

***Reimagining Asthma Care, Climate Resilience and
Equity in Contra Costa, California:
Partnering Health Care With Weatherization to Address
the Indoor Environmental Determinants of Health***

Part 3 of 3 in a Webinar Series on Solutions for the
Indoor Environmental Determinants of Health (IEDOH)

Hosted by

U.S. Environmental Protection Agency (EPA)

March 29, 2023, 2:00—3:30 p.m. EDT

Agenda

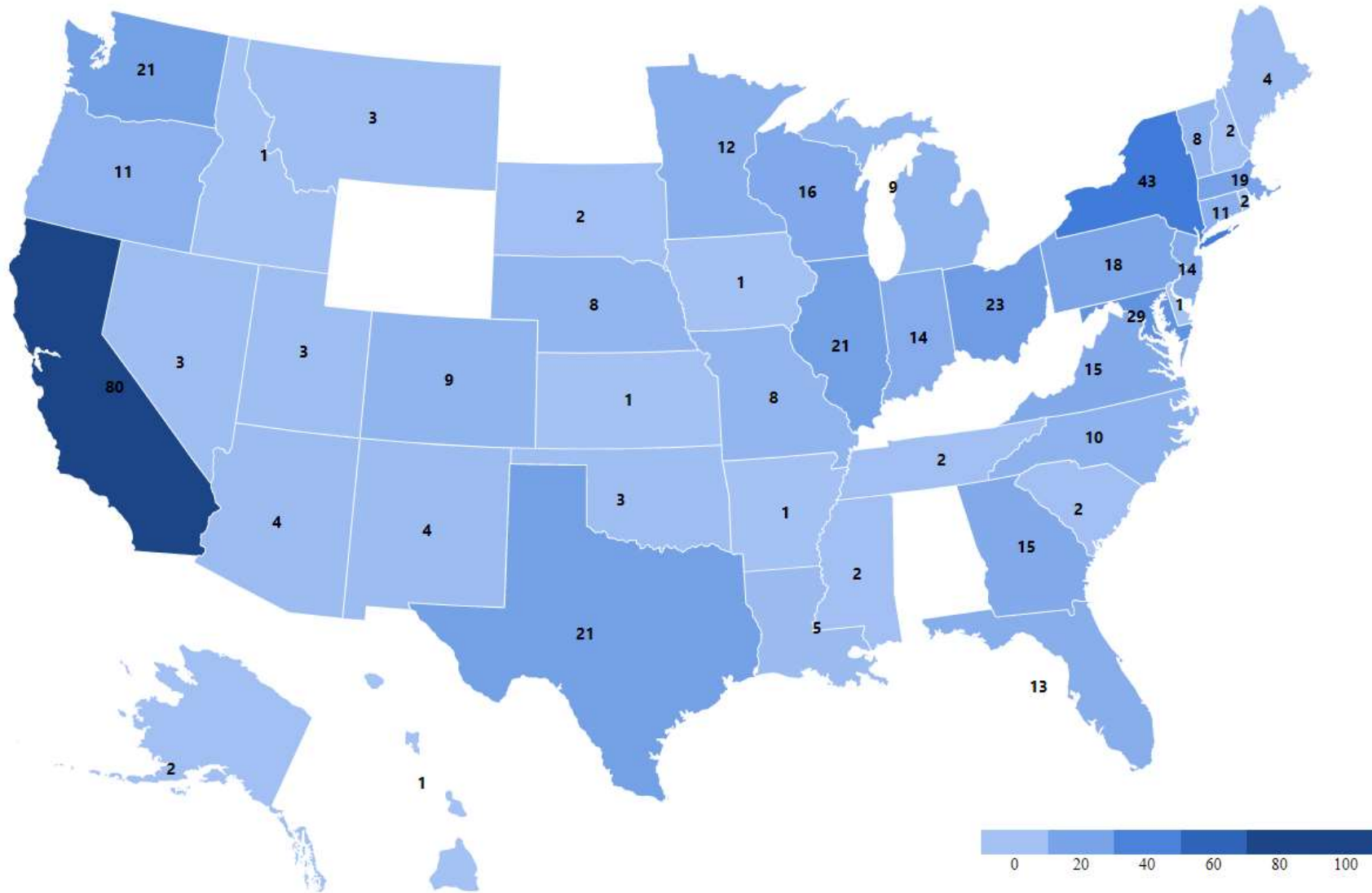
Welcome to a Series on Solutions for the Indoor Environmental Determinants of Health (IEDOH) in Asthma and Community Health.....**2:00 p.m. EDT**

Part 3: *Reimagining Asthma Care, Climate Resilience and Equity in Contra Costa, California: Partnering Health Care With Weatherization to Address the Indoor Environmental Determinants of Health*

Discussion of Questions From Audience..... **30 minutes**

Closing: Requests and Offers to Build National Asthma Impact.....**3:30 p.m. EDT**

Who Is Here Today?



