



# Protecting Health Center Patients from Environmental Hazards (PWC2)

# Audience Participation

**Chat**  
(use to talk with peers)



The screenshot displays a virtual meeting interface. On the left, there is a chat window with messages from Brian Long, James Haddock, Lesra Wiggins, and Cliff Greenberg. Below the chat is a poll window titled "#1. What is your biggest business writing challenge? (NO RIGHT ANSWER - OPEN QUESTION)". The poll results are as follows:

Condition	Percentage
Grammar and/or Types	45%
Content Structure	20%
Time	16%
Other	0%

The main area of the interface shows a video feed of a man in a dark suit and white shirt. To the right of the video is a presentation slide titled "UDS Reporting: Preparing, Doing, and Utilizing" with the subtitle "Cultivating Health Center Operations". The slide features a colorful graphic of people and the CURIS logo. At the bottom of the interface, there are navigation buttons for "Request Support" and "12:09pm Eastern", and a footer with "SkillPath" and "Digitell" logos.

**Polling/Q&A**  
(participate in polls, ask questions to faculty)



**LA MAESTRA**  
**COMMUNITY HEALTH CENTERS**  
City Heights · El Cajon · National City · Lemon Grove

## Environmental Health

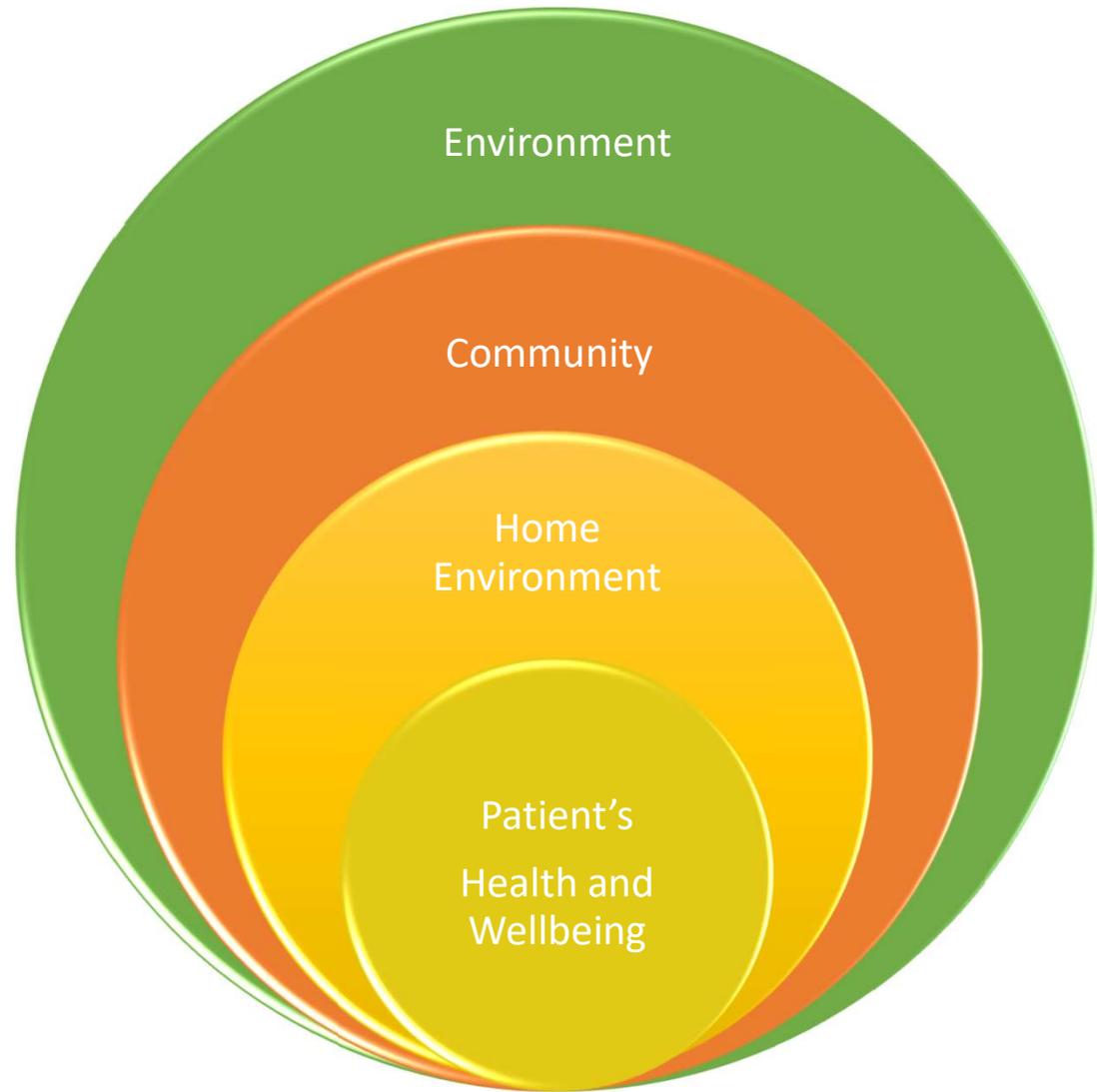
Presented by:  
Zara Marselian, PhD, FACHE  
President & CEO

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# Environmental Health Framework



## La Maestra Programs

- Outreach
- Education
- Resources/Pathways
- Coalitions, Advocacy
- Emergency preparedness:  
Partnerships with California  
Office of Emergency Services  
(Cal OES);The County of San Diego  
Office of Emergency Services (OES);  
Designated as a Points of Dispensing (POD)

