



AcademyHealth

Using Disadvantage Indices to Advance Health Equity:

Lessons Learned from State COVID-19 Response Efforts

*Supported by the Blue Shield of
California Foundation*





Purpose and Goals

- To highlight how states have used disadvantage indices to inform their COVID-19 vaccination efforts
- To surface early insights, challenges, and lessons learned based on states' experiences to date
- To identify important areas for evaluation that could inform the ongoing pandemic response, as well as potential future uses of indices to advance health equity

The goal is to **surface early evidence and evaluation needs** that can help policymakers and researchers better understand the use of disadvantage indices to promote equity during the COVID-19 pandemic and beyond.



Speakers

- **Hemi Tewarson, J.D., M.P.H.**
 - Executive Director, National Academy for State Health Policy
- **Harald Schmidt, Ph.D., M.A.**
 - Assistant Professor, University of Pennsylvania
- **Rohan Radhakrishna, M.D., M.P.H.**
 - Deputy Director, California Department of Public Health
- **David Rickless, M.S.**
 - GIS Analyst, CDC
- **John Auerbach, M.B.A.**
 - Director of Intergovernmental and Strategic Affairs, CDC



Logistics

- Questions may be submitted at any time using the Q&A box
- A recording of this webinar will be available on the AcademyHealth website in one week
- For technical assistance during the webinar, please contact Zoom Support at (888) 799-9666

Health, place and priority setting:

Addressing social justice in vaccine allocation (and elsewhere) through disadvantage indices

Harald Schmidt, PhD*

(*with multiple collaborators)

@harald_tweets

Acknowledgements

(Collaborators and/or assistance with key questions, not endorsement of following slides)

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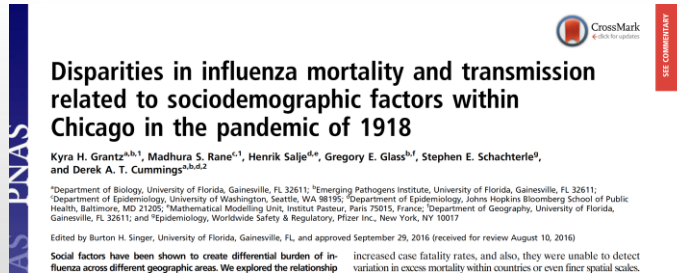
Main points:

- Unadjusted, traditional rationing frameworks risk compounding existing income, racial/ethnic inequities*
- In a major shift, *Disadvantage Indices* were integrated in vaccine rationing to promote social, racial/ethnic justice
- There is public support and broader use; explore equity-promoting potential beyond the pandemic

1918 Flu pandemic

1918:

Neighborhoods with higher unemployment, higher population density, and lower literacy levels: higher transmission rates and cumulative influenza mortality



1918 Flu pandemic & 2018 US Flu pandemic guidelines

1918:

Neighborhoods with higher unemployment, higher population density, and lower literacy levels: higher transmission rates and cumulative influenza mortality

Disparities in influenza mortality and transmission related to sociodemographic factors within Chicago in the pandemic of 1918

Kyra H. Grante^{a,b,1}, Madhura S. Rane^{c,1}, Henrik Salje^{d,e}, Gregory E. Glass^{b,f}, Stephen E. Schachterle^g, and Derek A. T. Cummings^{a,b,g,2}

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Edited by Burton H. Singer, University of Florida, Gainesville, FL, and approved September 29, 2016 (received for review August 10, 2016)

Social factors have been shown to create differential burden of influenza across different geographic areas. We explored the relationship increased case fatality rates, and also, they were unable to detect variation in excess mortality within countries or even finer spatial scales.