Polling Question 1

Do you know how to match asthma patients who need environmental interventions with home modifications like weatherization?

1. Yes, I know how to connect health care for asthma, like home visiting, with home modifications, like weatherization, to improve asthma.
2. No, I do not know about bridging asthma health care with weatherization to improve asthma by addressing exposures to the IEDOH.
3. I know a little and want to learn more.

Welcome to Solutions for the Indoor Environmental Determinants of Health

- EPA's Indoor Environments Division (IED) studies, supports and spotlights technical **solutions for the indoor environmental determinants of health**, the **IEDOH**, particularly in asthma care.
- For 20+ years, with 4,500+ champion-partners, IED has proven **solutions communities can use** to address the IEDOH in asthma.

IED's System for High Quality Asthma Care



Welcome to Solutions for the Indoor Environmental Determinants of Health

- High-quality asthma **systems break down siloes** to address the IEDOH in asthma.
- Systems require **time, partnership, data and investment** to scale and sustain.
- Assembling community systems to address the IEDOH in asthma is a model **for the social determinants of health (SDOH)**.

IED's System for High Quality Asthma Care



Solutions for the Indoor Environmental Determinants of Health

- **IEDOH solutions for asthma reflect SDOH models** for clinic–community integration, housing-related supports, and health equity priorities in health care.
- **This webinar series spotlights solutions with health care for the IEDOH** to help health care innovation stakeholders advance health equity with in-home environmental asthma care.



Join the Asthma Community Network to
access Solutions for the IEDOH at
AsthmaCommunityNetwork.org

Solutions for the Indoor Environmental Determinants of Health



Michael Kent

Hazardous Materials Ombudsman
for Contra Costa Health Services

Reimagining Asthma Care, Climate Resilience and Equity in Contra Costa County, California:

Partnering Health Care With Weatherization to Address the Indoor Environmental Determinants of Health