## Adverse Environmental Factors In San Diego

- Excessive Heat
- Fires
- Pollution
- Water Shortage
- High utility Fees
- Border
  - Pollution
  - Sewage Spills



## La Maestra's Commitment to Environmental Justice

- Healthy Buildings
- Gold LEED certified health center  
[https://lamaestra.org/wp-content/uploads/2022/01/SDGE-LaMaestra-2010\\_fall-1.pdf](https://lamaestra.org/wp-content/uploads/2022/01/SDGE-LaMaestra-2010_fall-1.pdf)
- Recycling programs
- Light bulb exchange
- Utility discount programs
- Canyons, street clean up programs
- Community Garden
- La Maestra Housing
- Advocacy, Collaborative networks

## Adverse Community Factors

- Freeways/Bridges/Industry
- Lack of Housing
- Substandard Housing
- Lack of Safe / Parks and playgrounds
- High crime
- Prevalence of Concrete



## La Maestra Programs

- Tenant Rights /Legal Partnerships
- Landlord negotiations
- Housing navigators
- Collaborations; Supportive Housing; Federal & State Subsidized Affordable Housing;
- CA's new Housing Accountability Unit
- Home visits – modifications
- Provider letters

## Adverse Home Environment

- Overcrowding
- Conditions of home environment ( lead paint; asbestos ceilings; lack of air ventilation /AC; old carpeting; pest control; trash; plumbing, mold)
- Fear of communicating with landlords-rent increases



## La Maestra Programs

- Housing Case Management
- Asthma mitigation Program
- In Home Visits/Home modifications
- Appliance Replacement
- Exercise Classes
- Community Garden
- Food Pantry, Hot Meals
- Youth Programs
- Window Insulation/ Repairs
- Utility (SDG&E Medical Baseline Program)
- Senior housing visits: home assessments, gas heater, plumbing, windows, safety
- Emergency rental & Utility assistance - Covid

## Adverse Patient Health & Wellbeing

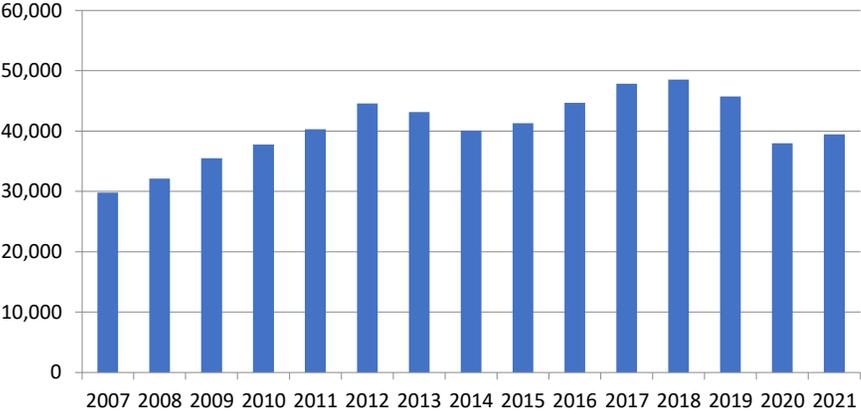
- Chronic Disease
- Lead
- Lack of nutritious food
- Physical Activities
- Limited space for physical activities
- Lack of clean, safe recreational spaces



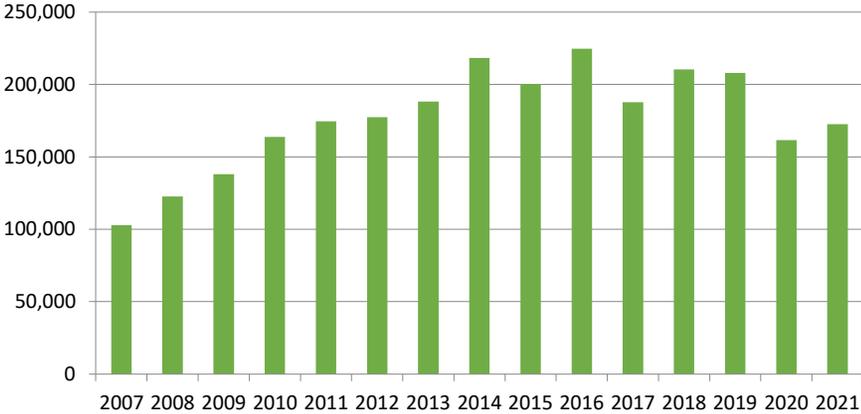
# La Maestra Patients and Visits



Unduplicated Patients



Total Visits



❖ 21 Sites in 4 San Diego communities: City Heights , El Cajon, National City, Lemon Grove

❖ More than 30 languages and dialects spoken by 750+ employees



**LA MAESTRA**  
**COMMUNITY HEALTH CENTERS**  
City Heights · El Cajon · National City · Lemon Grove

Thanks! Contact Information:

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President & CEO

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[Lamaestrafoundation.org](http://Lamaestrafoundation.org)

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# Climate Change and Health Equity in South Los Angeles

**Yohanna Barth-Rogers, M.D.**  
**UMMA Community Clinic**



The Lancet

THE LANCET

“Climate change is the greatest public health challenge of the 21st Century.”

