Climate Change and Health Equity

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Climate Change and Health Equity Program
Office of Health Equity

D4AS/P4H
2nd Regional Convening of Public Health Officers and Planning Directors
June 7th, 2017
Climate Change and Health Equity

- Climate Change and Health
  - Overview of Health Impacts
  - Connecting Climate Change and Health Equity
    - How Inequity Increases Vulnerability
  - Public Health and Planning Interventions
    - Promoting Resilience

- Climate and Health Planning and Communication
  - CalBRACE Climate and Health Assessments
  - Climate Change and Health Profile Reports
  - OutsideIn Capital Region
  - Cooling co-benefits
Human Health Impacts of Climate Change

- Heat-related illness and death, cardiovascular failure
- Extreme heat
- Severe weather
- Air pollution
- Changes in vector ecology
- RISING CO2 levels
- Rising sea levels
- Malnutrition, diarrheal disease
- Water and food supply impacts
- Water quality impacts
- Cholera, cryptosporidiosis, campylobacter, leptospirosis, harmful algal blooms
- Malaria, dengue, encephalitis, hantavirus, Rift Valley fever, Lyme disease, chikungunya, West Nile virus
- Forced migration, civil conflict, mental health impacts
- Environmental degradation
- Respiratory allergies, asthma
- Increasing allergens

Source: CDC, US Climate Resilience Toolkit; adapted from J. Patz
## HOW PEOPLE DIE IN THE SACRAMENTO REGION

<table>
<thead>
<tr>
<th>County</th>
<th>Leading Causes #1</th>
<th>Leading Causes #2</th>
<th>Leading Causes #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Stroke</td>
</tr>
<tr>
<td>Nevada</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>Yolo</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>Yuba</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>Placer</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>Sutter</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>El Dorado</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Unintentional Injury</td>
</tr>
</tbody>
</table>

### IN-ACTIVITY IS THE NEW SMOKING!

PREVENTABLE THROUGH ACTIVE DESIGN
Equality
Everyone has the same

Equity
Everyone has what they need
• Climate change will impact all people, but the most vulnerable suffer the most
• Climate change magnifies existing health inequities
• Climate change is a threat multiplier, amplifying existing risks.
Climate Change is a Health Equity Issue

Climate Threats
- Extreme heat
- Urban Heat Islands
- Air pollution
- Drought

Vulnerability
- Susceptible Populations
- Pregnant women, Children, Elderly, People of Color
- Diabetes, Chronic Illness

Health Impacts
- Heat Illness
- Preterm births
- Mental health
- Respiratory disease
- Cardiovascular disease
Resilience

- IPCC - “The capacity of social, economic, and environmental systems to cope with a hazardous event, trend, or disturbance, responding or reorganizing in ways that maintain systems’ essential function, identity, and structure while also maintaining the capacity for adaptation, learning, and transformation”

- From “bouncing back” to “bouncing forward.”

- Climate Resilience
Addressing the Causes of the Causes

Public Health and Planning Interventions

• Public Health Adaptation Strategies
  • Use County Health Assessments and Improvement Plans, data, communications, consultation, existing programs, and policy to identify, prevent and reduce health inequities, vulnerabilities and health impacts from climate change.

• Planning Adaptation Strategies
  • Use General Plans, Climate Action and Adaptation Plans, policies and regulations to reduce health inequities, vulnerabilities and health impacts from climate change.

Goals and Strategies for Resilient Neighborhood Development Whose

• Protect and enhance overall health, natural environment, and quality of life

• Promote location and neighborhood design that reduces auto dependence

• Active Design and Active Transportation

• PLUS preparedness planning for climate impacts
RESILIENT NEIGHBORHOOD DEVELOPMENT

Increase Physical Activity
Reduce risk of:
• Obesity
• Heart Disease
• Hypertension

Reduce Air Pollution & Traffic Injuries
Reduces risk:
• Asthma
• Other respiratory diseases

Improve Mental Health
• Mental health & well-being
• Reduce stress, anxiety

Advance Health Equity
• Improve living conditions
• Community engagement
• Access to services and opportunity

Increase Social Cohesion
Increase:
• Social connection
• Sense of community

Improve Diets
• Increase access to healthy foods
Climate and Health Assessments

Goals

What is happening locally in the counties around climate change planning and adaptation?

What is awareness around regional risk?

What efforts exist to adapt to climate change? (public health/external)

Are they integrating/partnering?

What will be needed to accelerate efforts?
Regional Vulnerabilities

NORTH SIERRA:
- Rural mountainous region with few cities scattered along primary transport routes.
- Roseville (in Placer) is largest city.
- Lake Tahoe and surrounding resorts are main attractions.
- Tourism is primary economic activity.
- Risks: reduced tourism, ecosystem change, wildfire.

NORTHERN CENTRAL VALLEY:
- Largely agricultural, inland region.
- Largest city is Sacramento, the capital city.
- Central portion of the region defined by the Delta, with inland marshes and cities along transport corridors.
- Risks: reduced agricultural productivity, wildfire, and public health effects of heat.

<table>
<thead>
<tr>
<th>County</th>
<th>Pop.</th>
<th>% people living in poverty</th>
<th>Pop. over age 65</th>
<th>Pop. &lt; age 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Dorado</td>
<td>181,737</td>
<td>8%</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>Placer</td>
<td>367,309</td>
<td>7%</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>Sutter</td>
<td>94,737</td>
<td><strong>16%</strong></td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>Yolo</td>
<td>200,849</td>
<td><strong>17%</strong></td>
<td>10%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Priorities and Needed Resources for Public Health

- Funding
- Capacity
- Grants
- Political Will / Salience
- De-siloing

Successful Climate Adaptation Planning
Climate and Health Profile Reports

Goals

- Build capacity at local health departments
- Further climate and health adaptation planning
- Prevent injury and disease

Content

- Regional and county climate change projections
- Potential impacts on health
- Strategies for adapting and building resilience
Addressing Climate Change While Improving Health
Adaptation Co-Benefits from Cooling Strategies

Increase - Improve
- Heat warning system
- Cooling Centers
- Places to be active
- Improved aesthetics
- Social support

Reduce – Public Health Impacts
- Heat stress
- Asthma/allergy
- Depression
- Cardiovascular incidents
- Increased opportunities for exercise

Reduce – Environmental Impacts
- Heat island effect
- Energy consumption
- Lower energy costs
- Reduce air pollution
- Reduce storm water run-off
- Decrease flooding risk

• Increasing tree canopy, green spaces and parks,
• Improve access to cooling centers and water in heat events
What’s Good for Health, is Good for Climate

We care about healthy living in the Capital Region. OutsideIn means that the outside environment (climate) affects us on the inside (health). That is why we are concerned about climate change. Now is the time to come together as a community and talk about how hotter temperatures, drought risks and other climate change impacts are affecting our well-being. The good news is many actions that help reduce climate impacts also improve the health of our families and community.

Grow your own vegetables and fruits in a backyard or community garden. Visit communitygarden.org to find one near you.
Thank You!

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