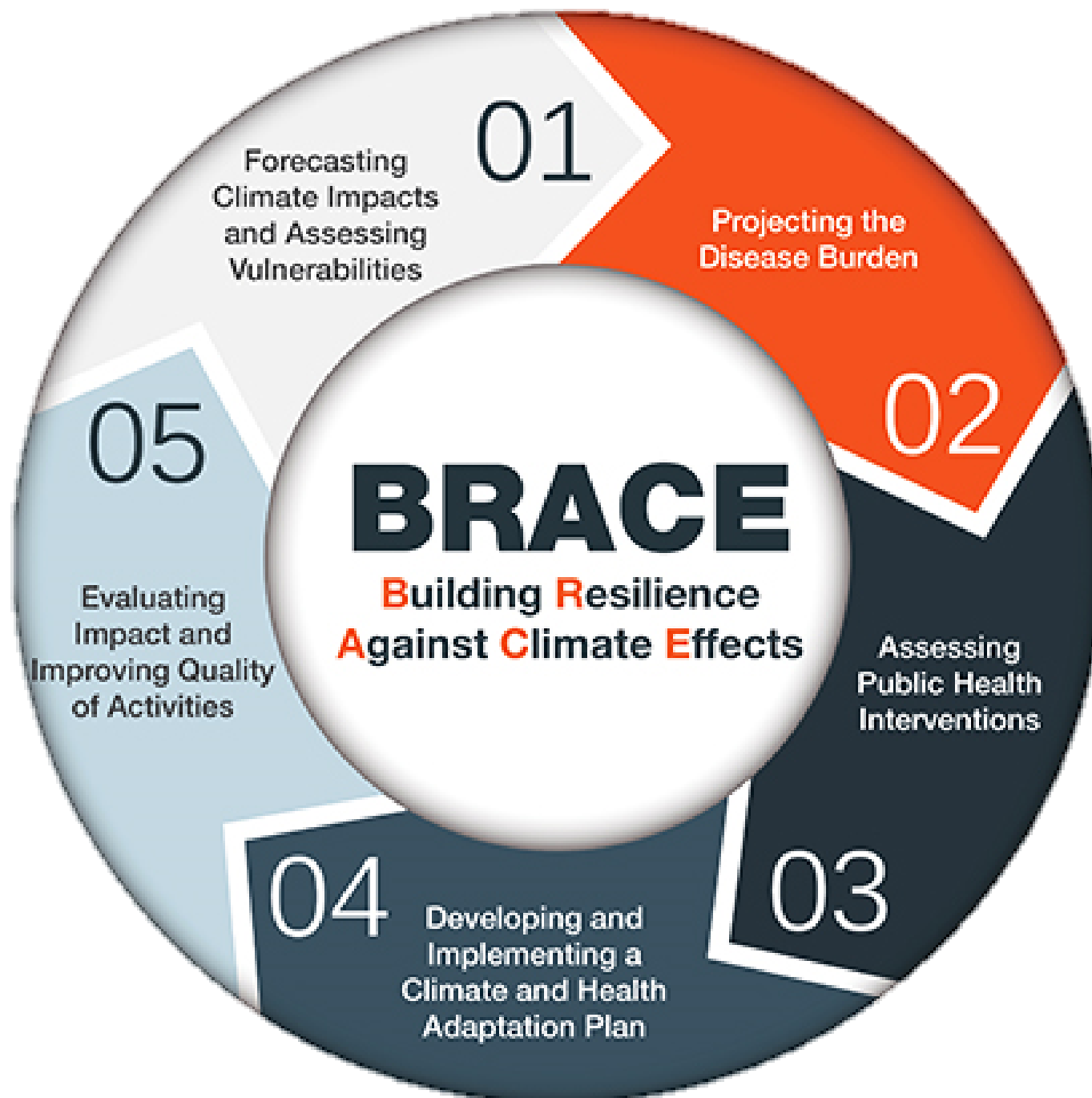


- Provide an overview of CDC's **B**uilding **R**esilience **A**gainst **C**limate **E**ffects (**BRACE**)
- Discuss Maryland's Public Health Strategy for Climate Change
- Describe how the Public Health Strategy for Climate Change fits into the State's Climate Change Adaptation and Response Plan

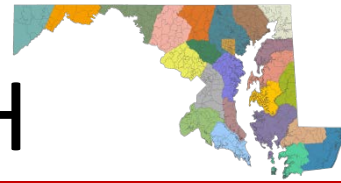
Building Resilience Against Climate Effects (BRACE)



- U.S. Centers for Disease Control and Prevention (CDC) 2014 framework to assist states and cities in developing resilience to climate effects
- Goal – use health data, forecast models to look at potential impacts, develop interventions and adaptations to climate impacts
- Assumes – involvement with affected communities, vulnerable populations

