

# HOUSING, ENERGY EFFICIENCY AND HEALTH EQUITY

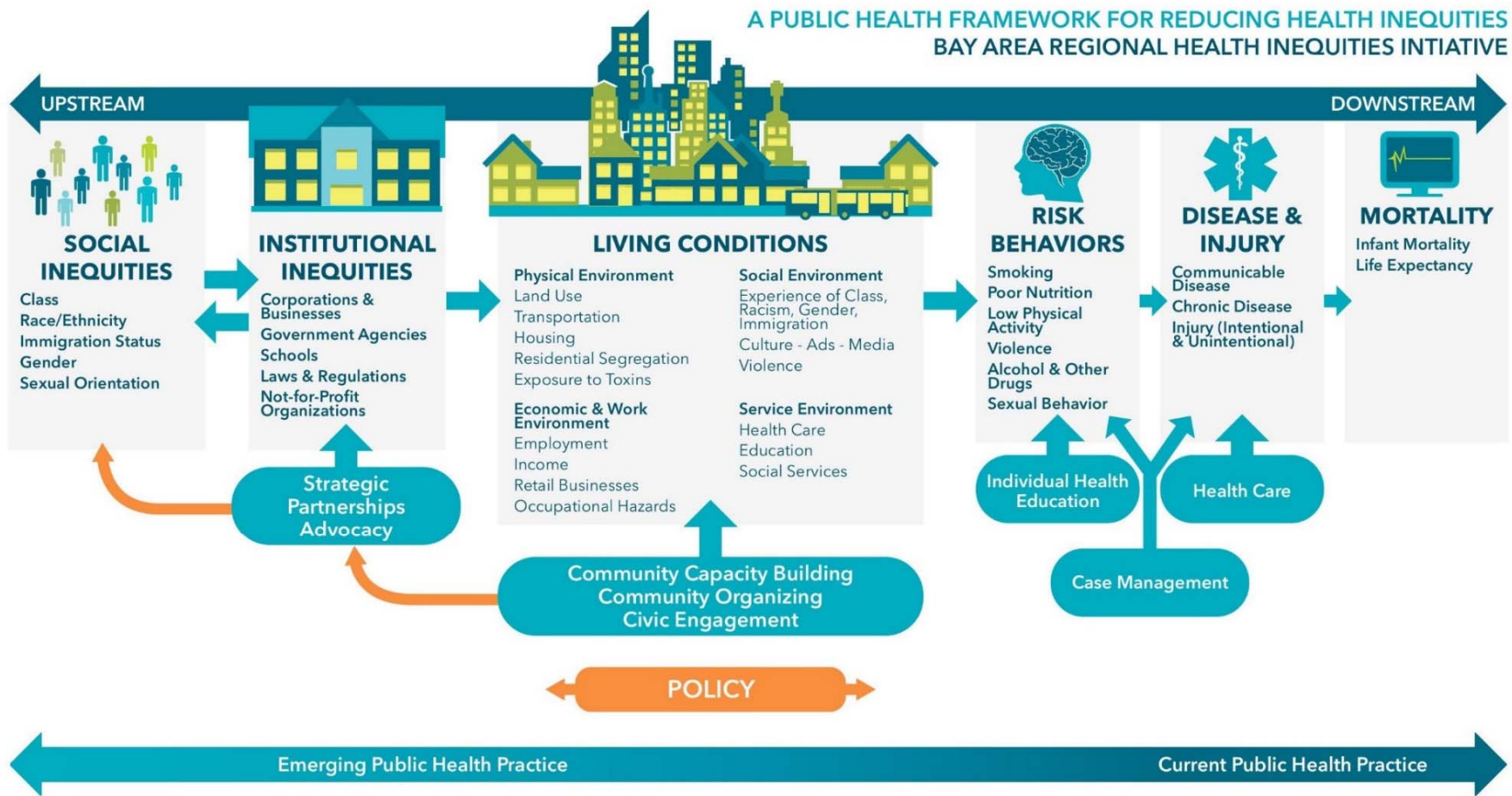
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Policy Manager for  
Housing and Equitable  
Development

