# Climate Change Adaptation Planning

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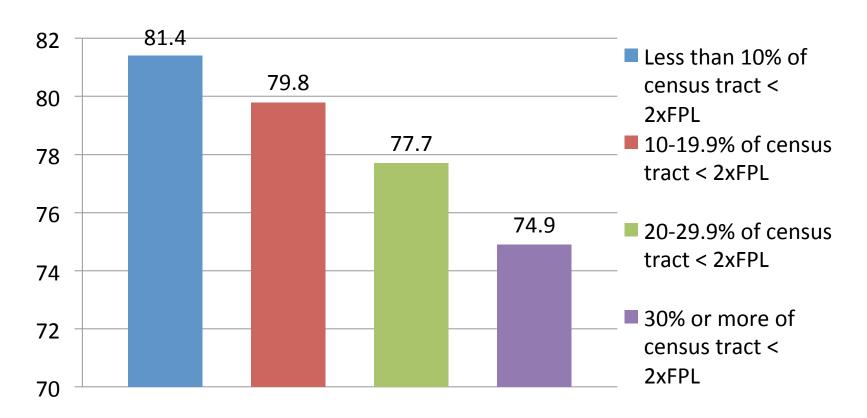
### Why adaptation is Important

 Climate Change impacts already being felt and will continue to get worse

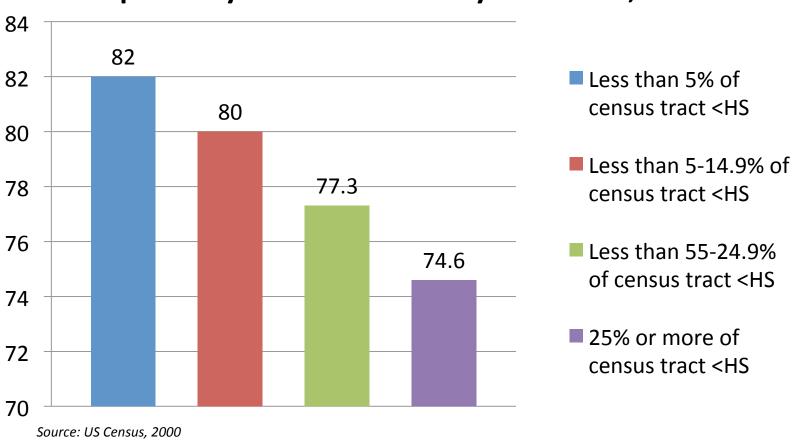
 The impacts of climate change will exacerbate the already disproportionate health impacts on vulnerable populations such low-income, people of color and less-educated.

### Impacts of Disparity on Life Expectancy

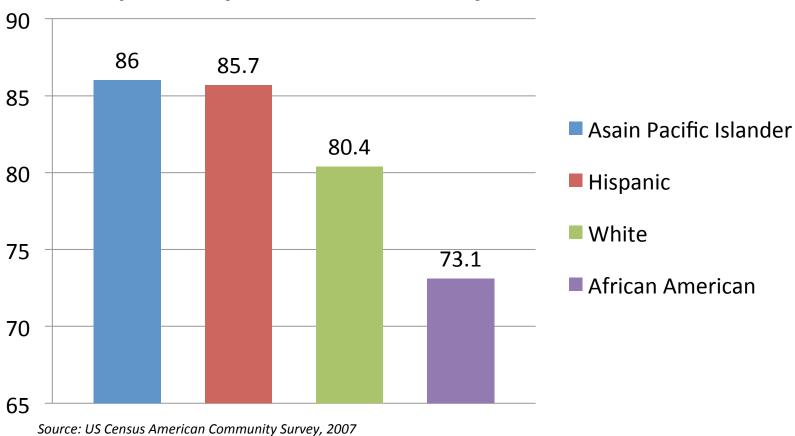
#### Life Expectancy in Contra Costa by Income, 2000



#### Life Expectancy in Contra Costa by Education, 2000



#### Life Expectancy in Contra Costa by Race, 2005-2007



- Main health disparities of concern in Contra Costa County:
  - Heart Disease
  - Cancer
  - Diabetes
  - Asthma

# Climate Change Impacts and Vulnerable Populations

#### **Vulnerable Populations**

- Low income
- Communities of color
- Low educational attainment
- Very old
- Very young
- Chronically ill
- Socially and linguistically isolated
- Limited mobility