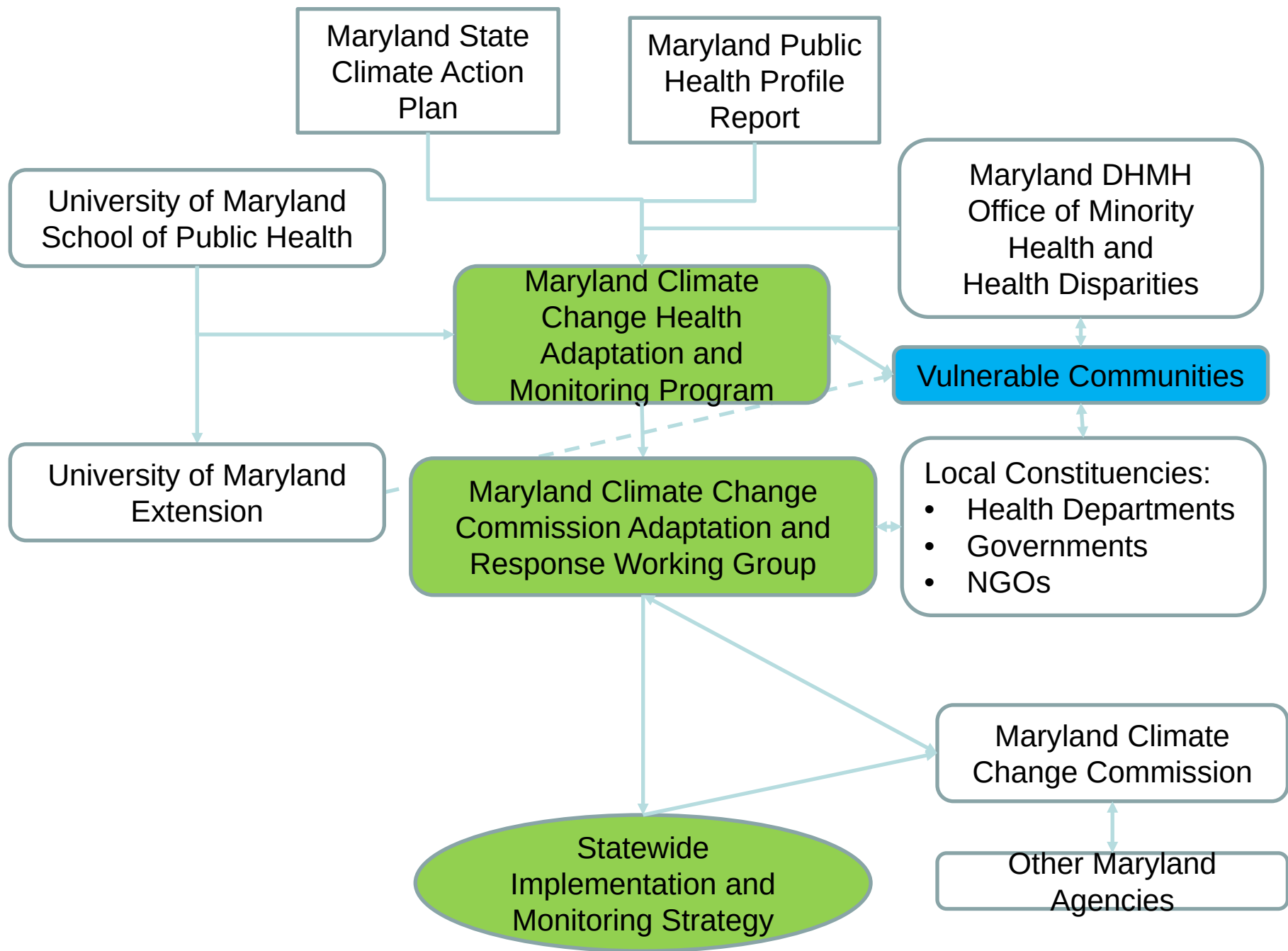


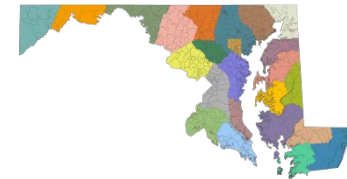
MARYLAND'S PUBLIC HEALTH STRATEGY FOR CLIMATE CHANGE



- 2007 -- Maryland Climate Commission
- 2008 – Maryland Climate Action Plan
- 2012 –Department of Health and Mental Hygiene Public Health Strategy for Climate Change
- 2016 – Maryland Climate and Health Profile Report
- 2016 – New five-year CDC cooperative agreement on climate change with states, cities







Amir Sapkota

MARYLAND HEALTH, COMMUNITIES, AND THE ENVIRONMENT



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Maryland Health, Communities and Environment

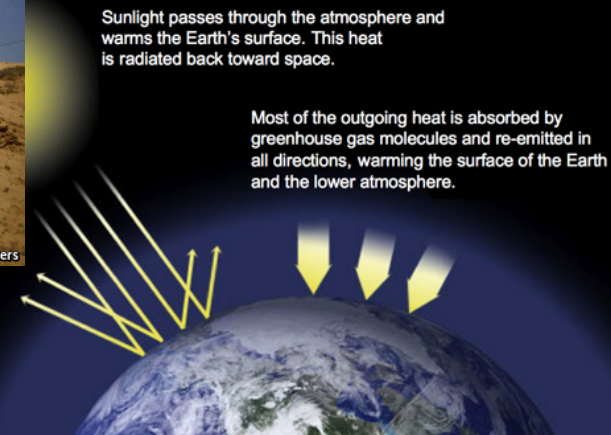
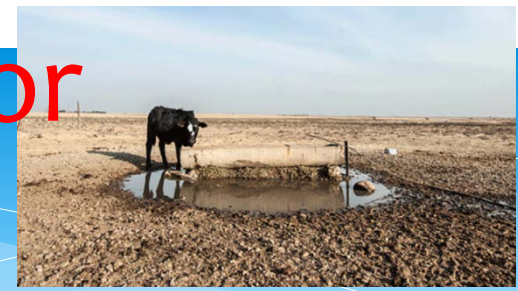
Who is most at risk & Where are the most vulnerable communities?
Summary of results from DHMH-UMD Project.

