Health and Racial Equity Frameworks to Guide Climate Change Investments in California

Linda Helland, MPH, CPH
Climate Change & Health Equity Section Manager
Office of Health Equity
California Department of Public Health

Network for Public Health Law
Climate Change and Health Equity Summit
October 13, 2022
Agenda

• Review current state of climate crisis and health equity impacts

• Present the equity framework of the California Department of Public Health’s Climate Change and Health Equity Section

• Discuss barriers to pursuing racial equity through climate-related funding in California

• Demonstrate tools and guidance for climate change resource allocation with an equity frame
Air Pollution & Increasing Allergens
Asthma, allergies, cardiovascular and respiratory diseases

Extreme Heat
Heat-related illness and death, cardiovascular failure

Drought
Water supply impacts, dust storms, Valley Fever

Environmental Degradation
Forced migration, civil conflict, loss of jobs and income

Wildfires & Wildfire Smoke
Injuries, fatalities, loss of homes, cardiovascular and respiratory diseases

Degraded Living Conditions & Social Inequities
Exacerbation of racial and health inequities and vulnerabilities, loss of employment

Changes In Vector Ecology
Lyme disease, West Nile Virus, hantavirus, malaria, encephalitis

Food System Impacts
Malnutrition, food insecurity, higher food prices, foodborne illness

Severe Weather & Floods
Injuries, fatalities, loss of homes, indoor fungi and mold

Water Quality Impacts
Harmful algal blooms, campylobacteriosis, cryptosporidiosis, leptospirosis

IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH

CDPH (Adapted from CDC, J. Patz)
CLIMATE CHANGE IS ALREADY HARMING HUMAN HEALTH.

PEOPLE FACING INEQUITIES HURT FIRST AND WORST.
A Low-Carbon, Climate-Resilient Community is...

- Access to affordable, healthy foods.
- Clean air, green spaces for recreation!
- Urban and community greening to keep cities cool.
- Healthy, energy efficient, & affordable housing!
- Kids have safe places to play and learn.
- Healthy built environment including walkable & bikeable communities!
- Where there are good jobs, and safe neighborhoods.
- Where people know and care for one another.

A Healthy, Equitable Community

Images adapted from ChangeLab Solutions http://www.changelabsolutions.org/publications/HiAP_Collaborative-Health
Racial Equity Lens
Operationalizing Equity in Resource Distribution

Equity = Fair distribution of power and resources

Equity mechanisms:
• Prioritized financial incentives, investments, or resources
• Higher levels of service
• Facilities
• Capacity building or training
• Jobs
• Decision-making power

“Cash, capacity, control”
2020: Uprising for Racial Justice

- Increased participation in GARE (Government Alliance on Race and Equity)
- Equity Officer positions in State agencies
- Offices of Racial Equity in State agencies
- Racial Equity Action Plans in State agencies
- Increased data collection on race, ethnicity, gender
- A Task Force to study reparations for descendants of enslaved people
- A desire to enact racial equity through prioritized resource allocation to BIPOC communities still suffering injustice and worse living conditions
Prop 209: The Language

- (a) The state shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting.

- (f) For the purposes of this section, “state” shall include, but not necessarily be limited to, the state itself, any city, county, city and county, public university system, including the University of California, community college district, school district, special district, or any other political subdivision or governmental instrumentality of or within the state.
What Prop 209 Does

● Prohibits using race or ethnicity (or gender) to allocate resources such as funds

● Allows policies to encourage diversity through policies that are “race-conscious” but do not involve numeric targets or quotas:
  ○ Using indicators that track closely with race and ethnicity (due to structural racism) such as poverty or socioeconomic status, or geography (due to racial segregation in housing)
  ○ Have the effect of prioritizing BIPOC communities if there are no numeric targets
  ○ Track data on distribution of resources by race and ethnicity
  ○ Local hire or enrollment quota (if have ”rational basis”)
  ○ Outreach to BIPOC communities
Tools to apply an equity frame for resource allocation

- **CalEnviroScreen** by CalEPA
- **Climate Change & Health Vulnerability Indicators** for California (CCHVIz)
- **California Healthy Places Index** by the Public Health Alliance of Southern CA
- **Planning and Investing for a Resilient California** guide for State agencies
What are Cleanup Sites?

Cleanup sites are places that are contaminated with hazardous chemicals and require clean up by the property owners or government. Chemicals at cleanup sites can move through the air or groundwater. People living near these sites have a greater potential to be exposed to chemicals from the sites than people living further away. Some studies have shown that neighborhoods with cleanup sites are generally poorer and have more people of color than other neighborhoods. The land may take many years or decades to clean up, reducing possible benefits to the community.