### **Climate Change Impacts to Health**

- Extreme heat
- Poor air quality
- Wildfires
- Severe weather
- Increased average temperature
- Agricultural changes
- Drought

## How is the Health Department engaging in adaptation discussions?

- Prepared a co-health benefits evaluation for the County's Climate Action Plan with recommendations to start addressing adaptation
  - Shows immediate benefits of mitigation measures
  - Demonstrates ability of non-health department-led efforts to reduce health disparities (HiAP approach)
  - Identified mitigation measures that are also adaptation measures
  - Provides basis for political support
  - Public receptive to health concerns

# CAP Co-health Benefits (Continued)

Health Indicator	Healthy Food	Physical Activity, Walkability, Bikeablility	Outdoor Air Quality	Indoor Air Quality	Improved Access	Green Space	Job Creation	Climate Risk Reduction	Health Equity
Reduction	LUT 5.6	EE 5.1	ALL	EE 1.1	LUT1.1	EE 5.1	EE 2.2	EE 1.1	EE 2.1
Measures		LUT 1.1		EE 1.2	LUT1.4	LUT 2.1	EE 6.1	EE 1.2	EE 2.2
		LUT 1.2		EE 1.3	LUT1.5	LUT 5.5		EE 1.3	EE 2.3
		LUT 1.3		EE 2.1	LUT1.6			EE 2.1	EE 4.1
		LUT 1.4		EE 2.2	LUT 1.7			EE 2.2	EE 6.1
		LUT 1.5		EE 2.3	LUT 1.8			EE 2.3	EE 6.2
		LUT 1.6		EE 2.4	LUT 1.10			EE 2.4	RE2.3
		LUT 1.7		EE 2.5	LUT2.1			EE 2.5	LUT 1.2
		LUT 1.8		EE 2.6	LUT2.2			EE 2.6	LUT 1.10
		LUT 1.10		EE 3.1	LUT2.3			EE 3.1	LUT 3.1
		LUT 2.1		EE 3.2	LUT2.4			EE 3.2	LUT 4.1
		LUT 2.2		EE 3.3	LUT5.4			EE 3.3	LUT 4.4
		LUT 2.3		EE 3.4	LUT5.5			EE 3.4	LUT 5.4
		LUT 2.4		EE 4.1	LUT6.1			EE 4.1	W1.5
		LUT 5.5		EE 4.2	LUT6.2			EE 4.2	W 2.1
		LUT 6.1		EE 6.2	GO4.3			EE 5.1	W 2.2
		LUT 6.2		LUT 1.9				EE 5.2	GO4.5
				LUT 3.1				EE 5.3	
				LUT 4.1				EE 6.2	
				LUT 4.3				LUT 4.2	
				LUT 4.4				LUT 5.5	
				LUT 5.1				WE 1.1	
				GO 1.1				WE 1.2	
				GO 4.4				WE 2.1	
								WE 2.2	
								GO 1.1	
								GO 2.1	
								GO 2.2	
								GO 4.4	

# How is the Health Department engaging in adaptation discussions? (Continued)

- Participate in BARHII Built Environment Committee, developing fact sheets
- Participated in Joint Policy Committee focus group and meetings
- Conducted workshop with City of Richmond and Contra Costa Climate Leaders

### How is the Health Department Integrating Adaptation into Programs?



## How is the Health Department Integrating Adaptation into Programs?

- Need to incorporate into existing programs
- Tie together different programs EPI, Emergency Planning, Prevention (built environment, nutrition, health homes), other divisions
- Work with different departments Planning, Public works.
   PITCH (Planning Integration Team for Community Health)
- Implementation of CAP measures that are both mitigation and adaptation
- Framing it as a Health-in-All-Polices issue

#### Successes?

- Framing the benefits of mitigation as health co-benefits in CAP
- Networking
  - Within Health Department
  - Within County
  - With Cities
  - BARHII
  - Joint Policy Council
  - California Department of Public Health
  - Public Health Institute/RAMP
  - NGOs

### Challenges?

- Community engagement through traditional means and social media
- Business engagement
- How to quantify and frame the health impacts
  - general vs vulnerable populations, direct vs indirect impacts
- Just how do you build community resilience?
- Funding?

#### Lessons learned?

- Slow going
- Do something specific
- Can't go it alone
- Health is a compelling argument