Building Resilient Communities in Maryland: A Stakeholder Forum

Friday December 9, 2016

Amir Sapkota, PhD
Associate Professor
University of Maryland School of Public
Health, College Park

Google Image for Climate Change



Source: Google image

What are the impacts in our backyard?



Source: google image

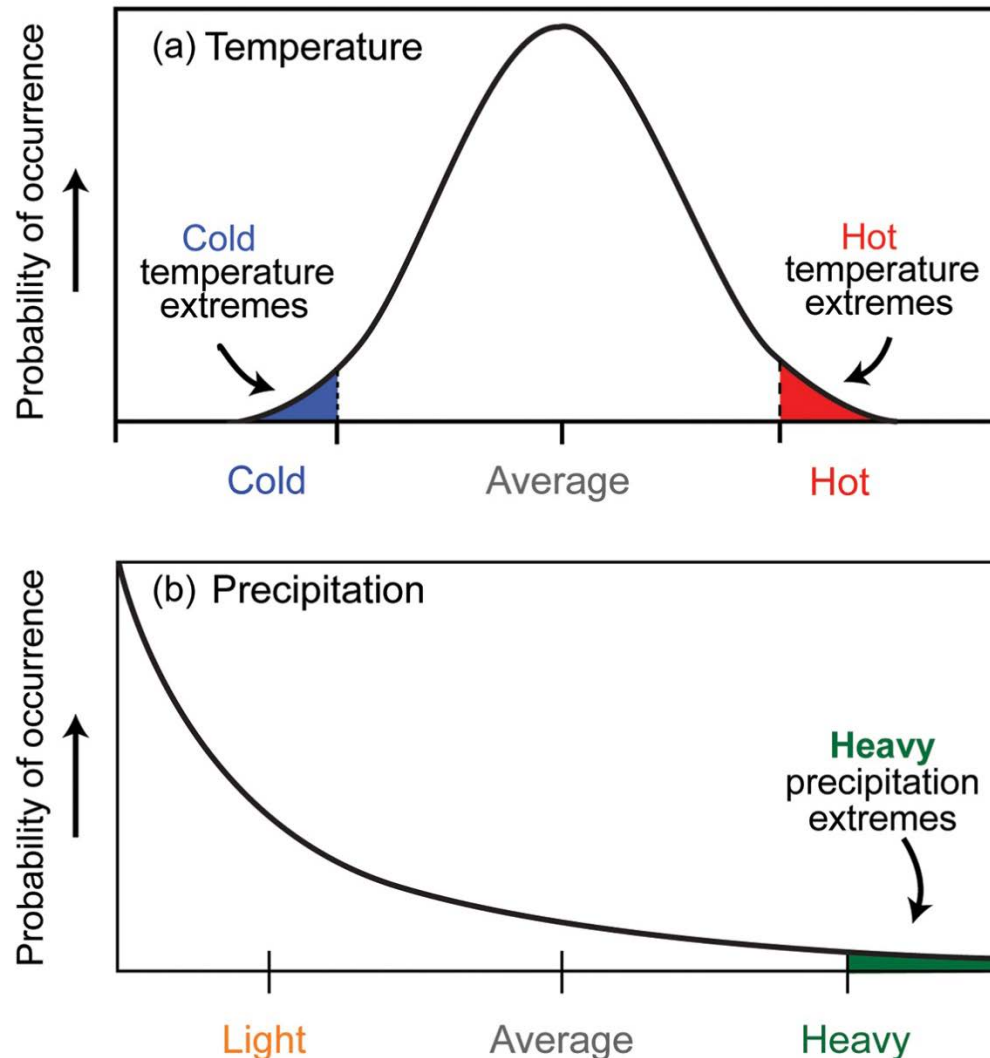
Weather vs Climate vs Climate Change



- **Weather:** It is what you get: look out of the window now.
- **Climate:** Aggregated pattern of weather averages, extremes, timing, geographic distribution) of...
 - *hot & cold; cloudy & clear; humid & dry; drizzles & downpours; snowfall, snowpack, & snowmelt; blizzards, tornadoes, & typhoons*
- **Climate Change:** *Altered patterns* of Climate
 - Deviation from the long term averages
 - Global average temperature is just one measure of the state of the global climate, but perhaps the only measure that is talked about.