# Physician's For Social Responsibility (PSR)



<https://www.psr-la.org/issues/air-climate-justice/>

“Healthy environments are an important part of creating healthy communities. Where you live should not determine whether you have clean air to breathe.”

## Overview

- Health disparities and Climate Change in South Los Angeles
- Neighborhood Oil Drilling and UMMA's local patient advocacy
- CPCA climate group and statewide advocacy

## According to WHO

- Climate change affects the most basic health requirements: **clean air, safe water, sufficient food and adequate shelter**. It also poses new challenges to the control of **infectious diseases**
- The health impacts of climate change may differ across populations and are dependent on several factors such as **existing vulnerability** and **adaptive capacity**, and **available resources**.



# Health Care Industry's Carbon Footprint

- Health care causes global environmental impacts that, depending on which indicator is considered, range between 1% and 5% of total global impacts, and are more than 5% for some national impacts. (Lancet, 2020)
- The U.S. healthcare system contributes 10% of the nation's carbon emissions and 9% of harmful non-greenhouse air pollutants. (Yale News, 2019)





South Los Angeles





**Table 2.** Top 25 cities with the most to gain by meeting the American Thoracic Society recommendations for PM<sub>2.5</sub> in 2017

PM <sub>2.5</sub> Rank	City	Excess Deaths	Lung Cancer Incidence	Excess Morbidities	Adversely Impacted Days
1	Los Angeles (Long Beach-Glendale), CA	877	153	1,700	853,966
2	Riverside (San Bernardino-Ontario), CA	698	125	1,211	612,701
3	Bakersfield, CA	252	46	470	228,115
4	Pittsburgh, PA	184	52	259	103,967
5	Fresno, CA	177	34	248	154,736
6	Visalia (Porterville), CA	109	17	194	95,475
7	Modesto, CA	84	17	150	68,414
8	Cleveland (Elyria), OH	71	19	90	39,384
9	Hanford (Corcoran), CA	70	11	62	74,614
10	Seattle (Bellevue-Everett), WA	66	16	109	67,615
11	Eugene, OR	66	14	74	41,559
12	Stockton (Lodi), CA	61	13	112	50,983
13	Oakland (Hayward-Berkeley), CA	59	12	105	56,262
14	Salt Lake City, UT	46	7	74	51,462
15	Detroit (Dearborn-Livonia), MI*	41	13	—	—
16	Medford, OR	42	10	46	21,793
17	Sacramento (Roseville-Arden-Arcade), CA	27	6	43	21,935
18	Merced, CA	24	5	42	24,177
19	Phoenix (Mesa-Scottsdale), AZ	23	5	41	19,336
20	San Jose (Sunnyvale-Santa Clara), CA	22	5	33	18,412
21	Grants Pass, OR	19	6	17	7,431
22	Boise City, ID	19	5	33	17,037
23	Madera, CA	17	4	149	14,884
24	Yakima, WA	14	3	23	10,812
25	Missoula, MT	13	3	19	11,034

Trends in Excess Morbidity and Mortality Associated with Air Pollution

# Health Inequities in South Los Angeles

Low-income communities and communities of color are disproportionately burdened by environmental health hazards

South Los Angeles is ranked in the top 10% most polluted communities in the California (CalEnviroScreen2.0)

South Central Los Angeles experiences high levels of land use incompatibility (Neighborhood oil drilling)

Residents of South LA are expected to live nearly 12 years less than residents of Brentwood.

# UMMA Patient Profile



54% live below poverty line



61% Medi-Cal insured



32% uninsured



22% ages 0-17



71% ages 18-64



7% ages 65+



49% male



51% female



70% Latino



20% African-American

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In Los Angeles, there are

**130 schools**

**184 daycare facilities,**

**213 elderly homes 628,000  
residents**

within a half mile of an active  
oil well.



# #THEDIRTYDOZEN

Throughout the Los Angeles Basin, oil companies reported repeated use of 12 notorious air toxins during extraction and production.

#TheDirtyDozen expose Californians to unacceptable health risks, including:



irritation to eyes, nose or skin



respiratory illness



cancer risk



damage to nervous system



cardiovascular disease



reproductive & endocrine disruption

CRYSTALLINE SILICA

METHANOL

HYDROCHLORIC ACID

HYDROFLUORIC ACID

2-BUTOXYL ETHANOL

ETHYL GLYCOL

XYLENE

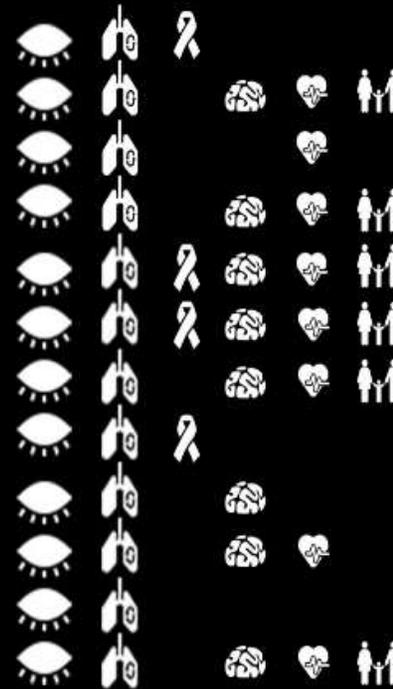
AMORPHOUS SILICA FUME

ALUMINIUM OXIDE

ACRYLIC POLYMER

ACETOPHENONE

ETHYLBENZENE



THE FULL EXTENT OF THE RISKS OF OIL RECOVERY TECHNIQUES IS STILL UNKNOWN.