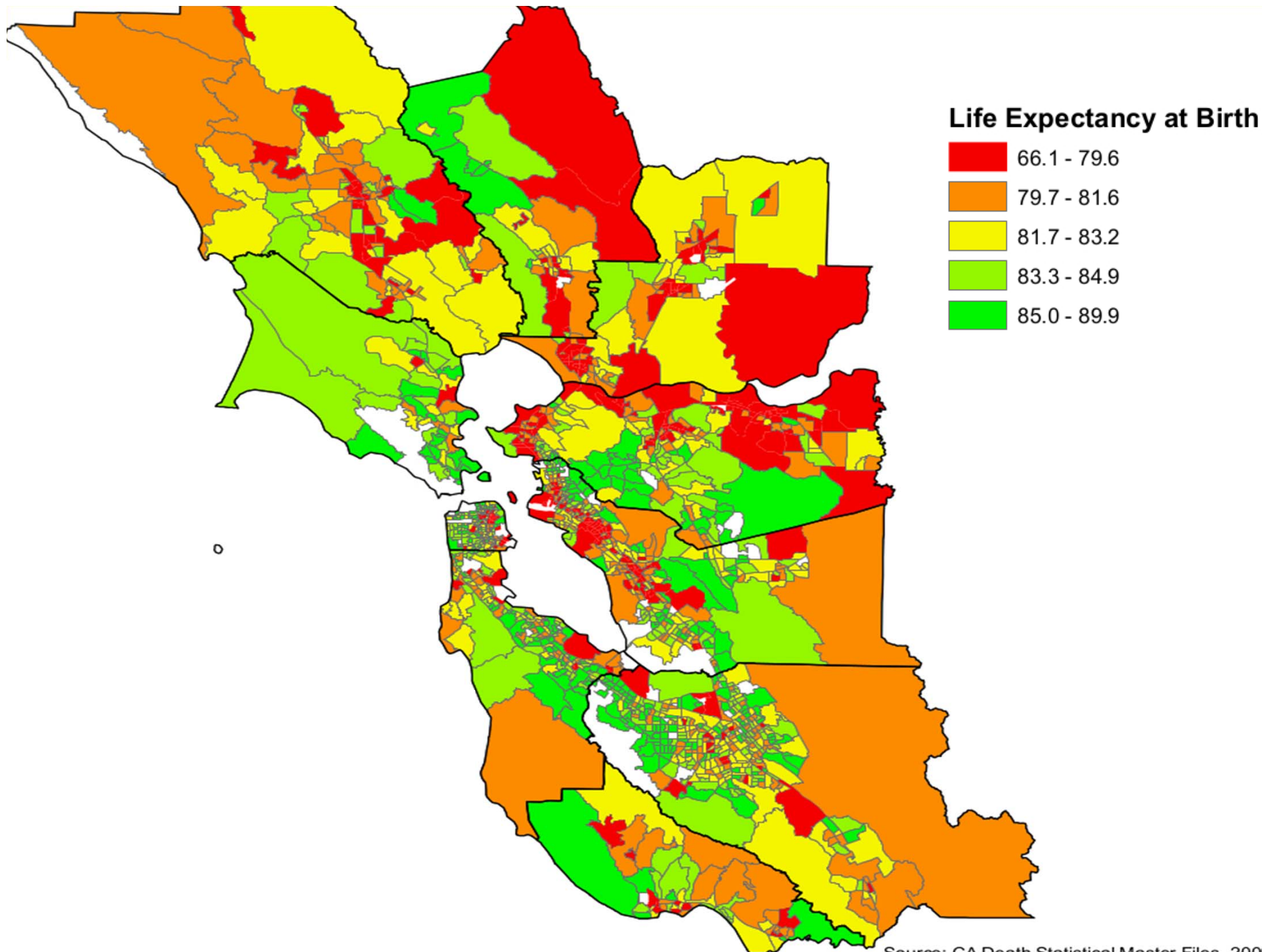
# BARHII



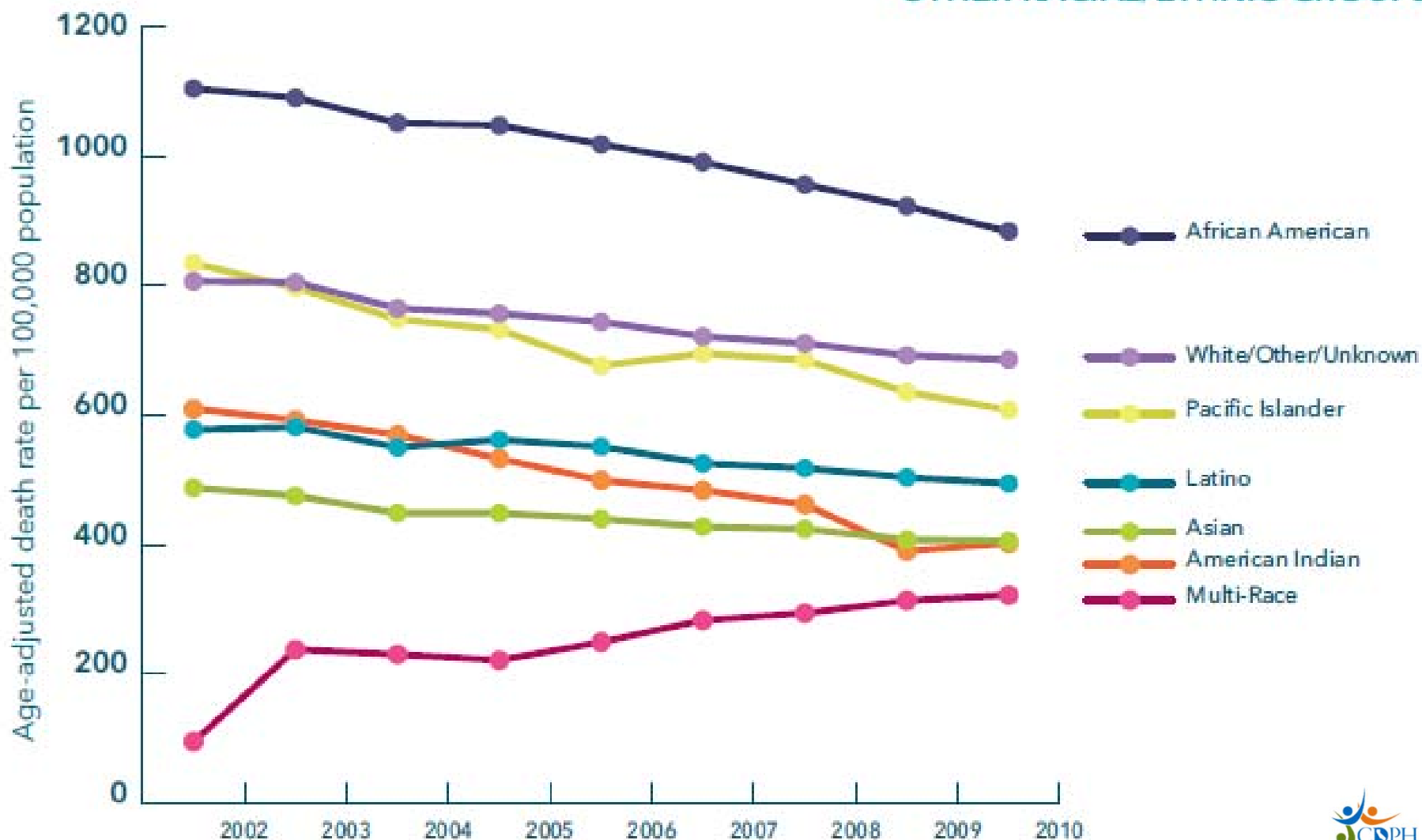
It is our mission to transform public health practice for the purpose of eliminating health inequities using a broad spectrum of approaches that create healthy communities.

# THE BARHII FRAMEWORK





## ALTHOUGH DEATH RATES IN CALIFORNIA HAVE DECLINED, DISPARITIES PERSIST WITH AFRICAN AMERICANS HAVING HIGHER DEATH RATES THAN THOSE OF OTHER RACIAL/ETHNIC GROUPS



**FIGURE 2:** Death rates, by race/ethnicity, California, 2002 to 2010.

Source: California Department of Public Health, Death Records; and California Department of Finance, Race and Ethnic Population with Age and Sex Detail, 2000-2008. Sacramento, California, July 2007.

Note: Age-adjusted rates are calculated using year 2000 U.S. standard population.

# CLIMATE CHANGE IS EXACERBATES EXISTING HEALTH INEQUITIES NOW

## Climate Impacts

- Extreme Heat
- Air Pollution
- Wildfire
- Severe Weather/Storms
- Drought
- Agricultural Disruptions



## Health Impacts

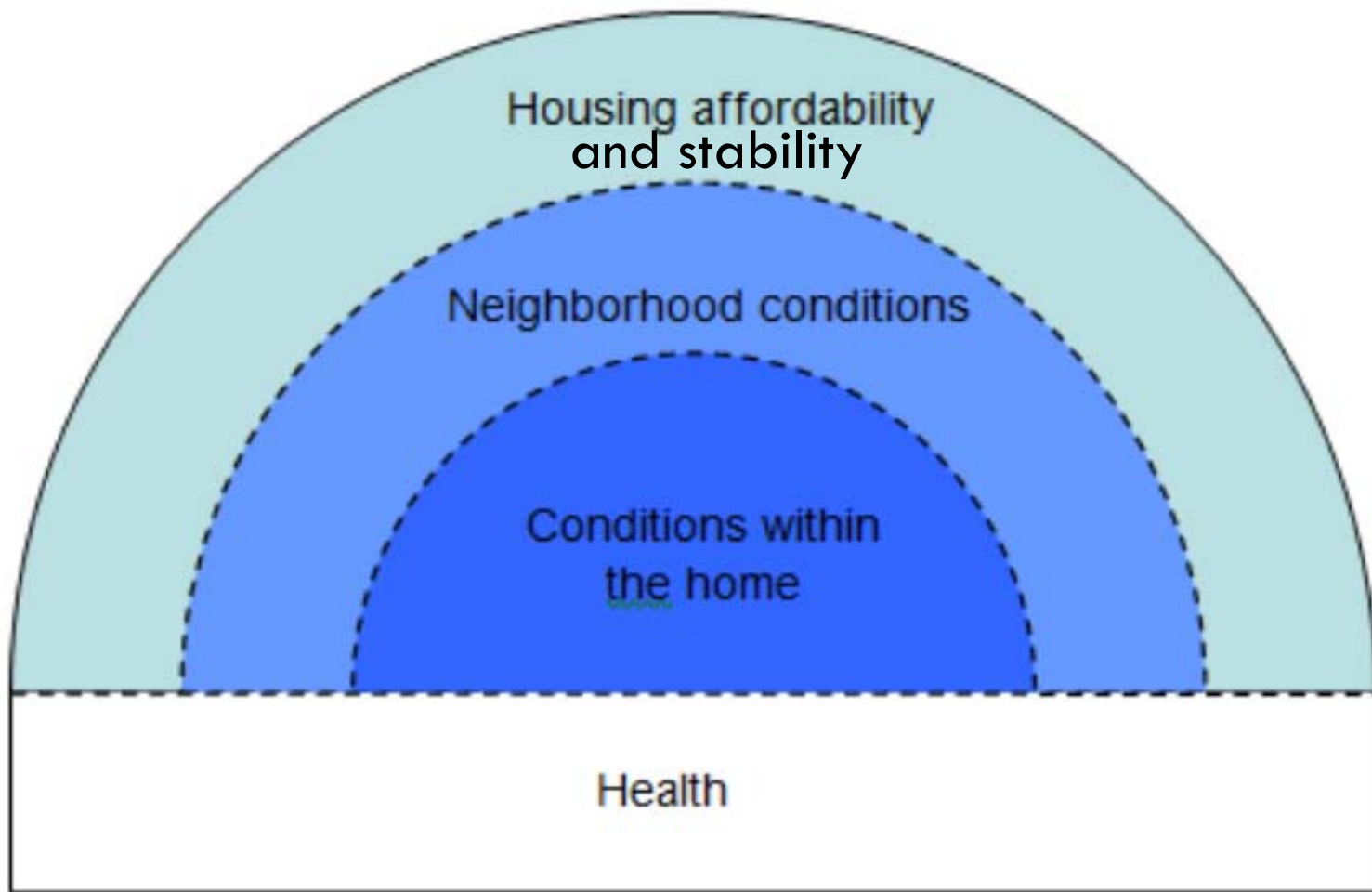
- Death
- Cardiovascular Stress and Failure
- Disease
- Hunger; malnutrition
- Increased cost of water, food and energy
- Illnesses such as Heat Stroke, Heat Exhaustion
- Mental health disorders