Extreme weather events

(heat waves, torrential downpours, Extreme cold, Draught, Hurricanes)



Extreme weather events are becoming:

- More frequent
- More intense
- Longer lasting

This trend is expected to continue in response to changing climate

Maryland Climate and Health Profile Report

April, 2016

Maryland Institute for Applied Environmental Health
University of Maryland School of Public Health
College Park

Prepared for the
Maryland Department of Health and Mental Hygiene



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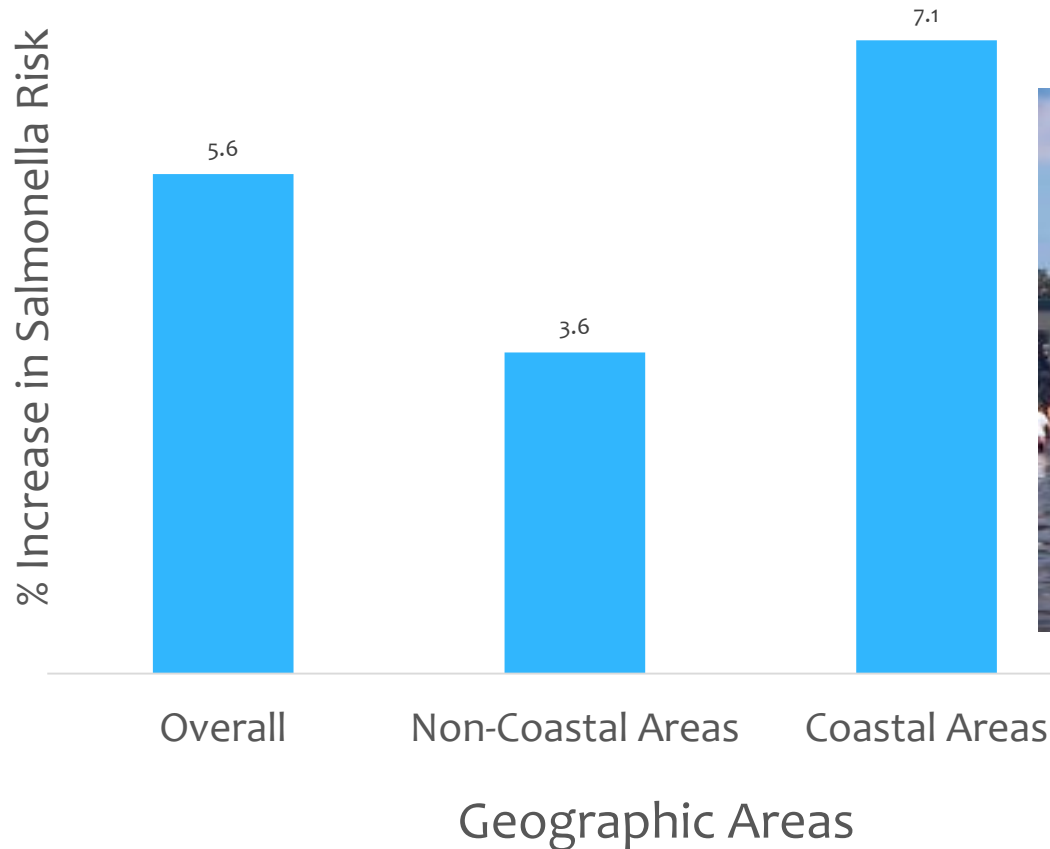
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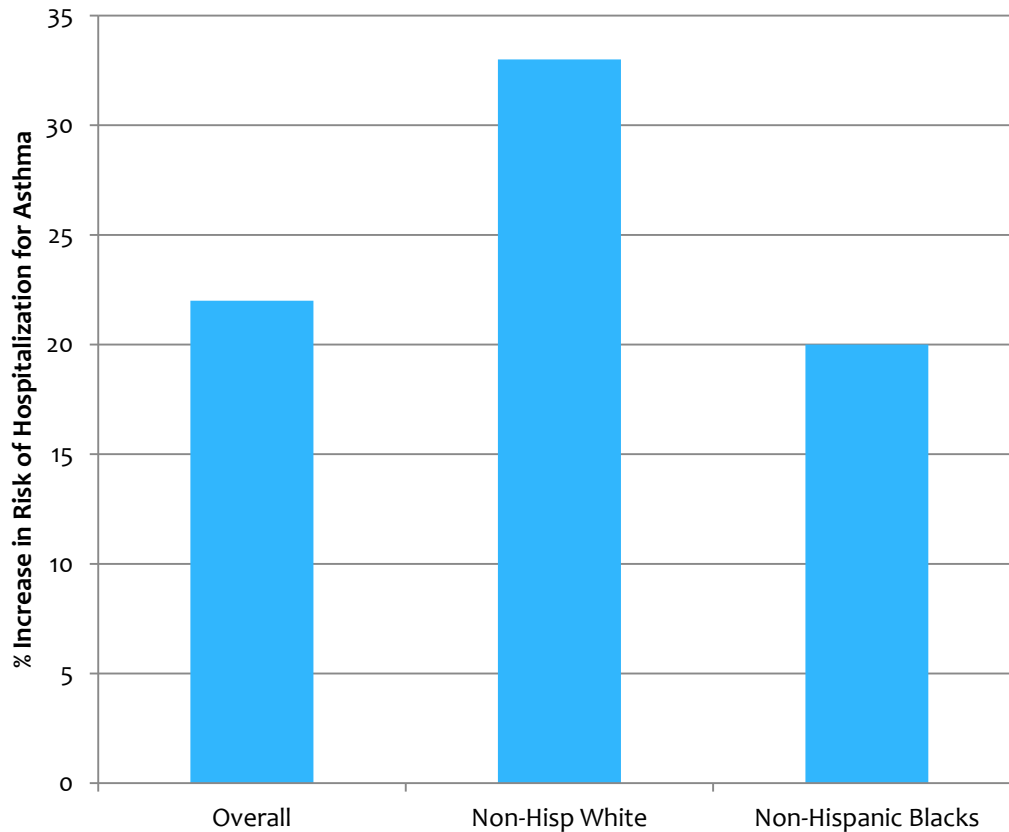
http://phpa.dhmdh.maryland.gov/OEHFP/EH/Shared%20Documents/Climate%20Change/MD_climate_and_health_FullReport_04182016%20Final.pdf