Under SCAQMD rule, oil companies are allowed to keep the identity of certain used chemicals hidden from the public if the companies claim it is a "trade secret."

## HEALTH THREATS OF NEIGHBORHOOD DRILLING to women and children



Over 750 active oil wells operate dangerously close to homes, schools, churches, parks and hospitals throughout Los Angeles. Neighborhood drilling threatens the health of thousands of Angeleno families. For the most sensitive populations—children, pregnant mothers and the elderly—the **health threats of neighborhood drilling** are a heavy burden.

Pregnant women living near active oil operations have a:

**40%**

increased risk of  
**PREMATURE BIRTH**

**30%**

increased risk of  
**HIGH-RISK PREGNANCY**

Prenatal exposure to  
**23 CHEMICALS**  
used in oil and gas operations  
has been shown to cause:

- increased risk of miscarriage
- increased risk congenital **heart defects** in infants
- increased risk of other **birth defects**
- serious **respiratory problems** in infants and children
- **pulmonary infections** in newborns
- slower development and **low IQ scores**



Children are especially susceptible to environmental pollution:

- The air intake of a resting infant is **twice that of an adult**, exposing them to larger amounts of toxics in the air.
- Pound for pound of, children drink more water, eat more food, and breathe more air than adults, offering **greater exposure** to toxic chemicals.
- Children are undergoing rapid growth and development, and their **delicate processes** are easily disrupted by toxic substances.

Oil and gas operations use **endocrine-disrupting chemicals**, which may cause reproductive harm and **infertility**.

As many of these chemicals can harm the reproductive system, their health impacts have the potential to **harm families across multiple generations**, even if they move away from the current source of exposure.

# UMMA Community Engagement

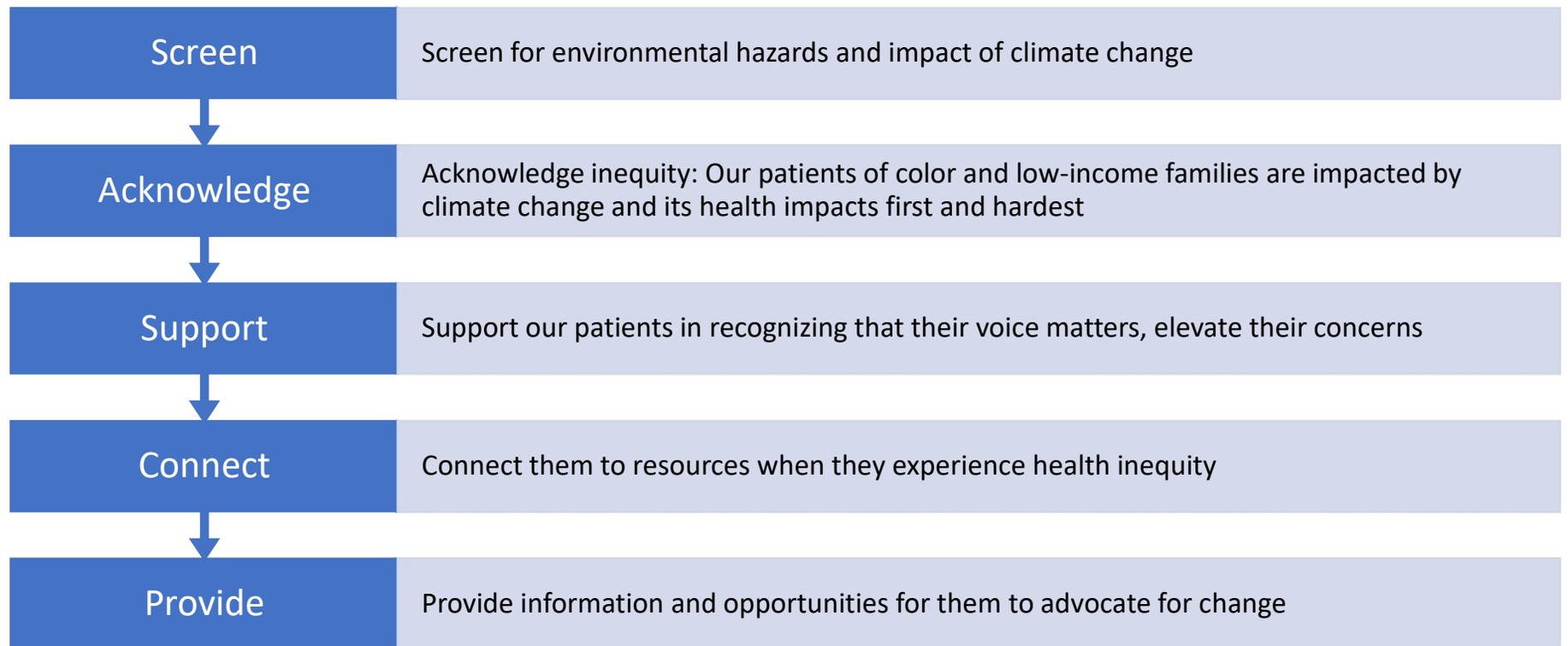
Engaged with local organizations do climate justice and health work including STAND LA and Physicians for Social Responsibility (PSR)

Attended city council hearings to study the health impacts of urban drilling

Educated care teams and clinic staff on the health effects of oil drilling in South LA