**Contra Costa Health Services
March 29, 2023**



Take Aways

Know which way is North

Follow your passion

Get out of your silo and
make friends

Contra Costa County



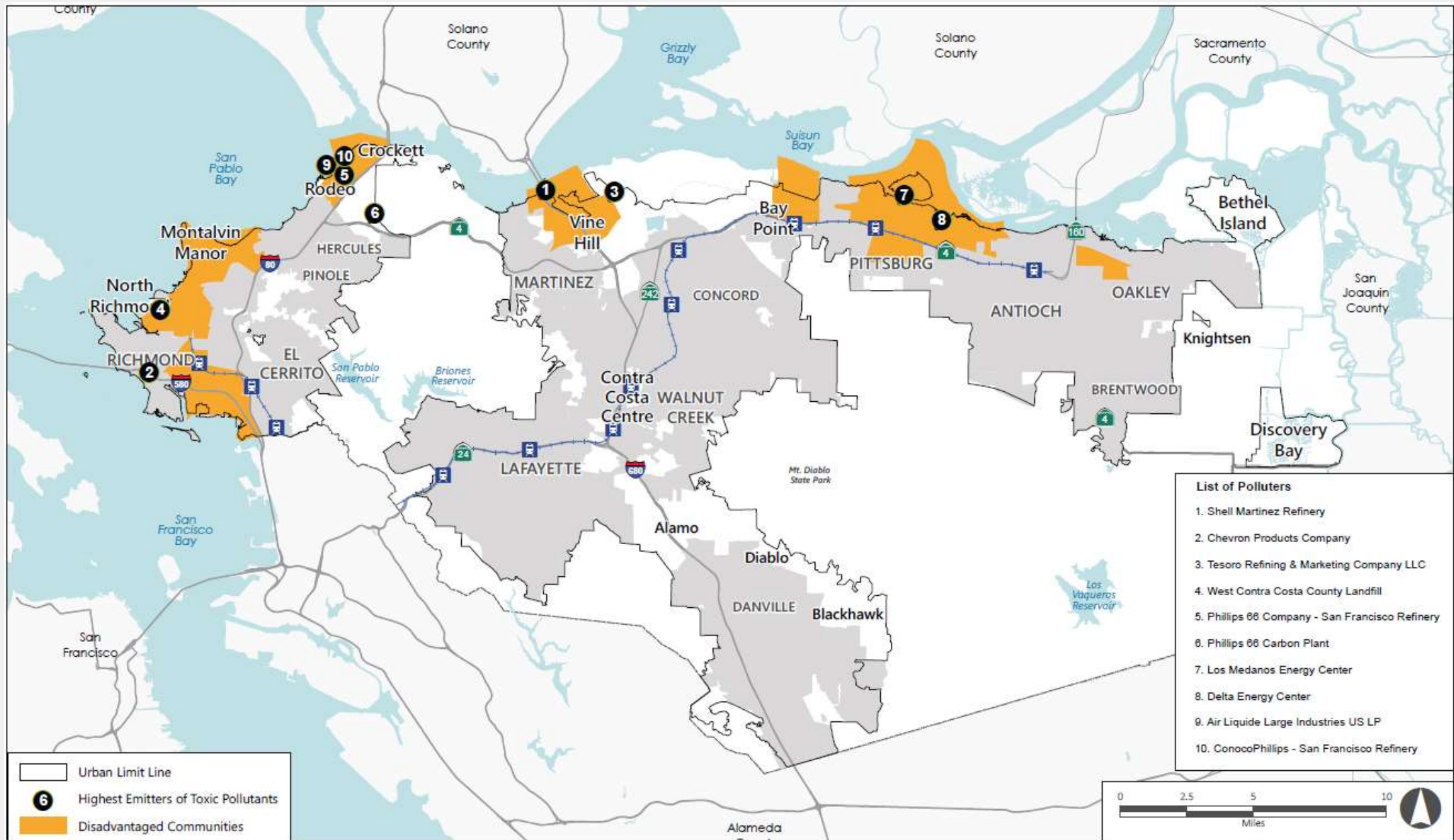
Demographics

Population: 1,150,215

- 20% Over 60 Years Old
- 7.8% in Poverty
- 19 Cities

Population by Race


- White: 43.2%
- Hispanic Latino: 25.8%
- Asian: 18%
- African American: 9.5%
- American Indian: 1%
- Other: 2.5%



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Public Health and Climate Change

The impacts of climate change will disproportionately impact vulnerable populations already suffering health inequities