Increased Risk of Salmonella Associated with Extreme Precipitation



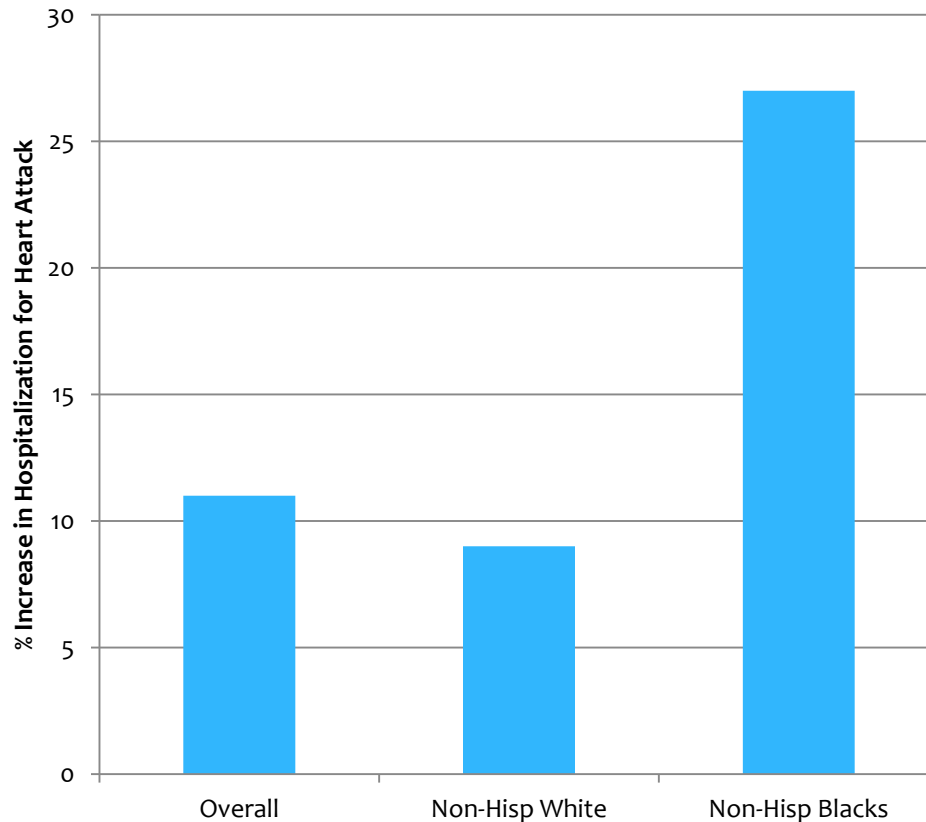
Picture: climatechange.maryland.gov/science/