Environmental health text campaigns (e.g. patient education, linking to community resources around neighborhood oil drilling)

# Engaging patients in the exam room



# Challenges

GETTING BUY-IN FROM LEADERSHIP AND THE BOARD

INCORPORATING CLIMATE JUSTICE INTO OUR STRATEGIC PLAN

NO MODEL IN CLINICAL SETTING (I.E. CLIMATE IMPACT SCREENERS)

LIMITED FUNDING AVAILABLE TO INTEGRATE INTO PRIMARY CARE

NOT PRIORITIZED NATIONALLY AS PART OF OUR MEASURABLE DATA

NOT INCENTIVIZATION TO GREEN HEALTH CENTERS OR TO ENGAGE IN CLIMATE ADVOCACY

## CPCA Climate Change Work Group: A sub-group of the Clinicians' Committee

Open to both clinician & non-clinician members of the health center community:

- Climate Change is a major driver of health impacts & cause of health disparities
- Growing awareness within medical community of negative impacts of climate change
- The climate crisis likely the most serious pandemic we will face in the future - therefore we, as a medical community, need to address it directly.



# CPCA Climate Change Work Group

Educate ourselves around climate change & health, and explore ways we can engage in climate action:

1. Collaborate with other groups working on climate change & health
2. Share interventions that address climate related health issues both in the exam rooms of our health centers and in the communities
3. Consider ways we may “Green” our health center organizations
4. Climate change related to policy and legislations that health centers wish to support

# Increasing Community Centers Engagement in Climate Equity – What can we do?

Identify local environmental health inequities

Integrate climate and environmental health effects within your clinical practice (another SDOH?)

Patient education linking health to climate change

Engage with community partners who are engaged in advocacy

Start a regional PCA group on climate change and health equity

Green our health centers – reduce our carbon footprint

# **EJ AT EPA TODAY**

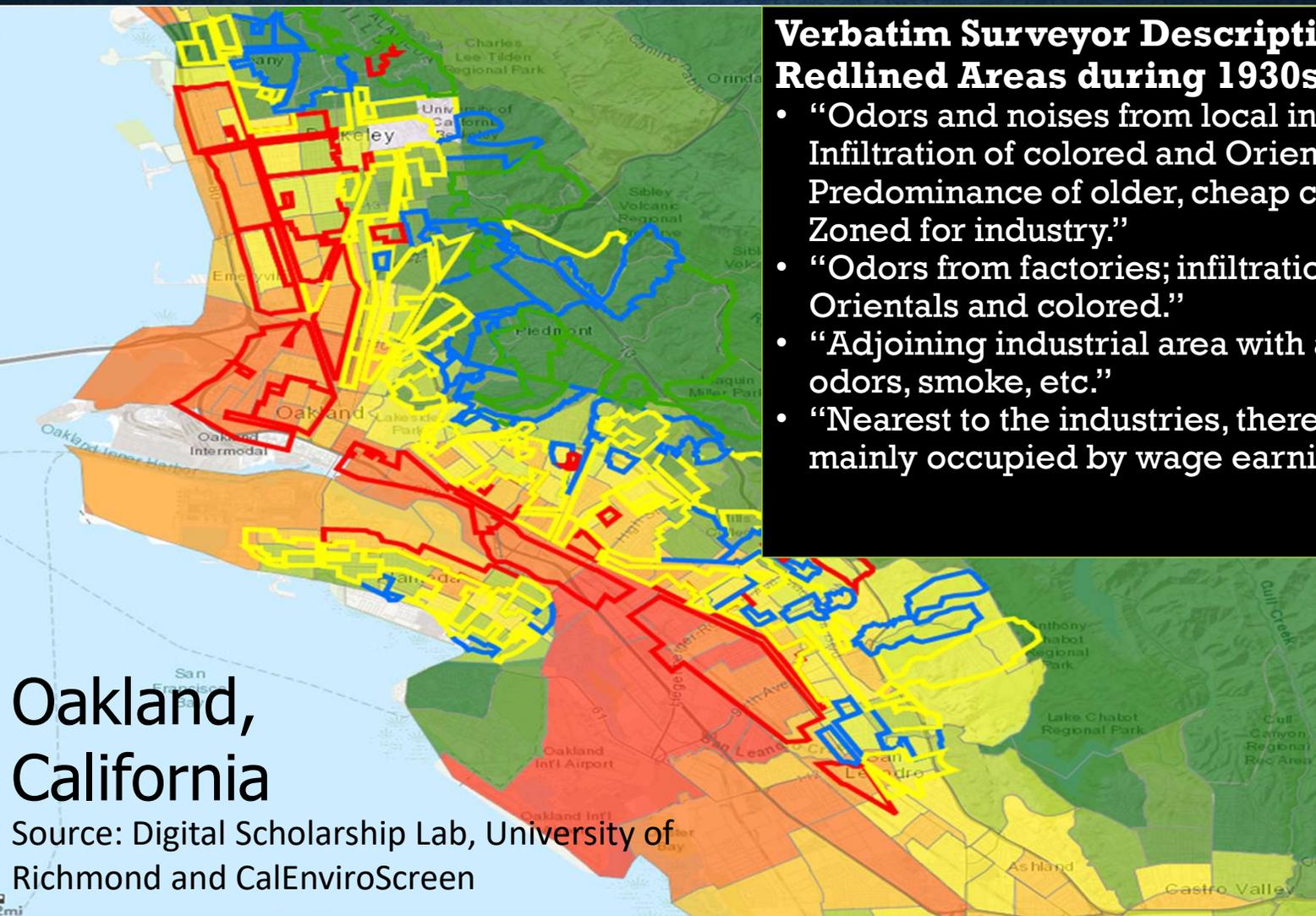
National Association of  
Community Health Center

