Turning Up the Heat: Climate, Health & Equity





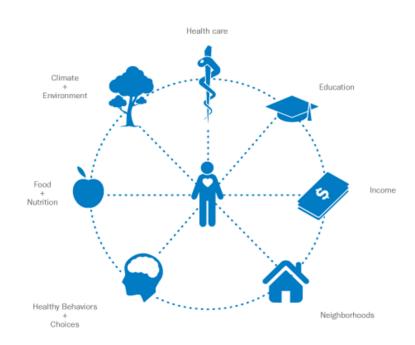
Dr. Jalonne L. White-Newsome, Senior Program Officer
The Kresge Foundation

Local Solutions: Eastern Regional Climate Preparedness Conference
April 4-6, 2016
Baltimore, Maryland

Healthiest Nation 2030 April 4 - 10, 2016



Social, environmental and individual factors influence our health as well as the opportunity to make healthy choices.



And inequities in these factors have greater impact on the health of people of color.

Presentation Outline

 Kresge and its interest in climate change and public health

 Framing climate resilience through a public health & equity lens

Resources

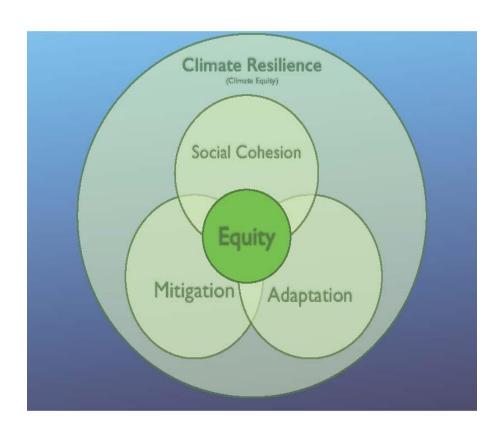
About Kresge

- Expand opportunities for low-income people in American cities
- Programs:
 - Arts & Culture
 - Detroit
 - Education
 - Environment
 - Health
 - Human Services



Environment Program

 We help communities build their resilience in the face of climate change



- Urban Energy Resilience
- Sustainable Water Resources & Management
- Climate Resilience in Coastal Cities
- Climate Resilience and Urban Opportunity

Climate Resilience and Urban Opportunity



Strengthen the capacity of community-based nonprofit organizations to influence local and regional climate-resilience planning, policy development and implementation to better reflect the priorities and needs of low-income people in U.S. cities.

Urban Energy Resilience

Enable cities to achieve dramatic reductions in greenhouse gas emissions in ways that also enhance climate change preparedness, social connectivity, and the engagement and benefit of low-income residents.



Sustainable Water Resources and Management







- Strengthen the physical, economic and social infrastructure in order to address the complexity of water quality and water quantity related concerns that are exacerbated by extreme precipitation, drought and an aging water infrastructure system across the U.S. in an equitable manner that will enhance the resilience and health of lowincome people.
- New strategy: 3rd quarter 2016

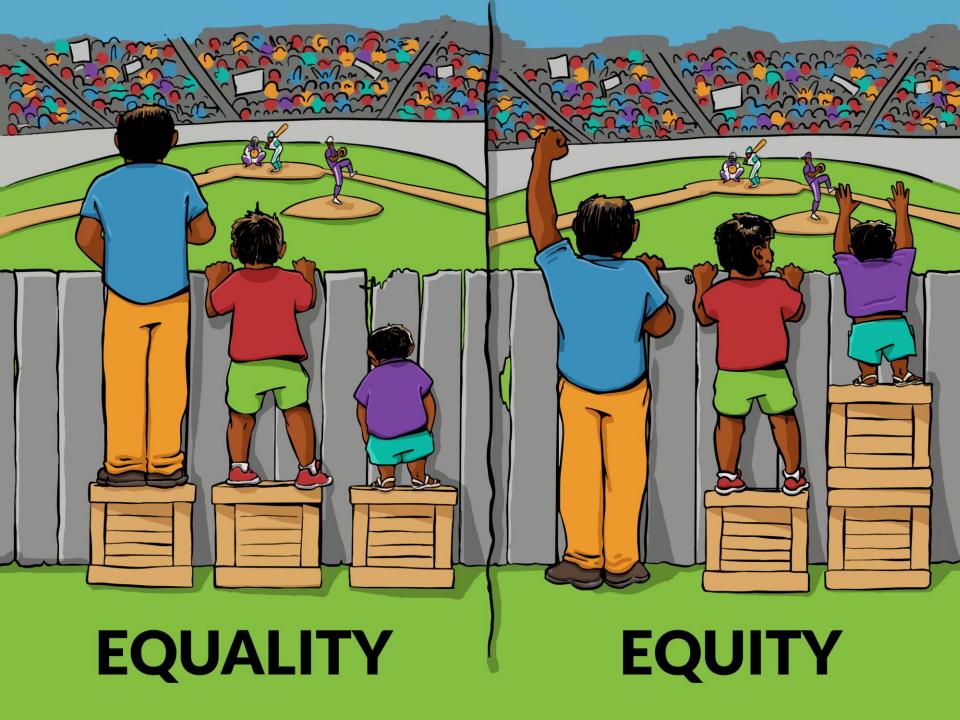
Framing climate resilience through a public health & equity lens