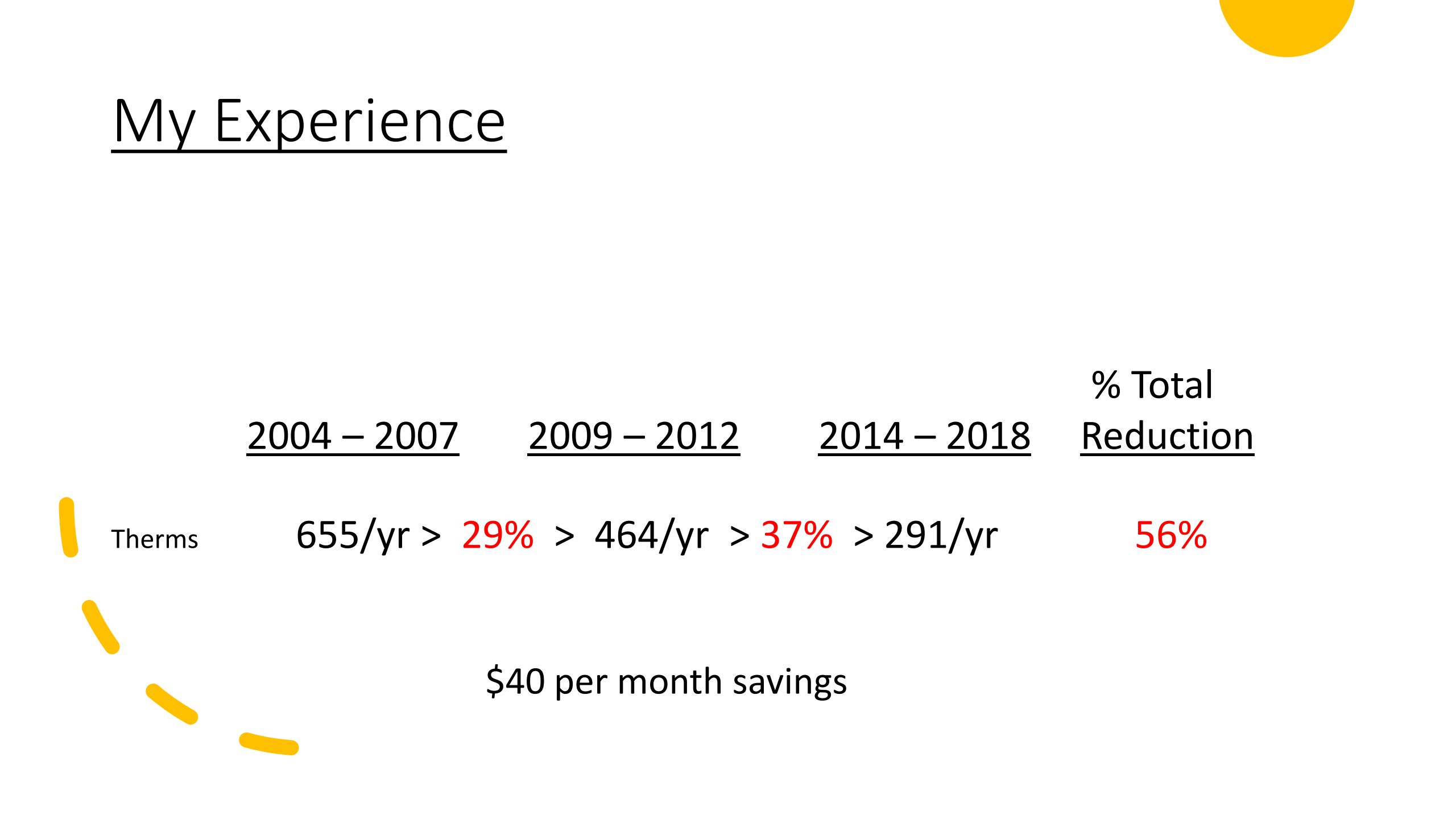
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2015

Climate Change Vulnerability in Contra Costa County: A Focus on Heat

My Experience



	<u>2004 – 2007</u>	<u>2009 – 2012</u>	<u>2014 – 2018</u>	<u>% Total Reduction</u>
Therms	655/yr	> 29% > 464/yr	> 37% > 291/yr	56%

\$40 per month savings

Health Benefits of Weatherization

Keeps homes cooler in the summer if no air conditioning (or if power goes out) and more comfortable in the winter

Reduce energy costs, leaving more \$ for essentials, and less likely to lead to disconnection