## Groups Most Impacted

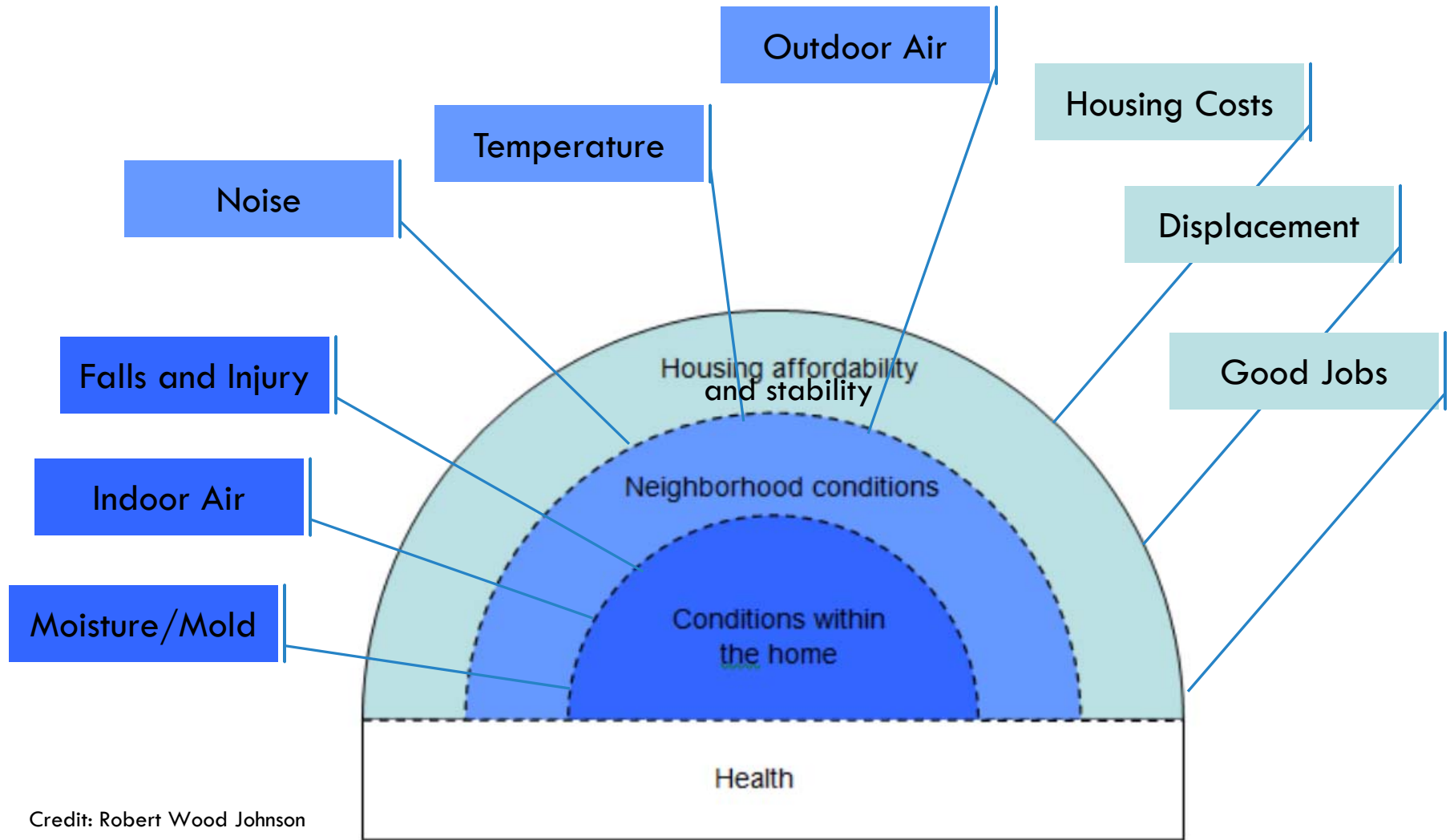
- Elderly
- Children
- Farm/Outdoor Workers
- Diabetics
- Low-Income Urban Residents
- People with Respiratory Diseases

# HOUSING AND HEALTH



Credit: Robert Wood Johnson

# HOUSING, ENERGY EFFICIENCY AND HEALTH



Credit: Robert Wood Johnson



# PUBLIC HEALTH ROLES

- Targeted Investments
  - By Neighborhood, Tenure and Housing Conditions
  - Specific, Medically Vulnerable Households
- Outreach
  - In client's homes
  - Trusted spokespeople
  - Building power with community
- Maximizing multiple benefits and avoiding harms

# HOUSING AND HEALTH: HABITABILITY



Health

Q Enter a location...



Details

← Back **Housing Habitability** ×

View Indicators

Rank

Pool

Create Custom Score

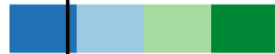
Data Upload

Report/Export

About

### How does this tract compare?

This tract



Less More

#### Healthy Conditions

This tract has a higher percent of households with basic kitchen facilities and plumbing than just **21.5%** of other California census tracts.

### What does this indicator measure?

Percent of households with basic kitchen facilities and plumbing

In this tract, **97.86%** of households have basic kitchen facilities and plumbing.

### What is the connection to health?

Everyone should be able to live in a safe and habitable home. Poor quality and unstable housing quality has been linked to asthma, injury, poisoning, depression, behavioral problems and educational delays, low birth weights, communicable disease, skipped meals and medical care, and food insecurity.