February 16, 2022

# HISTORICAL LEGACY OF EJ: REDLINING AND SYSTEMIC RACISM

## Verbatim Surveyor Descriptions of Redlined Areas during 1930s:

- “Odors and noises from local industries. Infiltration of colored and Orientals. Predominance of older, cheap cottages. Zoned for industry.”
- “Odors from factories; infiltration of Orientals and colored.”
- “Adjoining industrial area with attendant odors, smoke, etc.”
- “Nearest to the industries, thereby being mainly occupied by wage earning families”



## Oakland, California

Source: Digital Scholarship Lab, University of  
Richmond and CalEnviroScreen

Not Even Past

Not Even Past: Social Vulnerability and the Legacy of Redlining Introduction/About

**D4** Close

- Population
- e. Shifting or Infiltration of colored - fairly rapid
- c. Foreign Families 25% Nationalities  
Predominantly Jewish
- d. Negro 35
- b. Class and Occupation Rubber workers and laborers
8. Description and Characteristics of Area

← The 1930s Today →

4.9%	Diabetes (map→)	23.9%
17.7%	High Blood Pressure (map→)	53.5%
2%	Kidney Disease (map→)	5.3%

Leaflet | © Mapbox | © OpenStreetMap | Improve this map

Mapping Inequality Redlining in New Deal America

Introduction Downloads & Data About Contact Us American Panorama

Show area description for D4

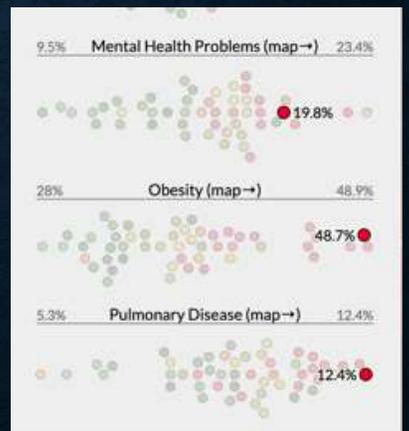
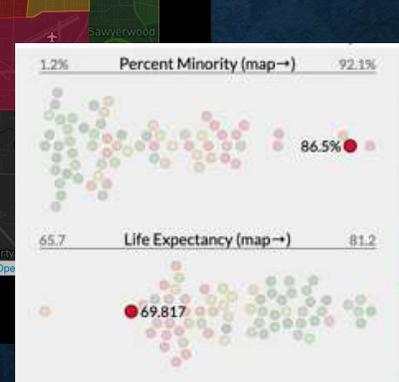
Red Rent Trend (next 6-12 months) Static to downward Search for city

- NEW CONSTRUCTION (past yr.) No. 0 Type & Price How Selling
- OVERHANG OF HOME PROPERTIES: a. HOLC. 12 b. Institutions 3-31-39
- SALE OF HOME PROPERTIES (past yr.) a. HOLC. 1 b. Institutions 3-31-39  
Very little,
- MORTGAGE FUNDS: if any 7. TOTAL TAX RATE PER \$1000 (193.B) \$ 28.90
- DESCRIPTION AND CHARACTERISTICS OF AREA:

Laid out about 1905; known as main Jewish shopping district; paved streets; good transportation; convenient to schools, churches, and stores; located just south of Perkins Park; level terrain. Most of the area lying south of Bartges Street has soft foundation due to nearby Summit Lake (southern boundary).

Homes located on Norfolk, Raymond and the south end Snyder, Schock, Metzger and Bowery Street are out of "plumb" owing to the shifting foundation. Heavy traffic along Wooster Avenue, Thornton and Bowery Streets. District affected by odors, smoke, and dirt from nearby Goodrich Rubber Company plant. Acquired property if not sold immediately will suffer from vandalism.

Declining district, heavily populated by low class Jews -- all stores on Wooster Avenue (traversing artery) are Jewish-owned. Present heavy negro encroachment gradually increasing.



# EJ AND SYSTEMIC RACISM SERIES

May 5, 2021, 12:00 – 1:00 pm EST

Learning about the [Climate Safe Neighborhoods Partnership](#) and how youth in two of Groundwork's Trusts, Groundwork Hudson Valley, and Groundwork Richmond, VA, and other places are leading the way in working closely with residents and stakeholders to organize, mobilize, and effect systems change to make communities more resilient to extreme heat and flooding.

[Recording of Climate Safe Neighborhoods Partnership Session](#)

(Captions in both English and Spanish; subtítulos en inglés y español)

[Transcript in English \(.txt\)](#)

[Transcript in Spanish \(en Español\) \(.txt\)](#)

June 10, 2021, 12:00 – 1:00 pm EST

Learning about the [Pollution and Prejudice](#) project and how CalEPA's racial equity team designed a set of tools to explore the connection between racist land use practices of the 1930s and the persistence of environmental injustice. Understanding how environmental conditions are informed by legacy land use practices helps CalEPA to ensure equitable access to clean air, water, and land for all Californians through policy development and implementation.