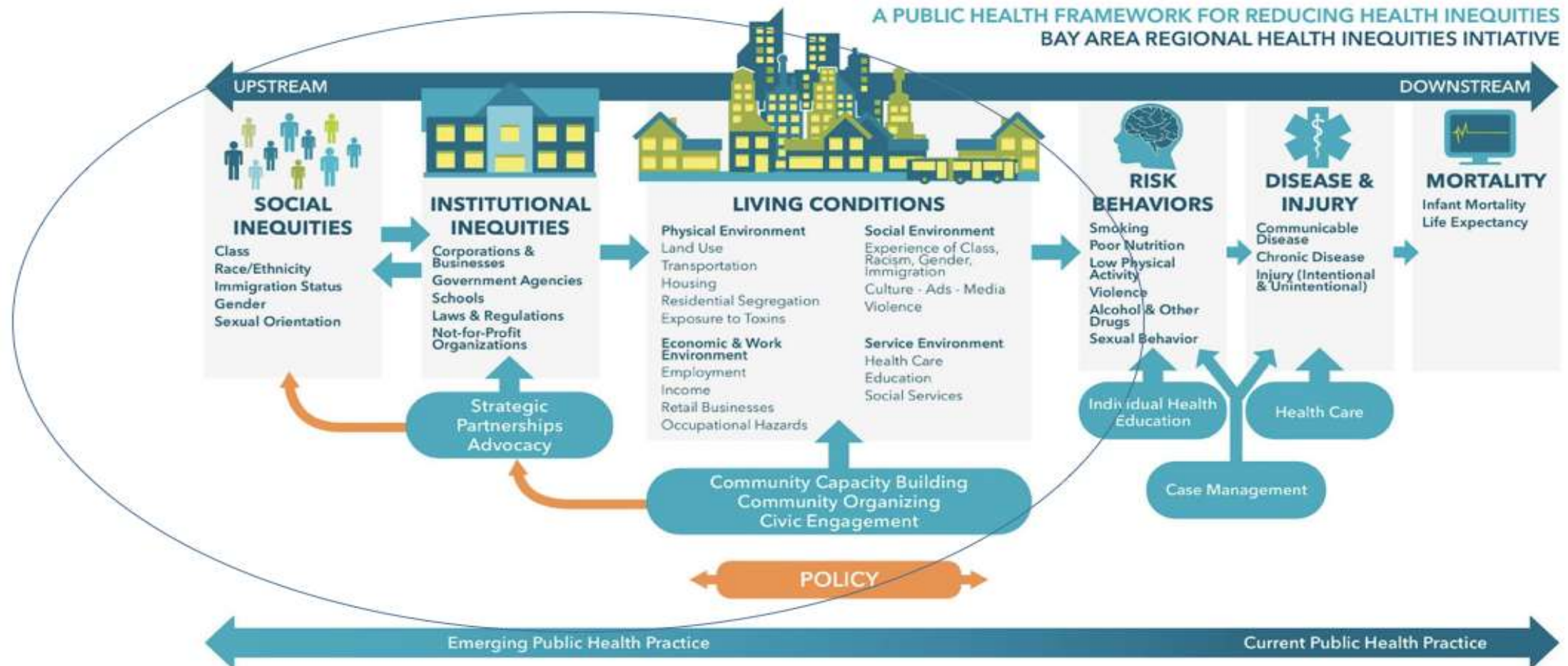
Keeps out particulate matter, making the air easier to breath for people with respiratory problems

Keeps out moisture, which can help reduce insect pests and mold, both asthma triggers