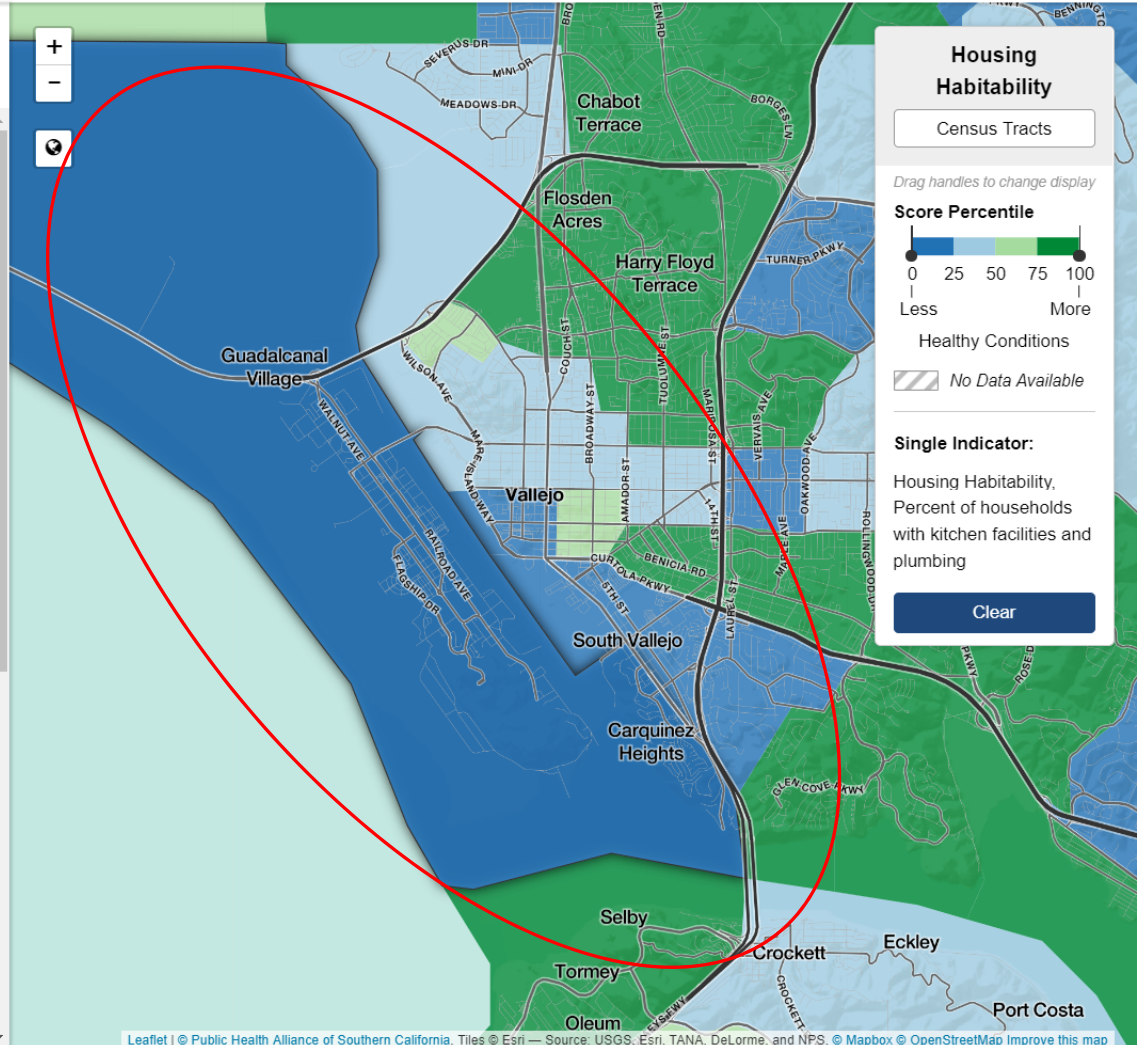
### Policy actions to address this indicator

#### Food Access

- [Improve Healthy Food Access](#)

#### Housing

- [Preserve and Improve Existing Housing](#)
- [Stabilize Residents and Neighborhoods](#)



**Housing Habitability**

Census Tracts

*Drag handles to change display*

**Score Percentile**

0 25 50 75 100

Less More

Healthy Conditions

No Data Available

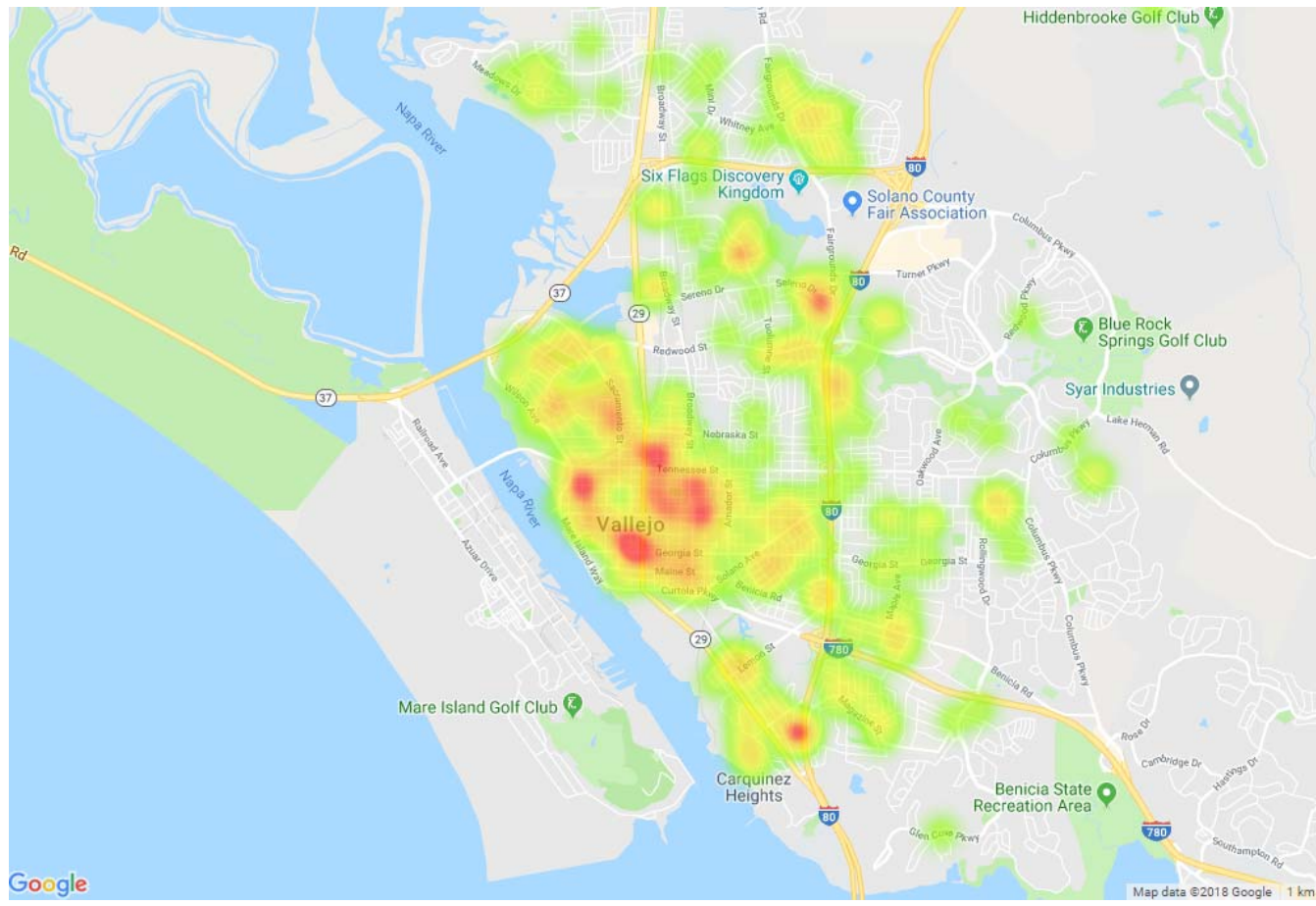
**Single Indicator:**

Housing Habitability, Percent of households with kitchen facilities and plumbing

[Clear](#)