Extreme Heat Events and Risk of Hospitalization for Asthma



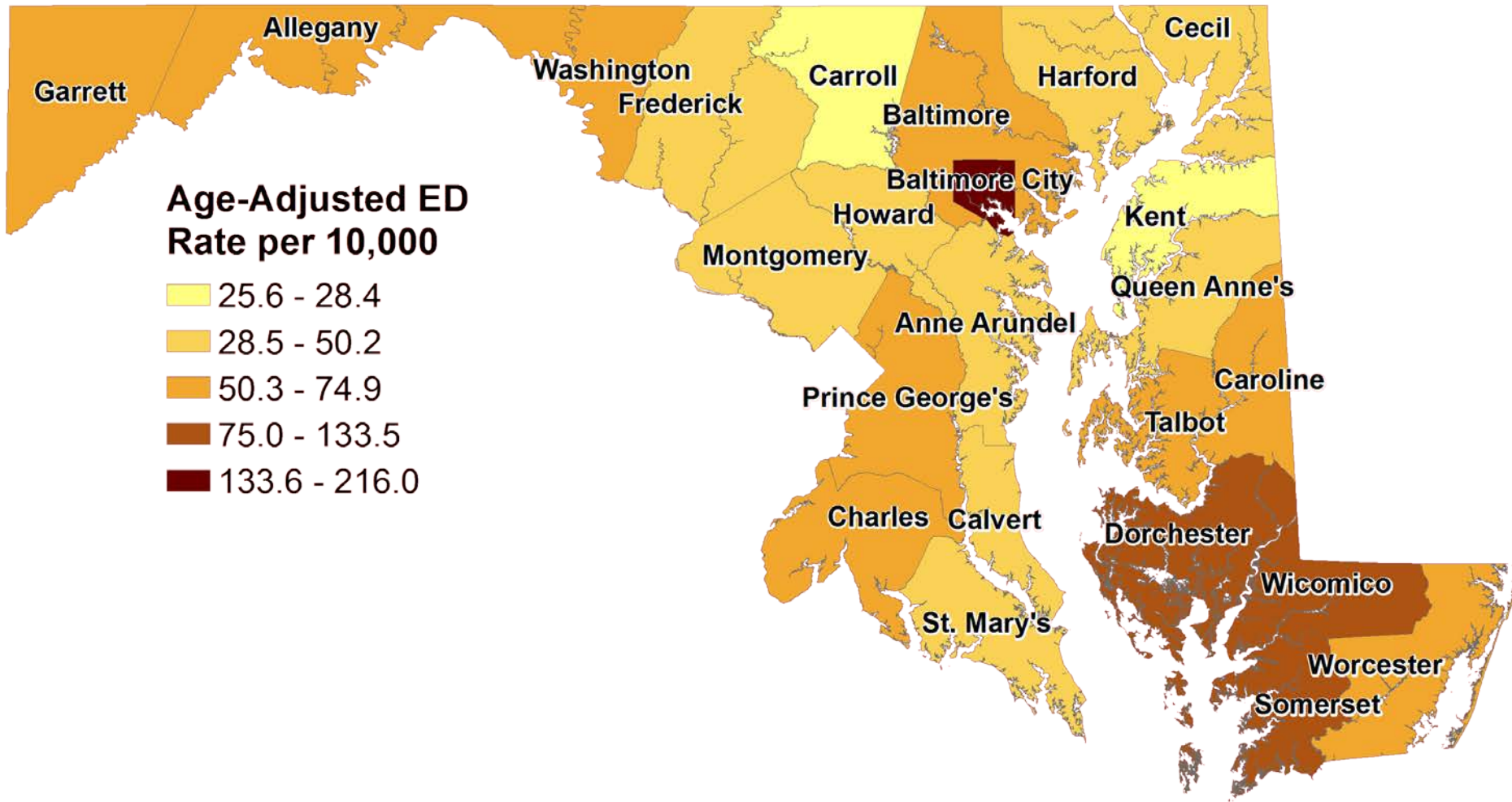
Baltimore.cbslocal.com

Extreme Heat Events and Risk of Hospitalization for Heart Attack

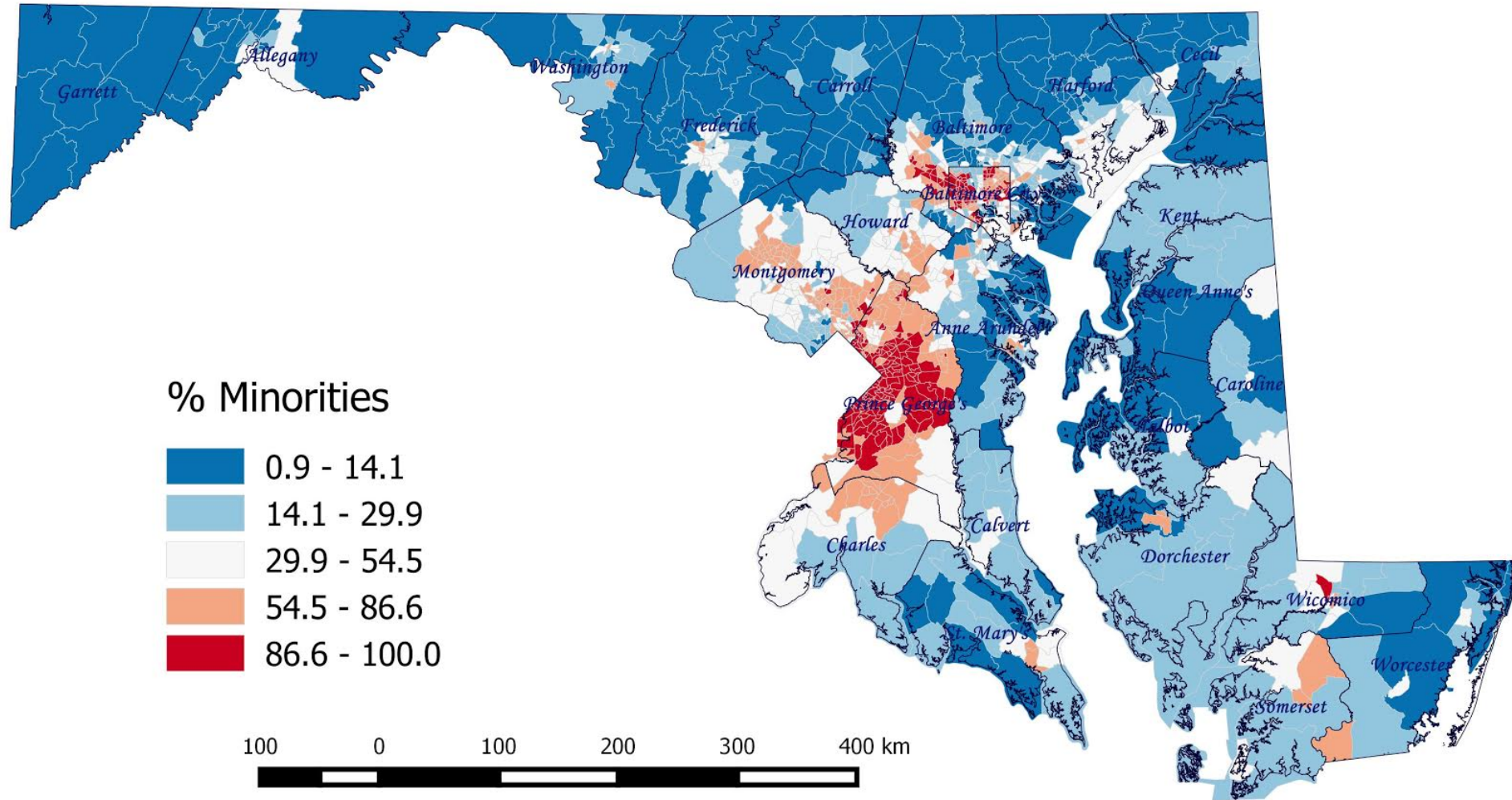


Cnn.com

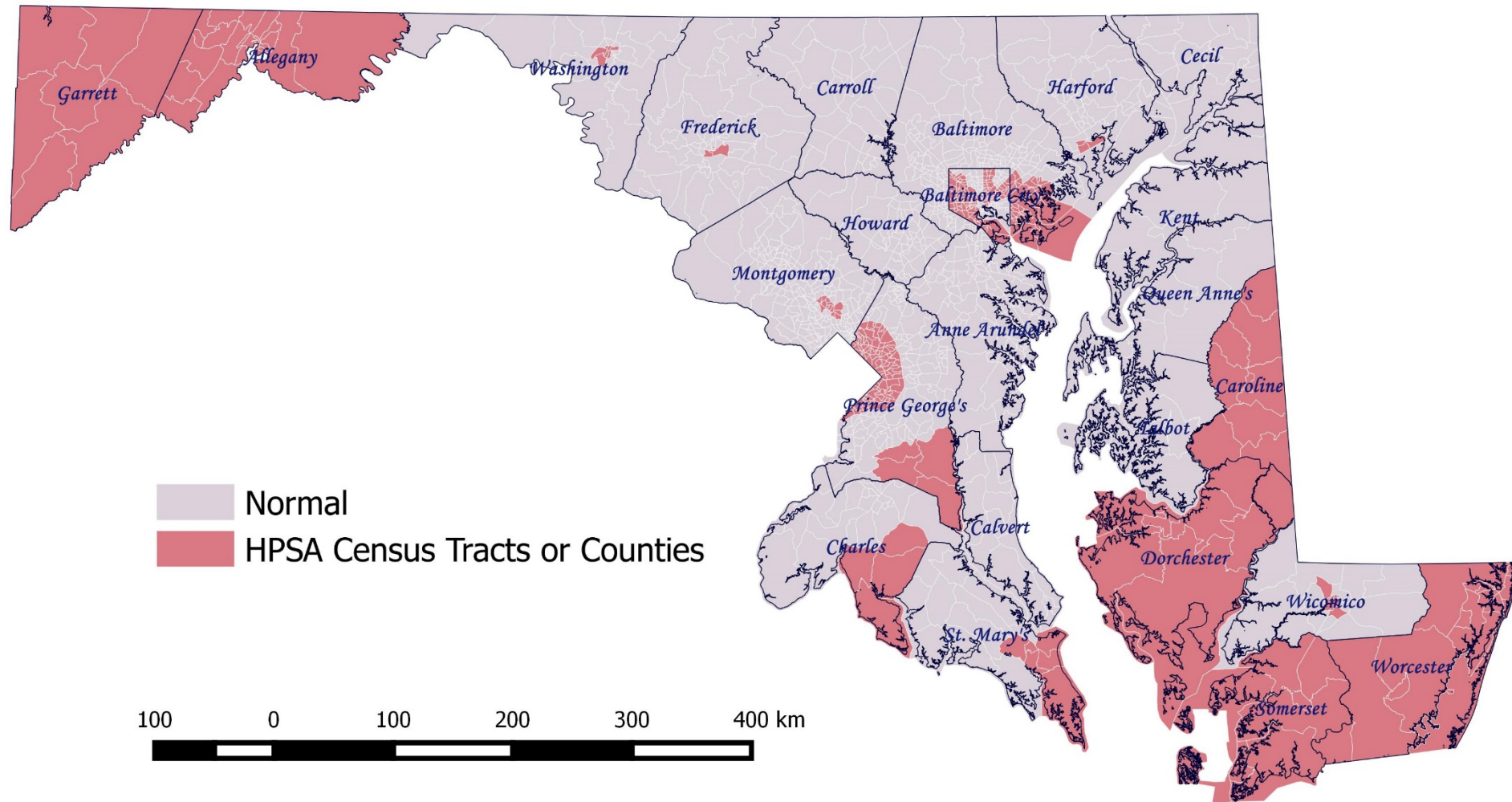
Asthma Hospitalization Rate by County



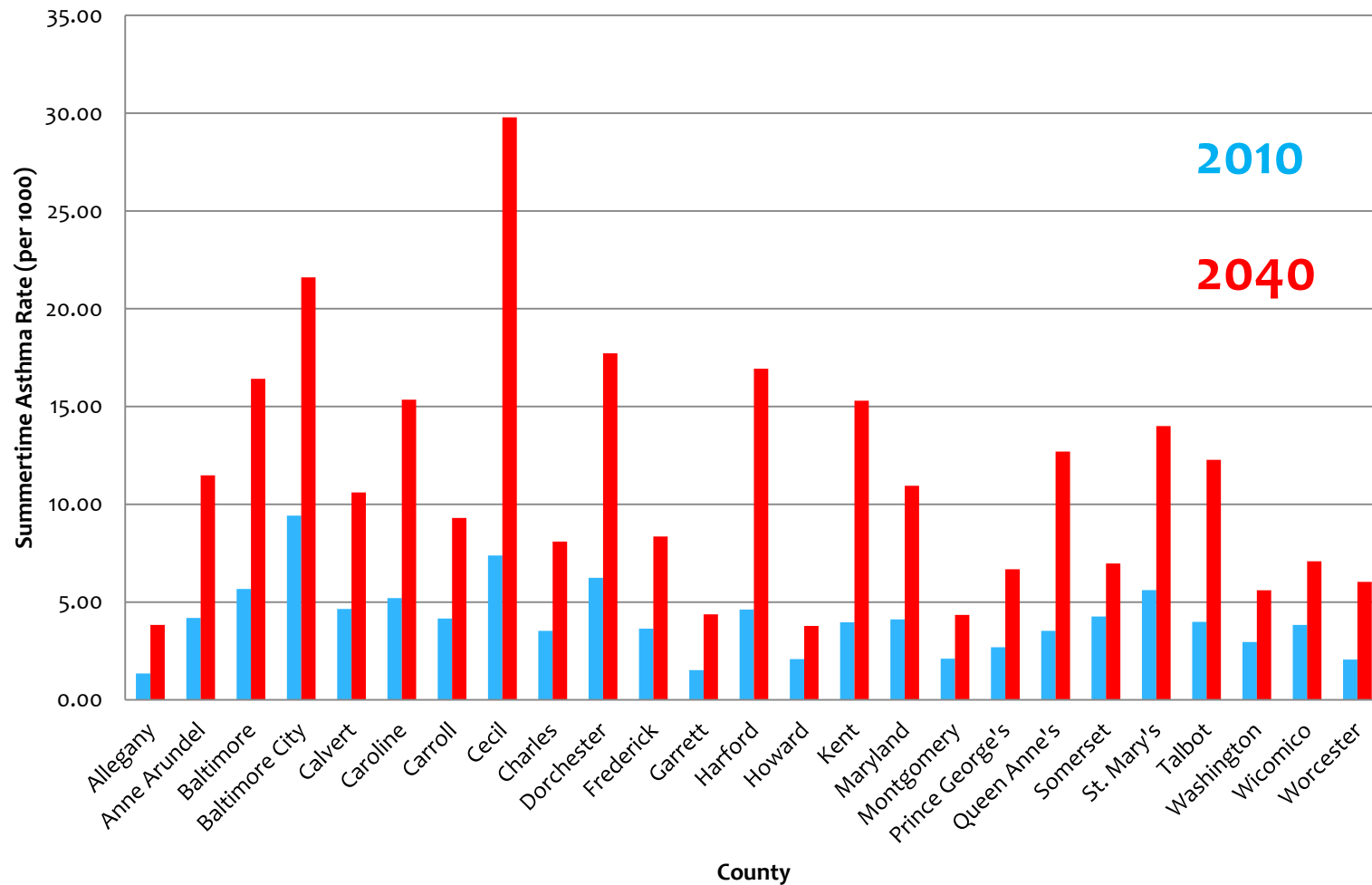
Percent Minority Population by Census Tract



Health Professional Shortage Areas



Summertime Asthma Hospitalization Rate by County



Summary

- Health of our communities is being impacted by extreme weather events
 - Recall that such extreme events are becoming more common, more intense, and longer lasting.
- The adverse health impact experienced by Marylanders is not equally distributed across geographic areas or population groups.
- The impact at local level will be exacerbated by existing disparities, individual sensitivity, preexisting conditions, and capacity to adapt.