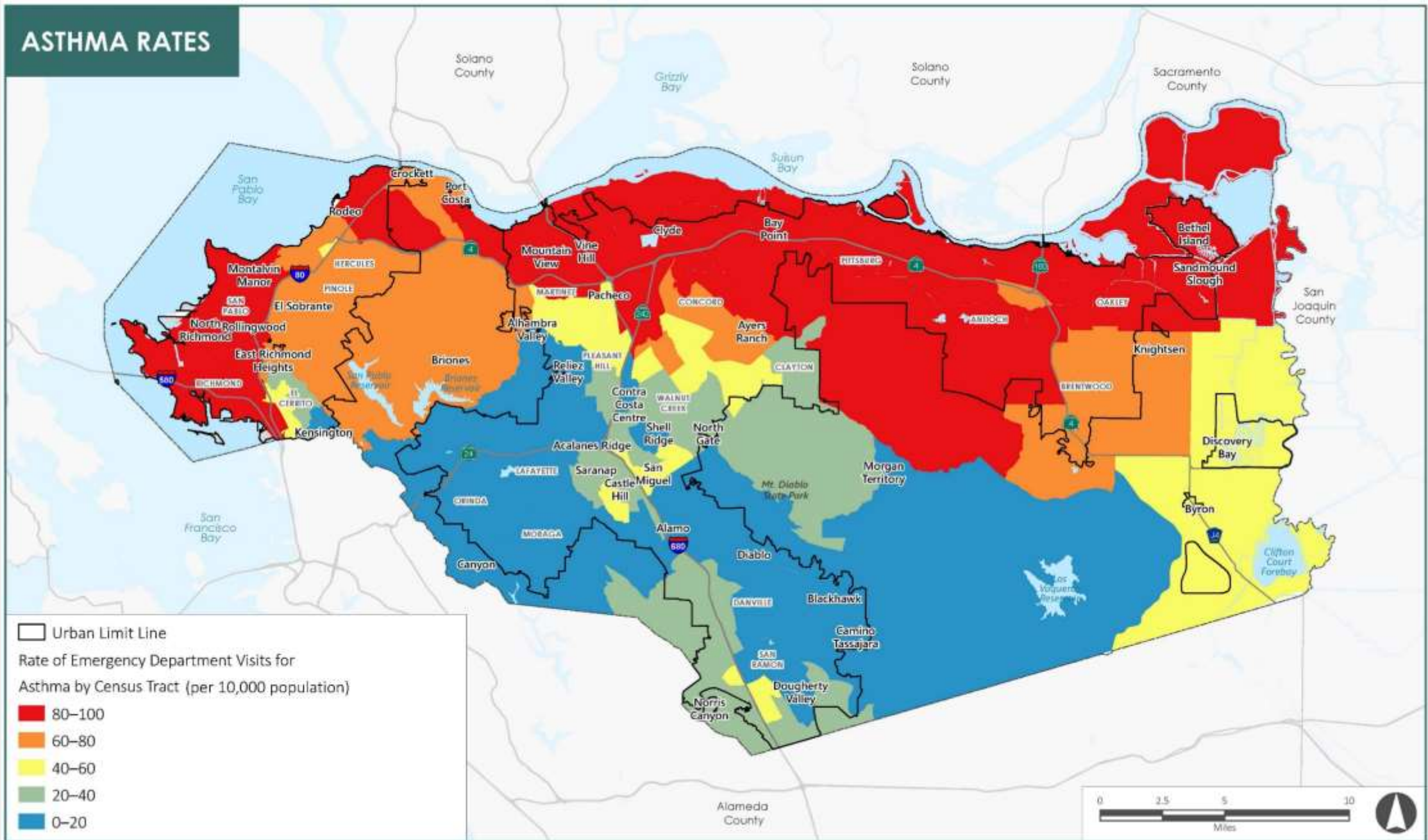
2017/2018: Pilot Project

- Integrated PHNs Process with Weatherization Services
 - 6 screening questions
 - 32 referrals
 - 17 different PHNs
 - 8 completed referrals
- Regional Asthma Management and Prevention (RAMP)
 - Funded by California Department of Public Health to coordinate written report

Addressing Social Determinants of Health



ASTHMA RATES



Source: California Office of Environmental Health Hazard Assessment, 2018; Contra Costa County, 2019; PlaceWorks, 2019.



Contra Costa Asthma Initiative

A business plan for a comprehensive home-based asthma program



“

Our communities don't get the attention we need. I feel most healthcare services are negligent towards us. I'm thankful that our communities are being targeted. It's making a difference for my family and is very helpful.”

- Contra Costa Health Plan asthma pilot participant









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Green & Healthy Homes Initiative