Credit: Robert Wood Johnson

# CODE ENFORCEMENT COMPLAINTS



# HEALTH AND HOUSING PRESERVATION STRATEGY



Community organizations expanding capacity to define needs and solutions



Leaders, planners, developers building affordability



Hospitals and health plans investments strategies

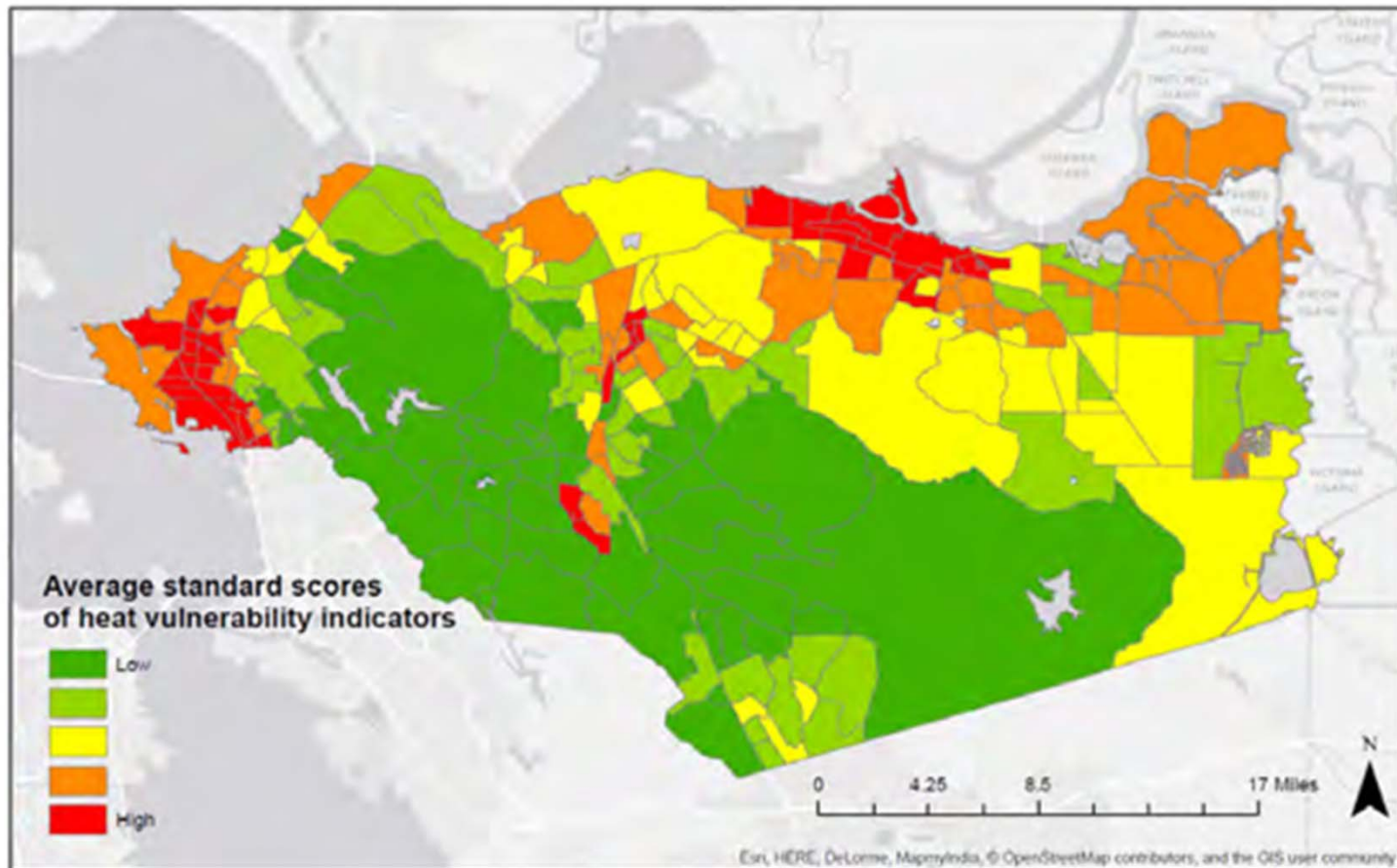
**Safe, stable  
affordable  
housing**

## **Healthy communities**

- Better food
- Lower asthma, allergies
- Less ER visits
- Reduction of homelessness
- Higher school performance
- Higher mental health
- Less driving



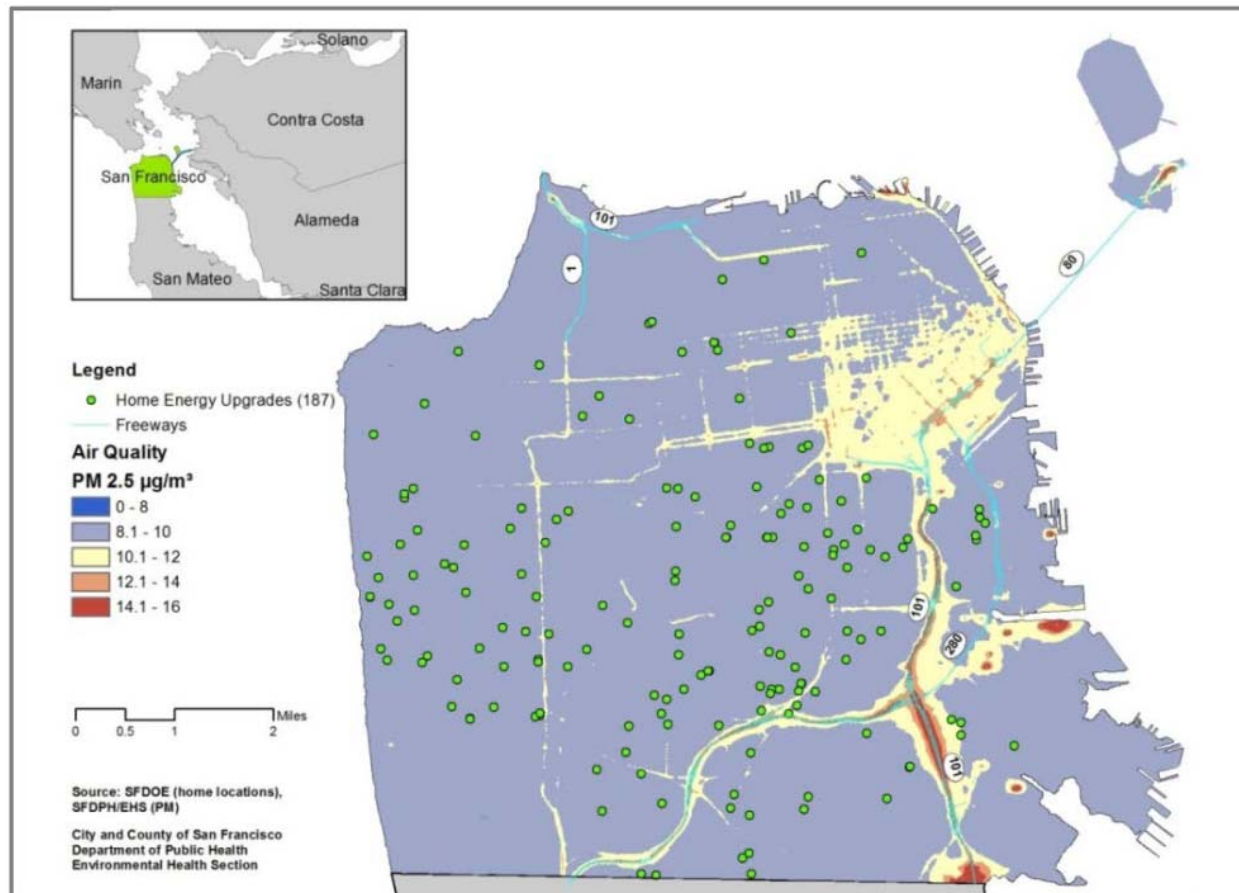
*Figure 21: Average Z-Scores Of Heat Vulnerability Indicators By Census Tract, Showing An Equal Number Of Census Tracts In Each Category.*



# AIR QUALITY



Map 1. SFHIP energy efficiency upgrade locations (187 homes) and average ambient annual PM<sub>2.5</sub> concentration from all sources ( $\mu\text{g}/\text{m}^3$ ).