Climate change puts vulnerable people at risk



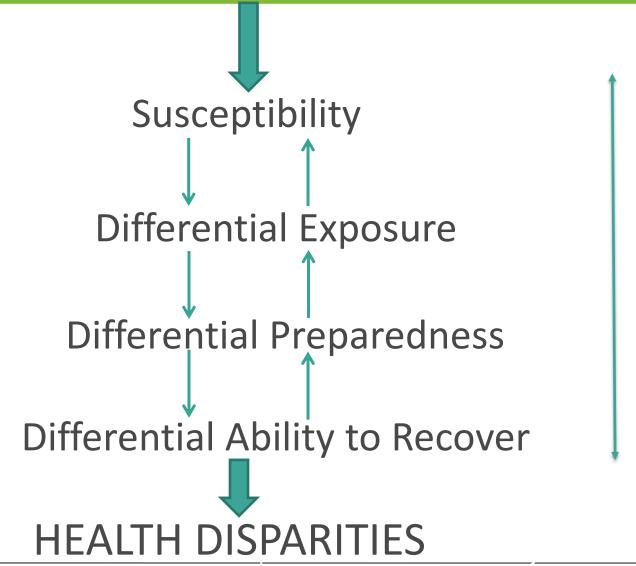
- The number & severity of heat waves is increasing
- Risk of dying is worse for some individuals
 - Children & the elderly
 - people suffering with allergies
 - those with pre-existing health conditions
 - Those living in urban areas
 - Those that are low income, and/or minority

The Health Impacts of Climate Change on Americans, June 2014



Vulnerability factors

EXPOSURE TO ENVIRONMENTAL HAZARDS



Key Question:

How do we develop plans to identify and assist the most vulnerable populations to urban heat island impacts?



ENVIRONMENTAL JUSTICE Volume 2, Number 4, 2009 © Mary Ann Liebert, Inc. DOI: 10.1089/env.2009.0032

Climate Change, Heat Waves, and Environmental Justice: Advancing Knowledge and Action

Jalonne White-Newsome, Marie S. O'Neill, Carina Gronlund, Tenaya M. Sunbury, Shannon J. Brines, Edith Parker, Daniel G. Brown, Richard B. Rood, and Zorimar Rivera

Validating Satellite-Derived Land Surface Temperature with *in Situ* Measurements: A Public Health Perspective

Jalonne L. White-Newsome, Shannon J. Brines, Daniel G. Brown, J. Timothy Dvonch, Carina J. Gronlund, Kai Zhang, Evan M. Oswald and Marie S. O'Neill

http://dx.doi.org/10.1289/ehp.1206176

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Article

Strategies to Reduce the Harmful Effects of Extreme Heat Events: A Four-City Study

Jalonne L. White-Newsome ^{1,†}, **, Sabrina McCormick ^{2,†}, Natalie Sampson ³, Miatta A. Buxton ⁴, Marie S. O'Neill ⁴, Carina J. Gronlund ⁴, Linda Catalano ⁵, Kathryn C. Conlon ⁶ and Edith A. Parker ⁷



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journal homepage: www.elsevier.com/locate/gloenvcha



Staying cool in a changing climate: Reaching vulnerable populations during heat events

Natalie R. Sampson ^{a,*}, Carina J. Gronlund ^b, Miatta A. Buxton ^c, Linda Catalano ^b, Jalonne L. White-Newsome ^d, Kathryn C. Conlon ^b, Marie S. O'Neill ^{b,c}, Sabrina McCormick ^e, Edith A. Parker ^f

Created: 29 July 2013

Heat Vulnerability Map Detroit NLCD (% Impervious and Respiratory)



Making heat a 'hot' issue in Detroit







Community based resiliency planning

- Collaborative planning process for ensuring that New York City's response to climate change meets the needs of low-income and other marginalized communities in Northern Manhattan and beyond
- Workshops use scenario planning to identify community needs and opportunities in response to changing temperatures, extreme weather events, and other impacts of climate change
- Identify opportunities to deliver multiple benefits beyond climate-resilience gains, such as green job opportunities, access to natural resources for public health, recreation, etc., support for local food systems, and more
- http://climateresil-weact.nationbuilder.com/