[Recording of the Pollution and Prejudice project Session](#)

(Captions in both English and Spanish; subtítulos en inglés y español)

[Transcript in English \(.txt\)](#)

[Transcript in Spanish \(en Español\) \(.txt\)](#)

April 6, 2021, 12:00 – 1:00 pm EST

Reviewing a recent study on the correlation of redlined areas and the location of urban heat islands will discuss their participatory research on the spatial distribution of climate impacts, involving communities in measuring heat in cities. This interdisciplinary approach offers a compelling perspective on how scientists and residents seek to address disproportionate vulnerability emerging from climate change.

[Recording of the Redlining and the Climate Crisis Session](#)

(Captions in both English and Spanish; subtítulos en inglés y español)

[Transcript in English \(.txt\)](#)

[Transcript in Spanish \(en Español\) \(.txt\)](#)

March 4, 2021, 12:00 – 1:00 pm EST

Highlighting [The Mapping Inequality Project](#), a unique collaboration on redlining and current environmental challenges that provides publicly accessible digitized versions of redlining maps for about 200 cities. This project has generated trailblazing work in the area of EJ and systemic racism. Two of its founders will discuss the genesis, philosophy, methodology, and impact of this game-changing project.

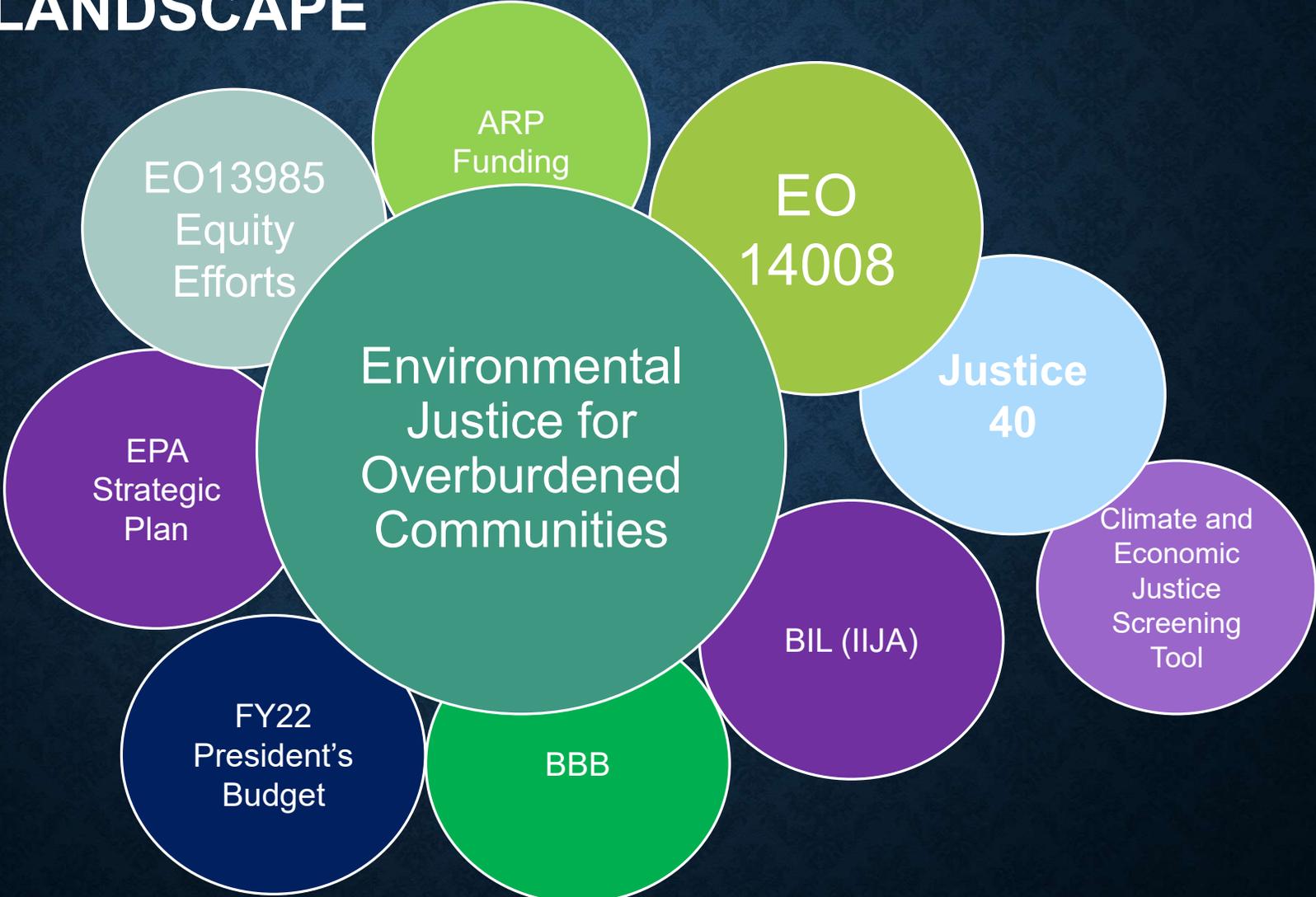
[Recording of the Mapping Inequality Project Session](#)

(Captions in both English and Spanish; subtítulos en inglés y español)

[Transcript in English \(.txt\)](#)

[Transcript in Spanish \(en Español\) \(.txt\)](#)