# HOUSING AFFORDABILITY IMPACTS SPENDING ON HEALTHCARE AND FOOD



**Low-Income Households that can comfortably afford housing are able to spend:**



**More on Childcare**



**1/3<sup>rd</sup> more on Healthy Food**



**5x as much on Healthcare**

See BARHII Displacement Brief

Image Credit: the Noun Project—Arthur Shlain, Adrien Coquet, UNiCORN, and Aneeqe Ahmed

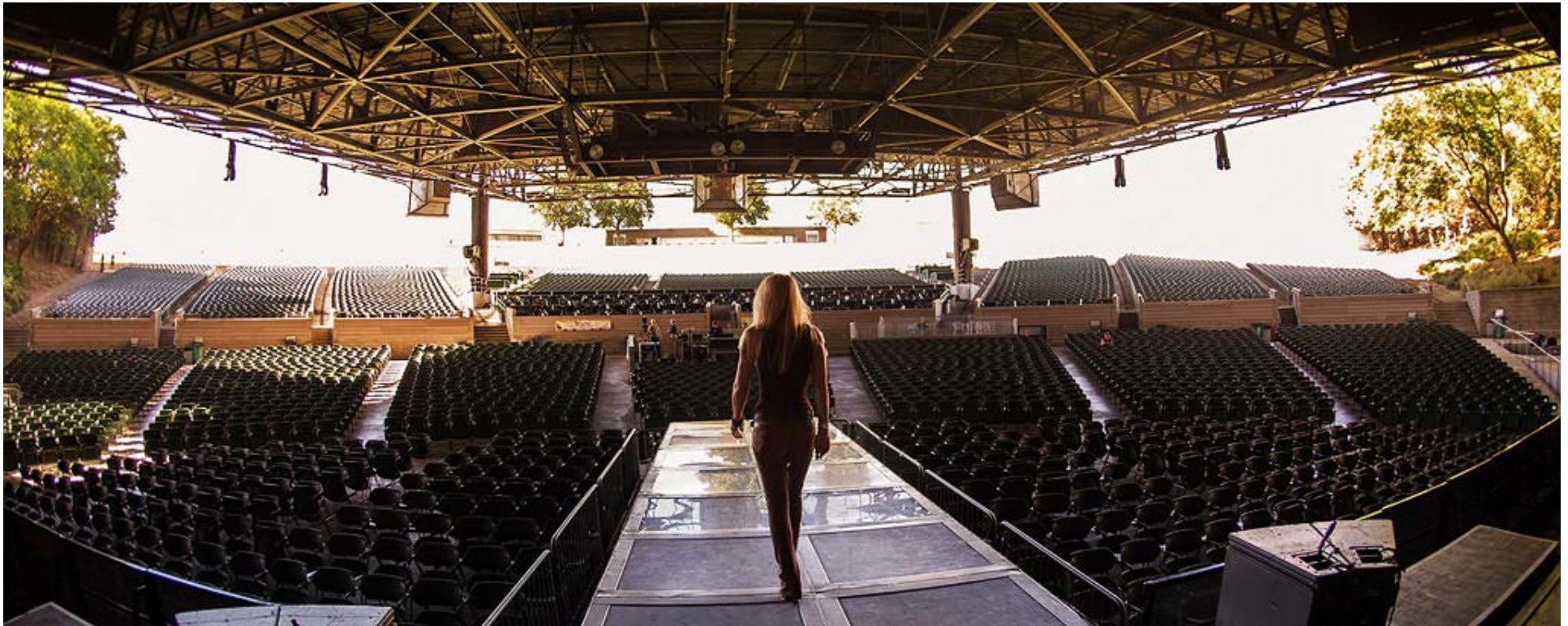
# DISPLACEMENT IN THE BAY AREA



COUNTY	AT RISK	ONGOING or ADVANCED
<b>Alameda</b>	35%	36%
<b>Contra Costa</b>	24%	18%
<b>Marin</b>	22%	25%
<b>Napa</b>	28%	28%
<b>Sacramento</b>	35%	23%
<b>San Francisco</b>	35%	47%
<b>San Joaquin</b>	36%	24%
<b>San Mateo</b>	27%	38%
<b>Santa Clara</b>	22%	37%
<b>Santa Cruz</b>	33%	31%
<b>Solano</b>	18%	16%
<b>Sonoma</b>	20%	24%
<b>Yolo</b>	27%	22%
<b>Bay Area Total</b>	29%	31%



# EVICCTIONS



In 2014-2016, there were approximately as many formal evictions filings in Contra Costa County as there are seats in the Concord Pavilion. This is likely only a small part of total evictions that took place.

Eviction is a leading cause of homelessness.

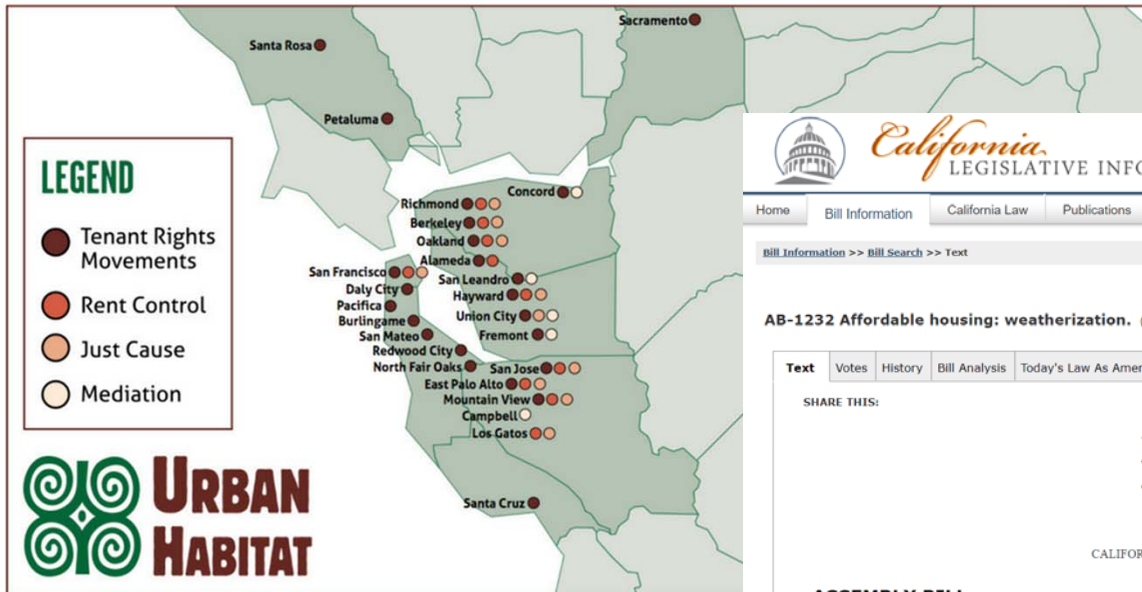
Tenants Together: <https://actionnetwork.org/groups/tenants-together/files/23632/download>

Image Credit: The Concord Pavilion

# TENANT/HOMEOWNER PROTECTIONS



## NORTHERN CALIFORNIA TENANT PROTECTIONS MAP



California LEGISLATIVE INFORMATION

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Quick Search: Bill Number  GO

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Bill Information >> Bill Search >> Text

[PDF](#) | [Add To My Favorites](#) | [Track Bill](#) | Version: 04/25/19 - Amended Assembly | Go

**AB-1232 Affordable housing: weatherization.** (2019-2020)

Text | Votes | History | Bill Analysis | Today's Law As Amended | Compare Versions | Status | Comments To Author

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AMENDED IN ASSEMBLY APRIL 25, 2019  
 AMENDED IN ASSEMBLY APRIL 11, 2019  
 AMENDED IN ASSEMBLY MARCH 26, 2019

