HOT TRENDS

• 9 of the 10 warmest years in recorded history have occurred since 2005
• Heat waves growing longer, hotter and more frequent
• July 2019 hottest month on record for the planet
• If we stay on the current global emissions path, more than 60% of urban areas in the U.S. will experience an average of 30 or more days with a heat index above 105°F*
• Cities are particularly impacted. Climate change worsens the Urban Heat Island effect by raising the baseline
• This relative change in temperature causes greater damage in cooler places and where fewer heat-mitigation and adaptation strategies are in place

*Union of Concerned Scientists: Killer Heat in the United States (2019)
HEALTH IMPACTS

• Mortality
  • More people in the U.S. die from extreme heat than from any other weather-related event*
  • Worst heatwave in modern history: Russia in 2010, killed an estimated 55,000
  • A “no-action” scenario would result in an additional 9,300 heat-related deaths across the country annually without additional adaptation or acclimatization
• Heat exhaustion, heat stroke, aggravated existing conditions, increased suicide rates
• Vulnerable populations disproportionately impacted
  • Low-income, minorities, elderly, homeless, immigrants, pregnant, socially isolated, preexisting medical conditions, people with disabilities
  • Historically redlined areas; fewer resources; limited access to A/C, cooler recreational facilities, green space

OTHER IMPACTS

- **Power outages** from stress on electrical grid (e.g., increased A/C demand)
- **Infrastructure** - buckling roads, rail track kinking, planes unable to take off (decreased air density)
- **Reduction in GDP**, loss in labor productivity, retail and tourism affected
- **Drought, wildfires**
LOCAL GOVERNMENTS

• Positioned to collect information about community needs and **respond on a community scale**

• Exercise **significant authority in policy domains** that can increase adaptability and reduce vulnerability to heat
  • Energy efficiency
  • Zoning and land use
  • Building codes
  • Public works and utilities
  • Emergency response and public health
MAKING STRIDES

- Heat emergency response plans
- Cool roofs, cool pavement, green roofs
- Cooling centers
- Updating building codes to improve energy efficiency and ventilation
- A/C multi-family ordinances
- Tree cover/urban forestry programs, greening urban spaces
Surili Sutaria Patel - Deputy Director, Center for Health Policy, American Public Health Association
  • Heath equity, health/climate nexus, BRACE

Sean Hecht - Co-Director, Emmett Institute on Climate Change and the Environment, UCLA School of Law
  • Adaptation frameworks, equity and environmental justice, public participation

Kathryn Goldman - Climate Adviser, City of Los Angeles
  • Local strategies, lessons learned, regional coordination

Mark Hartman - Chief Sustainability Officer, City of Phoenix
  • Challenges, opportunities, developing partnerships