- Planning is critical for building resilience. Must engage local stakeholders: planners, community leaders, faith groups, community health workers, citizen groups and non-profits.

ADAPTATION AND RESPONSE PLAN



MARYLAND COMMISSION ON CLIMATE CHANGE ADAPTATION & RESPONSE WORKING GROUP 2016 ACTION PLAN

APRIL 18, 2016

Maryland's Commission on Climate Change is charged with advising the Governor and General Assembly on ways to mitigate the causes of, prepare for, and adapt to the consequences of climate change and maintaining and strengthening the State's existing Greenhouse Gas Reduction Plan. The Commission is supported by a Steering Committee and four working groups. The Adaptation and Response Working Group is charged with developing a Comprehensive Strategy for Reducing Maryland's Climate Change vulnerability. The Strategy includes both short-and long-term measures that State and local governments may undertake in planning for and adapting to diverse impacts of climate change.



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HUMAN HEALTH ADAPTATION AND RESPONSE WORK PLAN 2016



CHALLENGE: HUMAN HEALTH

Enhancing preparedness to protect human health, safety, and welfare.

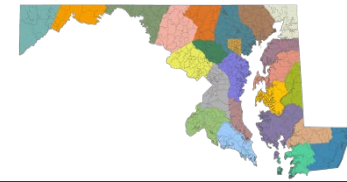
Solutions

- 7 Conduct vulnerability assessments to gain a better understanding of risks and inform preventative responses.
- 8 Integrate impact reduction strategies into State and local planning practices.
- 9 Streamline and revise data collection and information dissemination channels.



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WHAT MARYLAND IS DOING



- Engaging with stakeholders – “Building Resilient Communities in Maryland: A Stakeholder Forum” – Dec 9, 2016
- Working within existing networks of community engagement and collaboration to bring additional resources
- Identifying vulnerable communities and trusted messengers to work with us in the vulnerable communities
- Creating an Implementation and Monitoring Strategy to track interventions and adaptations, provide tools for local communities, and facilitate data dissemination
- Working with planners on master plans