Date Published: 04/25/2019 09:00 PM

CALIFORNIA LEGISLATURE— 2019–2020 REGULAR SESSION

**ASSEMBLY BILL** **No. 1232**

Introduced by Assembly Member Gloria

February 21, 2019

# CO-BENEFITS: JOB TRAINING

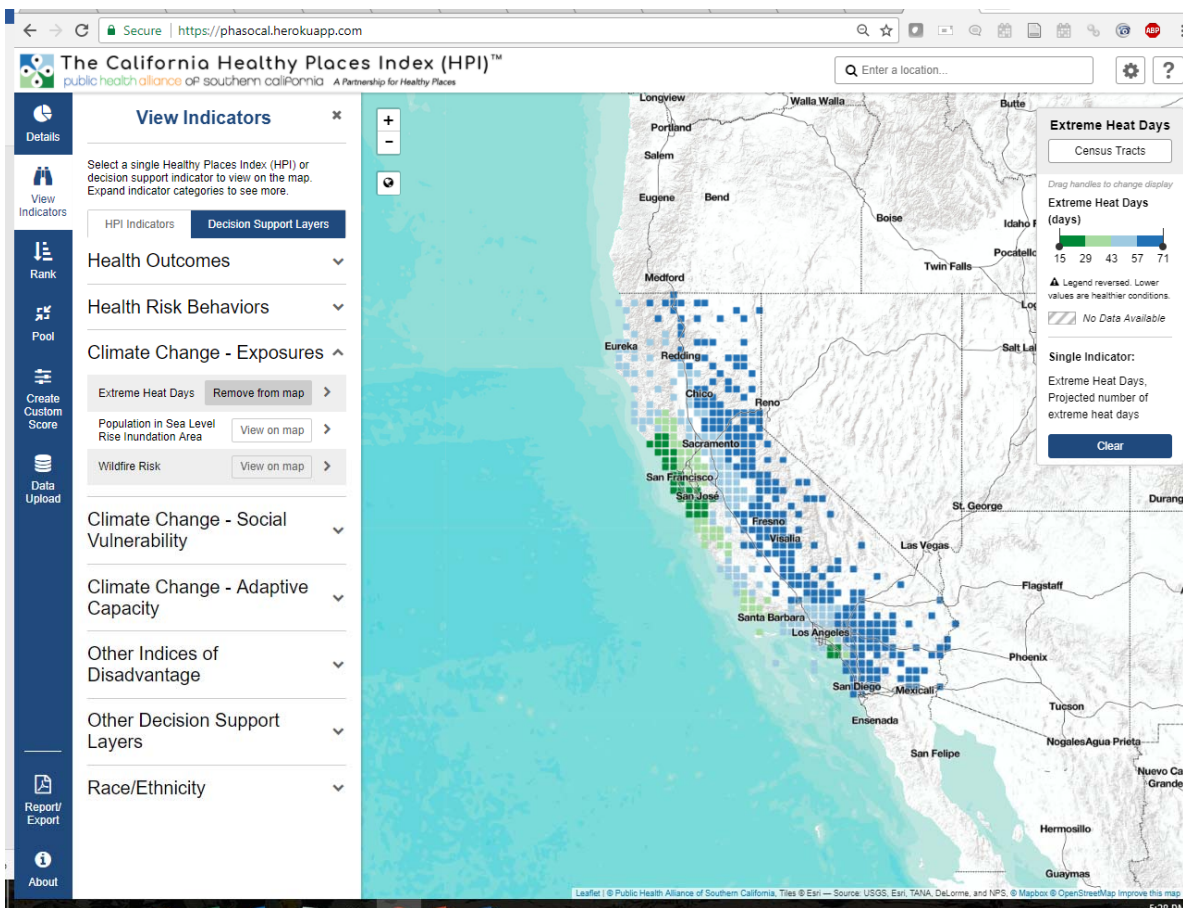


# THANK YOU!

Contact us for More Information:

[wdominie@barhii.org](mailto:wdominie@barhii.org)

# PUBLIC HEALTH RESOURCES: HEALTHY PLACES INDEX



g/policy-actions/extreme-heat/#heat\_resilient\_households

### Prevention

#### Heat Resilient Households

Help residents prepare and stay healthy during heat events through home weatherization, air conditioning, education, and other programs.

Find the policies that are right for you.

Weatherization Programs help low-income residents ensure that their homes are energy efficient and weatherproof, usually at low or no cost to residents. Some programs will install air conditioning for medically vulnerable residents. Weatherization programs can include cool roof coatings, insulation and other treatments that work to keep homes cool when temperatures are high and to save residents money. To maximize public health co-benefits, weatherization programs may also operate in conjunction with programs to address asthma triggers and improve indoor air quality, or include job training and employment opportunities for people with barriers to employment. In making homes more air-tight, weatherization can increase the need for well-maintained ventilation systems. In areas with high proportions of renters, some programs allow tenants to request weatherization services with the consent of their landlords, and pay for improvements from savings on energy bills. There are a number of funding sources/programs for low-income weatherization in California, including the Low Income Home Energy Assistance Program, Weatherization Assistance Program, and the Low-Income Weatherization Program. For more information, see: The U.S. Environmental Protection Agency's Reducing Urban Heat Islands Compendium of Strategies, Heat Island Reduction Activities, the California Department of Public Health's Healthy Homes, San Francisco's Assessing the Health Co-Benefits of San Francisco's Climate Action Plan and Enhancing Health Benefits of Residential Energy Efficiency Programs.

#### Cool Communities

Reduce the heat-island effect, and help residents stay safe with cool infrastructure and recreation facilities.

Find the policies that are right for you.

Cool Roofs are made of materials that reflect and shed heat to keep buildings cool. Traditional roofs may be as much as 55-65 degrees hotter than daytime air temperatures, while cool roofs are typically only 10-20 degrees warmer. Local governments can install cool roofs on public buildings, lowering community temperatures and helping drive demand and capacity for cool roof installation from jurisdictions can explore partnerships with energy companies. In use public dollars to offer cool roof incentives. California already has cool roof standards in its Statewide Title 24 standards, but local jurisdictions can build on top of these standards in their local energy codes. For more information, see: The U.S. Environmental Protection Agency's Reducing Heat Islands: Compendium of Strategies, Cool Roofs, Climate Resilient's Cool Roofs Initiative, and Los Angeles' Cool Roof Ordinance.

Cool Pavements are paving materials designed to reflect solar energy, speed up evaporation or otherwise stay cooler than traditional pavements. Cool pavements include seals that can be added over existing paving, traditional materials like concrete, modified asphalt or other newer materials. They can also be permeable pavements with or without plant elements (e.g. grass pavers or porous concrete, respectively) to increase water absorption or support urban greening. Local governments can adopt cool pavements in their own operations, provide incentives, or include them in development and parking standards. For more information, see: The U.S. Environmental Protection Agency's Reducing Heat Islands: Compendium of Strategies, Cool Pavements, and the U.S. Environmental Protection Agency's Cool Pavements Initiative.

# PUBLIC HEALTH RESOURCES: CLIMATE QUICK GUIDES

## GUIDE 01

Taking Action on Climate Change for Health



### Climate Change: What's Public Health Got to Do With It?

#### DEFINITIONS

**Greenhouse Gases (GHG)**  
Gases which absorb infrared radiation and trap its heat in the atmosphere. Both natural and industrial gases exhibit these greenhouse properties, like carbon dioxide and methane.



This is the first in a series of five Guides designed to help public health professionals understand.