# EPA'S EJ LANDSCAPE



# Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

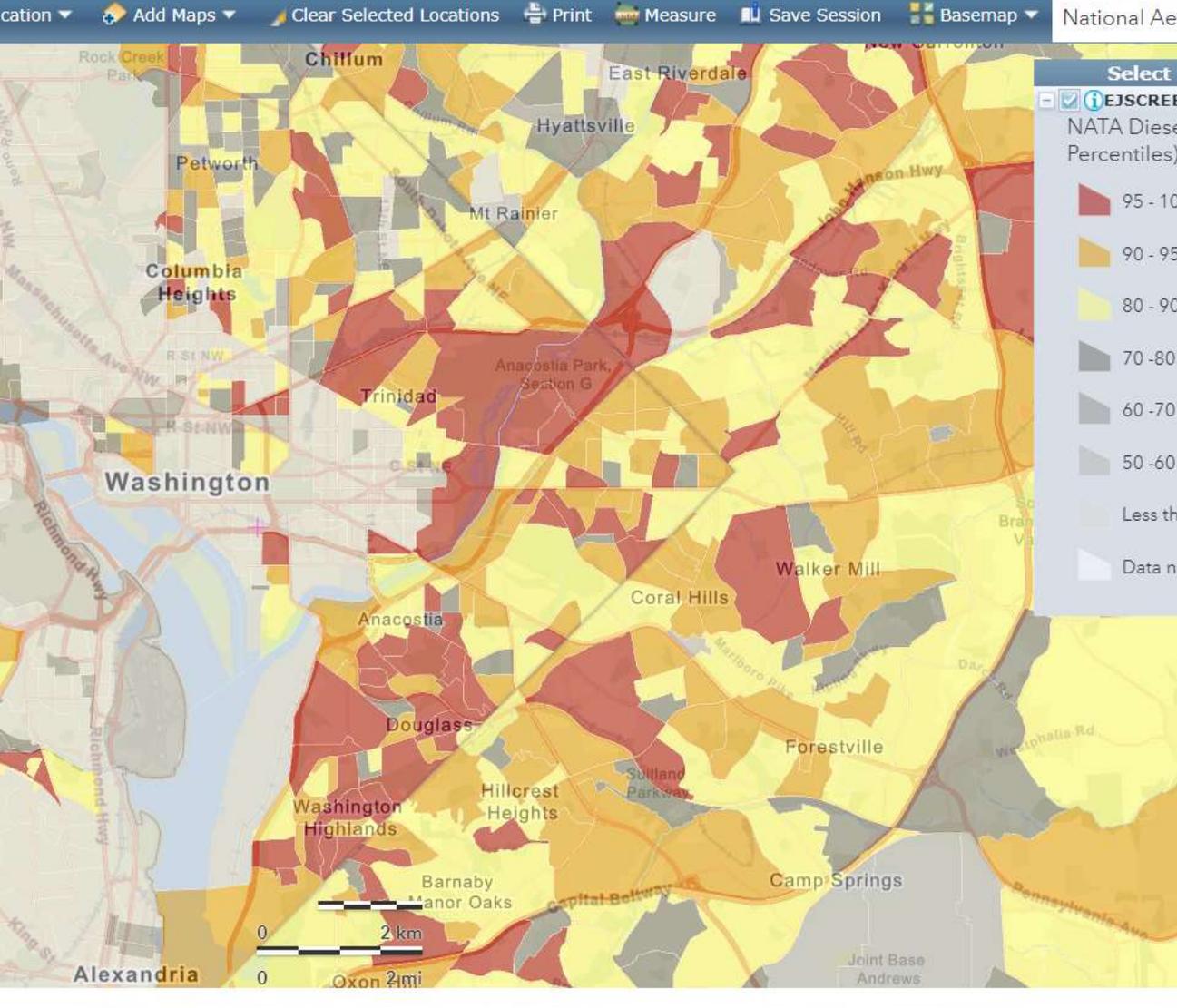
JANUARY 20, 2021 • PRESIDENTIAL ACTIONS

- All of government approach to equity and civil rights
- Not completely EJ, but significant overlap
- Significant public engagement

# Executive Order on Tackling the Climate Crisis at Home and Abroad

JANUARY 27, 2021 • PRESIDENTIAL ACTIONS

- Justice40 – 40% of the benefits of certain programs to disadvantaged communities
- EJ Scorecard
- Significant public engagement



## EJSCREEN PROVIDES A CUMULATIVE VIEW

- Look across all 11 indexes or at specific relevant indexes or indicators
- Look at all places at or above thresholds for all indexes
- 80<sup>th</sup> percentile = 34% of the country
- 90<sup>th</sup> percentile = 23%
- 95<sup>th</sup> percentile = 14%



FY 2022-2026

# EPA Strategic Plan

EJ as Goal 2 with cross-cutting integration

1. EJ Integration within EPA
2. Furthering application of disproportionality and cumulative impacts
3. Support for Communities
4. Support for partners (states, tribes, local gov.)
5. Civil Rights Enforcement

## Implications of these commitments across the board

- Disproportionality and cumulative impacts in regulatory decisions (i.e., permits, rules)
- Disproportionality and cumulative impacts in formal agreements with regulatory partners (i.e., states, tribes, local governments)
- Clear responsiveness to community input in our decisions
- Just treatment and meaningful engagement with communities with EJ concerns
- Bringing together compliance with civil rights laws and integration of EJ considerations across the environmental regulatory endeavor

## Thanks! and Contact Info

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# Questions & Answers



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