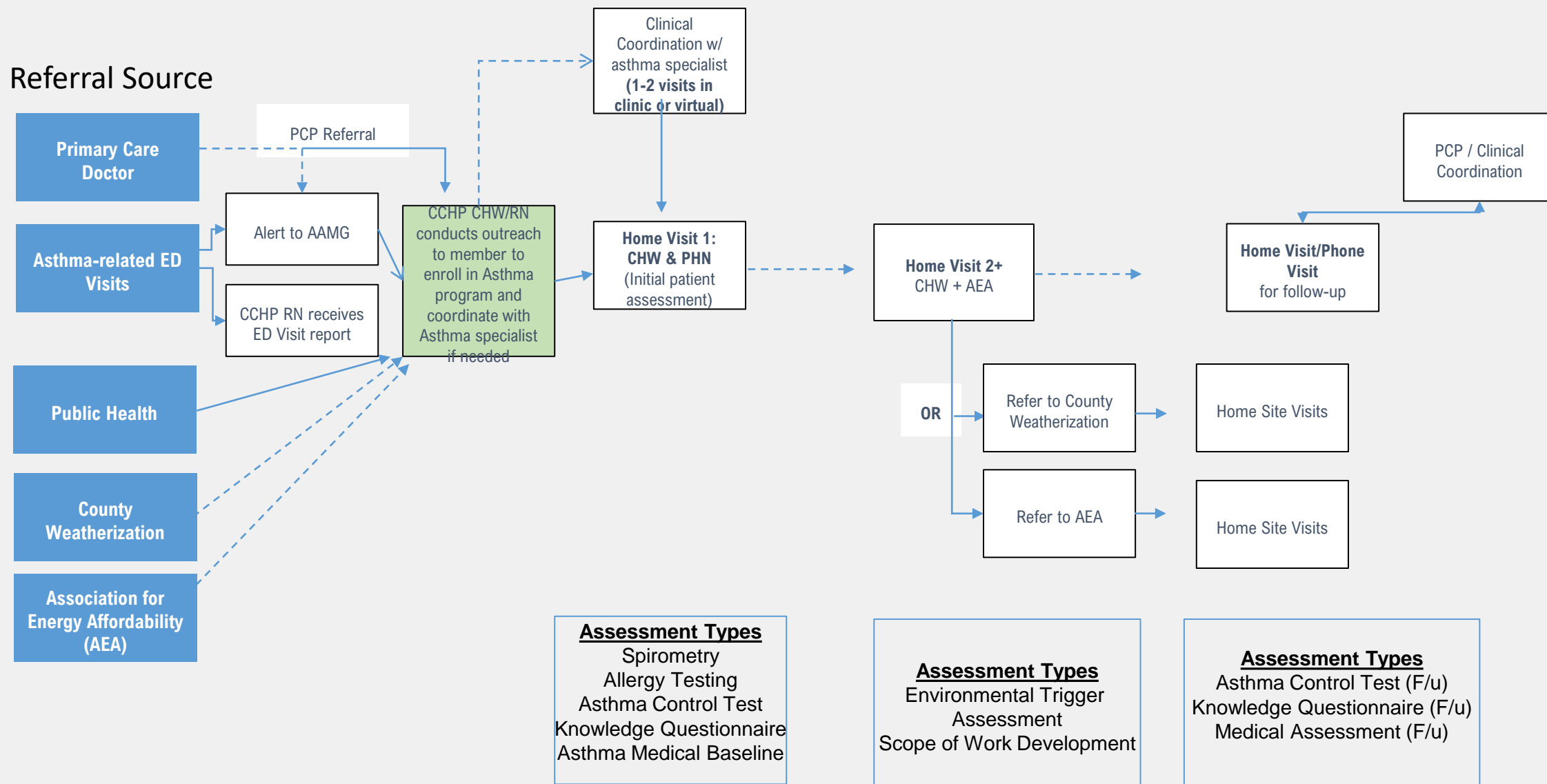
- 2018/2019: Awarded Phase I Technical Assistance Grant to Develop Business Plan to Expand Services to Improve Health Outcomes for Asthma
- 2019/2020: Awarded Phase II Technical Assistance Grant
 - Research feasibility of integrating Project into the State health care billing system

Current Asthma Initiative Project

- Grant from State of California Department of Health Care Services through the Sierra Health Foundation
Three years, 150 assessments
- Grant from the Bay Area Air Quality Management District
One year, 38 assessments augmented
- Grant from the Bay Area Air Quality Management District through the Automobile Emissions Research and Technology Fund by the California Attorney General's Office
Two years, 70 assessments near sources of transportation
- Grant from the US EPA to local community clinics to conduct asthma education
Two years, 60 home education visits

	Program Component	Staffing Organization	
Home Visits	2-3 Home Visits for Asthma Education Coordinate with PCP on Asthma Action Plan; medication usage training; environmental triggers training; follow up with PCP and care managers		
	Consumer Supplies to reduce asthma triggers e.g. green cleaning supplies, hypo-allergenic mattress and pillow covers, integrated pest management, food storage containers		
Home Assessment	Environmental assessment Identify home-based asthma triggers and write remediation scope	Single-Family: County Weatherization	Multi-Family: Association for Energy Affordability
	Remove asthma triggers from home Moisture issues (mold removal, ventilation, plumbing leaks) Allergens (carpet removal/cleaning), and Irritants (HVAC, combustion gases, VOCs)		
EE/ Weatherization	Lower energy bills and improve comfort of home <i>Leveraged funds</i> Lighting, heat pumps, energy-efficient appliances, HVAC		 

Coordination of Health/Energy Programs



Next Steps

Take Aways

Know which way is North

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make friends

Questions?

Contact Information:

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Hazardous Materials Ombudsman

Contra Costa Health Services

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Discussion

Audience questions for EPA IED and Contra Costa County

Polling Question 1

Do you know how to match asthma patients who need environmental interventions with home modifications like weatherization?

1. Yes, I know how to connect health care for asthma, like home visiting, with home modifications, like weatherization, to improve asthma.
2. No, I do not know about bridging asthma health care with weatherization to improve asthma by addressing exposures to the IEDOH.
3. I know more than I did before, and I have some ideas about how to partner in my community to match asthma patients who need environmental interventions with home modifications.