- Guide 01 Climate Change: What's Public Health Got to Do With It?
- Guide 02 Health and Equity Co-Benefits of Addressing Climate Change
- Guide 03 Climate Change and Health Equity
- Guide 04 How Public Health can Address Climate Change
- Guide 05 Getting Involved in Climate Change Action Planning

#### What is Climate Change?

Global warming refers to the rise in global average temperature near Earth's surface. It is one aspect of climate change, which refers to major changes in temperature, precipitation, or wind patterns that last for a long time. Human activities are releasing large amounts of greenhouse gases into the atmosphere.

#### Why is Climate Change a Public Health Issue?

"Climate change is a threat to our health, our food, our shelter, and our ability to live well. It is a public health issue and public health professionals can play a key role in addressing it."

#### How does Climate Change Affect Public Health?

Climate change has a wide range of impacts on public health. It can affect the distribution of infectious diseases, the availability of clean water and air, and the health of our food systems. Climate change also affects the health of our most vulnerable populations, including children, the elderly, and people with pre-existing health conditions.

## GUIDE 04

Taking Action on Climate Change for Health



### How Public Health can Address Climate Change

Greenhouse gas emissions from human activity are increasing the earth's temperature, resulting in extreme weather events that have serious health consequences. Vulnerable communities will likely have some of the greatest exposure to climate-related health impacts and the fewest resources to confront them. This is a public health issue and public health professionals can play a key role in addressing it.



#### We Can Address Climate Change. We Can Impact Health.

The following are suggested actions public health staff can take to address climate change at work. We urge you to carry out some of these and encourage your leadership or staff to implement them so that your organization is doing its part to confront this threat to public health.

#### Research

- Complete internal needs assessments and community vulnerability assessments to gather baseline data.
- Map geographic areas for impacts over time.
- Partner with other agencies to monitor key data changes (i.e., weather, neighborhood, and health outcomes). Include health data and maps on County or City website for use by others.
- Work with relevant agencies in your jurisdiction to examine emissions related to your health department's purchasing policy, building energy use, and staff travel.

#### Education and Outreach

- Conduct trainings on the health impacts of climate change for department staff, medical professionals, staff in related departments, and community-based organizations.
- Post climate change web links and information to your department's website, professional network list-serves and email lists.
- Use local data to identify opportunities to address climate change.
- Empower all staff working with the community to integrate messages into existing prevention programs about the health co-benefits of addressing climate change. For example, did you know global warming affects pollen release, which can lead to an increase in asthma and other respiratory problems?

#### Spotlight on Santa Clara County

As part of its CDC funded Communities Putting Prevention to Work Obesity Prevention Initiative, the Santa Clara County Public Health Department (SCCPHD) worked with jurisdictions and community organizations on environmental strategies to increase the use of active transportation and the consumption of local fresh food. Some of the strategies were: creation of a city Community Supported Agriculture (CSA) project, expansion of the acceptance of Cal Fresh/EBT cards at farmers' markets, adoption of Safe Routes to School policies in school districts and cities, creation of a bilingual bike map, development of zoning standards to implement active transportation policies in a city general plan, and amendment of a city code to reduce parking requirements. SCCPHD also embarked on a new collaboration with the Office of Planning to create a Health Element, which will be the first of its kind in the County and will help shape other elements of the General Plan.

## GUIDE 02

Taking Action on Climate Change for Health



### Health and Equity Co-Benefits of Addressing Climate Change

#### DEFINITIONS

**Health Co-benefits**  
The health benefits that result from strategies that are intended to address a non-health issue.

**Mitigation**  
As related to climate change: reducing greenhouse gas emissions.

Climate change mitigation and readiness measures are being implemented in land use, transportation, water, energy, waste, agriculture, and more. Many climate action strategies also have significant beneficial effects on public health and equity, known as co-benefits, making climate change action a "win-win." Some health co-benefits of strategies to reduce greenhouse gas emissions from transportation include: decreases in obesity, cardiovascular disease, respiratory illness, osteoporosis, and

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## GUIDE 03

Taking Action on Climate Change for Health



### Climate Change and Health Equity

#### DEFINITIONS

**Health Inequities**  
The unfair and avoidable differences in health status seen within and between populations and places.

**Built Environment**  
Environments in which people live, work, and

#### Climate Change Will Not Affect All Communities in the Same Way

Whether through sea level rise, droughts, or heat waves, the populations most vulnerable to climate-related health impacts are the same communities that experience health inequities, the unjust and avoidable disparities in health outcomes. These include the elderly, children, communities of color, and those unable to afford food, quality shelter, funds for cooling and transportation, or lacking alternatives to contaminated drinking water.

#### Mitigation Strategies Can Support Health Equity Efforts

Reducing greenhouse gas (GHG) emissions is essential to reduce the effects of climate change. Actions to mitigate further climate change can also reduce health inequities. More than 60% of adults do not achieve the amount of regular physical activity. The highest rates of physical inactivity are among California's low-income households and communities with the least access to safe places to exercise and play. Rates of chronic diseases such as diabetes and heart disease are also higher in these communities.

Climate change mitigation law, Senate Bill 375, requires regional housing, and other land use planning to lower greenhouse gas emissions. Regional agencies are planning for built environments that are walkable with jobs, affordable housing, schools, and basic services close to one another and easily accessible by public transportation, encouraging residents to drive less. Placing jobs, enriched public schools, and grocery stores and services, such as grocery stores, with housing that is close to public transit provides increased opportunities for physical activity and helps decrease health inequities.

## GUIDE 05

Taking Action on Climate Change for Health



### Getting Involved in Climate Change Action Planning



Public health employees have an important role to play in shaping policies and plans designed to address climate change. As experts on the health of our communities and on the needs of vulnerable communities, public health staff can ensure that these needs are addressed while we prepare to adapt to a changing climate. Policy work can include collaborating with local or regional planning agencies, writing letters or providing testimony to advocate for healthy policies, or participating on boards or commissions that address climate change issues.

Opportunities abound for raising health equity concerns in planning processes to address climate change. California's Senate Bill 375 requires each region to develop a Sustainable Communities Strategy (SCS) – an integrated transportation and land-use strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks. The participation of public health staff in this recent, regional process helped create a more equitable and health-focused plan for the Bay Area.

There are also opportunities to get involved at the local level as municipalities use the SCS guidance to plan for their future housing and land use development via agencies that are accountable to local boards of supervisors, such as:

- City and county transportation commissions
- County congestion management agencies (CMAs)
- Transit agencies
- Sales tax authorities

Cities across California are also adopting voluntary plans to reduce their greenhouse gas (GHG) emissions. These include amendments to General Plans, comprehensive sustainability plans, and Climate Action Plans, among others.

In all these planning efforts, public health can educate planners, engineers, and policy-makers about the links between active transportation, housing, and health outcomes and ensure that the needs of the most vulnerable and least resourced communities are addressed. BARHII created a set of downloadable resources that can assist public health staff to participate in planning efforts: (1) *The Healthy Planning Guide* and (2) *Partners in Public Health*.<sup>6</sup>

#### Spotlight on Alameda County

The Adapting to Rising Tides (ART) project is a collaborative planning project evaluating how Bay Area communities can improve their resilience to sea level rise and storm events. The project was initiated in 2010 by the San Francisco Bay Conservation and Development Commission (BCDC) with NOAA Coastal Services Center. This cross-jurisdictional project is focused on a Bay Area sub-region, which includes a portion of the Alameda County shoreline from Emeryville to Union City. Alameda County Public Health Department was invited to participate from the inception. Public Health staff attended planning meetings / strategy sessions and helped to ensure a public health equity focus was included. Public Health staff provided consultation to BCDC staff in scoping of the project to ensure hazardous materials, community land use, and vulnerable population issues were included and edited community land use and equity reports. In addition, Public Health staff facilitated linkages to County and community-based organization staff and provided data.



Figure 1. Area Implicated to be Flooded by 100 Year Flood. 55 inch Sea Level Rise<sup>6</sup>