More information can be found in the Cleanups chapter in the CalEnviroScreen 4.0 report and the Cleanups indicator page.
Climate Change & Health Vulnerability Indicators for California

**Environmental Exposures:**
- Heat
- Air Quality (ozone and PM 2.5)
- Drought
- Wildfires
- Sea Level Rise

**Population Sensitivity:**
- Children and Elderly
- Poverty
- Education
- Race and Ethnicity
- Outdoor Workers
- Vehicle Ownership
- Linguistic Isolation
- Disability (mental and physical)
- Health Insurance
- Violent Crime Rate

**Adaptive Capacity:**
- Air Conditioning Ownership
- Tree Canopy
- Impervious Surfaces
- Public Transit Access

[https://www.cdph.ca.gov/Programs/OHE/Pages/CC-Health-Vulnerability-Indicators.aspx](https://www.cdph.ca.gov/Programs/OHE/Pages/CC-Health-Vulnerability-Indicators.aspx)
Transportation improves access to evacuation and shelter from climate hazards, such as wildfire, air pollution, heat waves, and flooding.

What is the climate change challenge?
Vehicle ownership is a measure of mobility and access to transportation. Transportation is a critical resource for evacuation and survival during heat waves and other extreme weather events. For example, access to a vehicle is important during flooding which may require emergency evacuation of populations living in coastal and low-lying areas, and may also require adequate sheltering for displaced populations.

Why is this climate change impact important to health?
Vehicle ownership is important during extreme weather events because it improves access to evacuation or access to cooling centers or shelter from environmental exposures such as wildfire, air pollution, heat waves, or flooding. A survey among predominantly poor and African American Hurricane Katrina evacuees revealed that 34% reported lack of a car or other means of transportation as the main reason for not evacuating the storm's danger. In the Los Angeles-Long Beach Metropolitan Area, higher proportions of African Americans (20%), Latino (17%), and Asian (10%) households do not have access to a car compared to White households (8%).

Who is most impacted?
- Urban areas generally have lower rates of automobile ownership, particularly in inner city populations with low income.
- Some communities of color are more likely to have limited or no car ownership, which increases their risk of being impacted during heat and other extreme weather events. Populations with higher rates of people of color and poverty are less likely to own cars.

Differences by race

https://skylab.cdph.ca.gov/CCHVlz/
Vulnerability

Visualize California Counties based on levels of both an exposure variable and a population sensitivity variable. The plot illustrates the intersection of hazard (from an aspect of climate change) and sensitivity (from circumstances of the population or place that tend to increase susceptibility to the hazards of climate change). Counties are assigned to the bottom (least), middle, or top (most) third for both exposure and sensitivity. The most vulnerable counties appear in top and right-most portions of the figure. Points are sized according to the population living in that county. Hover over points for the county name, population, and indicator values.

Some examples of important combinations to consider are

- Heat + elderly / outdoor workers / health insurance / air conditioning / tree canopy / impervious surfaces
- Ozone + children
- PM2.5 + children
- Wildfire + elderly / disability
Guide State Investment & Resource Distribution to Prioritize Health Equity

Provide Health Equity Input to State Grants to CA Communities

• Regional Climate Communities (Strategic Growth Council [SGC])
• Affordable Housing & Sustainable Communities Program (SGC)
• Transformative Climate Communities (SGC)
• CA Climate Investments Technical Assistance Program (SGC)
• Climate Change Research Grant Program (SGC)
• Triennial Strategic Research Plan and Annual Research Plans (CA Air Res. Board)
• SB 1 (Transportation) Adaptation Planning Grants (CalTrans)
• SB 1 (Transportation) Sustainable Communities Grants Program (CalTrans)
• Active Transportation Program (CalTrans)
• Solutions for Congested Corridors, Local Partnership Program, Transit and Intercity Rail Operations & Capital (CalTrans)
• Urban Greening Grant Program (CAL FIRE)

Features Incorporated:

• Equity framework
• Prioritizing based on CCHVIs & HPI
• Community engagement & capacity building
• Local hiring, jobs creation & training
• Preventing displacement
• Partnering with health departments
• Reducing VMT, facilitating active transport
Appendix C
Equity Checklist

The following checklist is intended to assist State agencies to ensure that plans and investments identify and protect the State’s most vulnerable populations, as explained in Principle 2.

» Which vulnerable populations may be impacted by or could benefit from your policy, initiative, program or budget?
  › Have you identified these populations based on population characteristics, location, or both?

» Have you designed a process to collaborate with vulnerable populations?
  › Which best practices for meaningful engagement are you implementing (see Community Engagement Best Practices)?
  › Are you sharing as much decision-making power as feasible (see Spectrum of Public Participation)?
  › Is there a need for formal agreements to define collaboration, and if so how will you develop them (see an example partnering agreement)?

» How may the policy, initiative, program or budget increase racial equity?
» How may the policy, initiative, program or budget decrease inequality in income or wealth?
Equity Checklist for State Agencies

- Which vulnerable populations may be impacted or could benefit?
- **Increase racial equity?**
- Decrease inequality in income or wealth?
- Ensure safety and improve health outcomes?
- Prioritize vulnerable communities for employment and job training?
- Dedicated set-asides?
- Unintended consequences?

[http://opr.ca.gov/planning/icarp/resilient-ca.html](http://opr.ca.gov/planning/icarp/resilient-ca.html)
Health and Racial Equity Frameworks to Guide Climate Change Investments in California

Linda.Helland@cdph.ca.gov
Climatechange@cdph.ca.gov

Thank you!