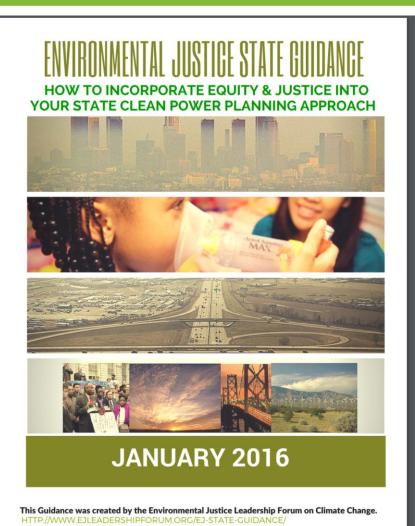


5 Considerations as you plan for equitable outcomes

- 1. Assembling unusual partners
- 2. Identifying goals and unintentional consequences
- 3. Measuring what matters to all
- 4. Harnessing a vision in a shared process
- 5. Continuous evaluation

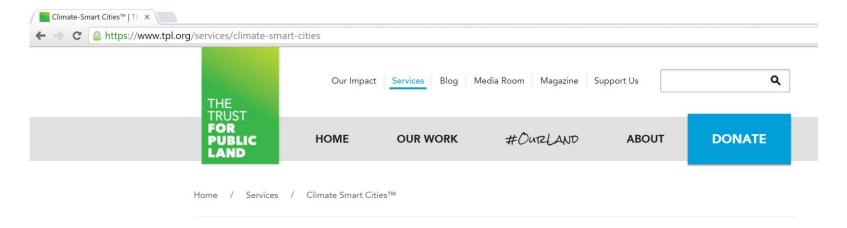
Resources

Guidance for incorporating equity into planning



- Guidance created for a diverse set of stakeholders with a specific policy focus
- Has transferable lessons and advice for UHI mitigation and adaptation:
 - High impact engagement
 - Conducting an equity analysis
 - Importance of understanding co-benefits
- Guidance on Considering
 Environmental Justice During
 the Development of Regulatory
 Actions

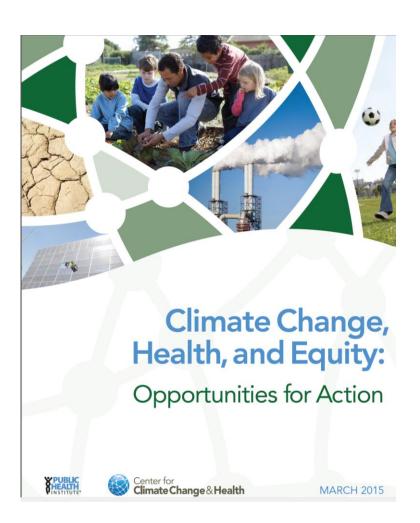
Trust for the Public Land: Climate-Smart Cities



Climate-Smart Cities™



Resources



ENSURING RISK REDUCTION IN COMMUNITIES WITH MULTIPLE STRESSORS: ENVIRONMENTAL JUSTICE AND CUMULATIVE RISKS/IMPACTS

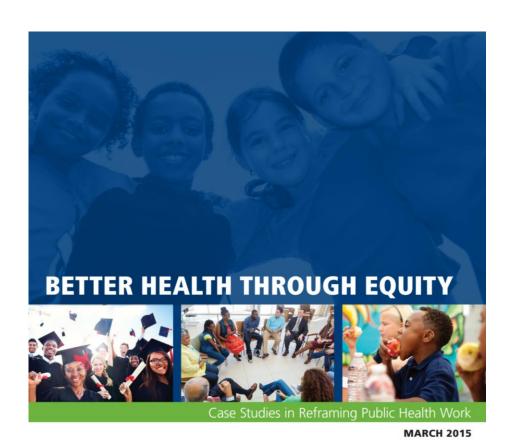
NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL



DECEMBER 2004

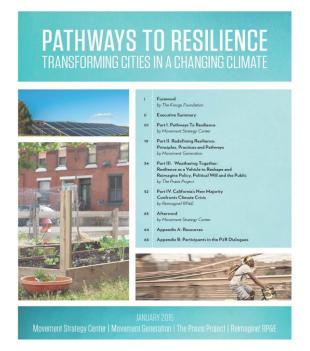
Prepared by the National Environmental Justice Advisory Council Cumulative Risks/Impacts Work Group

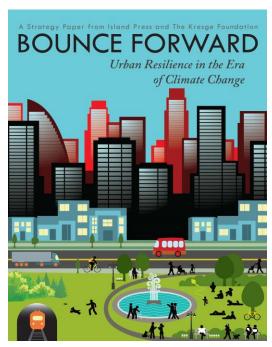
Better Health Through Equity: Case studies in reframing public health work



- Build knowledge & understanding
- Start a dialogue about inequality
- Building trust
- Allowing community to shape the interventions
- Not allowing data to be the only driver
- Process

Resources









- Pathways To Resilience/Movement Strategy Center
- Bounce Forward: Urban Resilience in the Era of Climate Change/Island Press
- Resilience for Free: How Solar+Storage Could Protect Multifamily Affordable Housing.../Clean Energy Group

Principles of Environmental Justice

(#7) Environmental Justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation

Thank you!