SEE COMMENTARY

Table 1. Category, vaccination population groups, estimated number in population group, and tiers for low, moderate, and high/very high pandemic severity

Accessible version at https://www.cdc.gov/flu/pandemic-resources/national-strategy/planning-guidance/guidance_50k.html#table-1

		TIER 1 ¹	TIER 2	TIER 3	TIER 4	TIER 5	Not Targeted ²			
Category	Population Group	Estimated Number ³	Low Severity ⁴	Moderate Severity	High/Very High Severity					
Homeland and national security	Deployed ⁵ & mission essential personnel	850,000								
	Essential military support & sustainment personnel	650,000								
	Intelligence services	150,000								
	National Guard personnel	500,000								
	Other domestic national security personnel	150,000								
	Other active duty military & essential support	1,500,000								
Health care and community support services	Public health personnel	300,000								
	Inpatient health care providers	3,200,000								
	Outpatient & home health providers	2,600,000								
	Health care providers in long-term care facilities	1,600,000								
	Pharmacists & pharmacy technicians	725,000								
	Community support & emergency management services	600,000								
	Mortuary services personnel	50,000								
	Other health care personnel	350,000								
Other critical infrastructure	Emergency services & public safety sector personnel (EMS, law enforcement, & fire services)	2,000,000								
	Manufacturers of pandemic vaccine & antivirals	50,000								
	Communications/information technology (IT), electricity, nuclear, oil & gas, water sector personnel, & financial clearing & settlement personnel	2,300,000								
	Critical government personnel - operational & regulatory functions	425,000								
	Banking & finance, chemical, food & agriculture, pharmaceutical, postal & shipping, & transportation sector personnel (critical infrastructure with greater redundancy)	3,400,000								
	Other critical government personnel	400,000								
General population	Pregnant women	4,000,000								
	Infants & toddlers 6-35 months old	11,000,000								
	Household contacts of infants <6 months old	4,500,000								
	Children 3-18 years old with high risk condition	7,000,000								
	Children 3-18 years old without high risk condition	62,000,000								
	Adults 19-64 years old with high risk condition	38,000,000								
	Adults ≥65 years old	41,000,000								
	Healthy adults 19-64 years old	132,000,000								

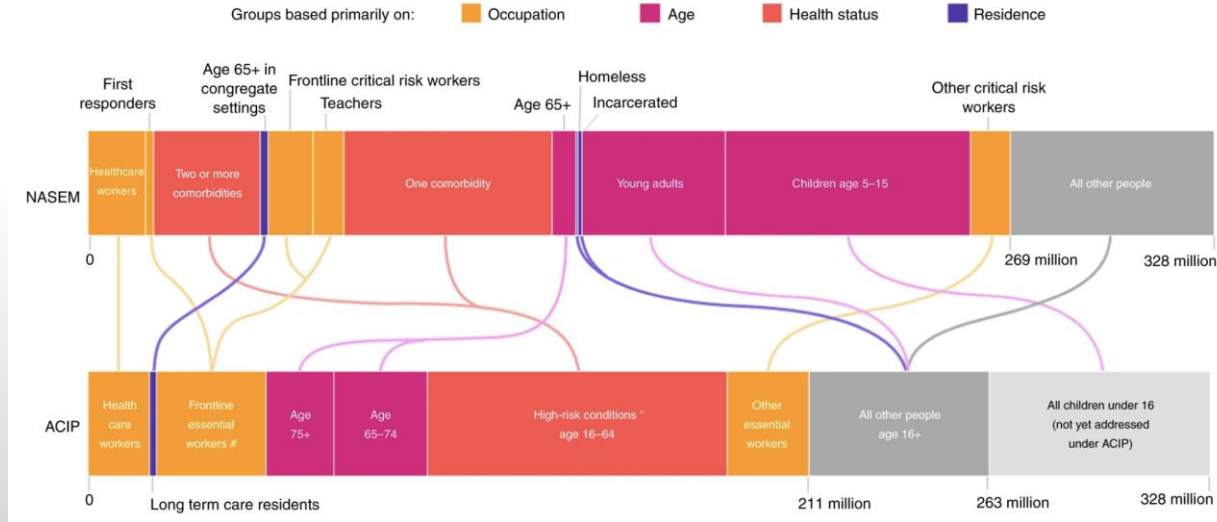


Penn
UNIVERSITY OF PENNSYLVANIA

Prioritizing *across* groups

Fig. 1: Priority groups under NASEM and ACIP frameworks.

From: [Equitable allocation of COVID-19 vaccines in the United States](#)



Prioritizing *across* & *within* groups

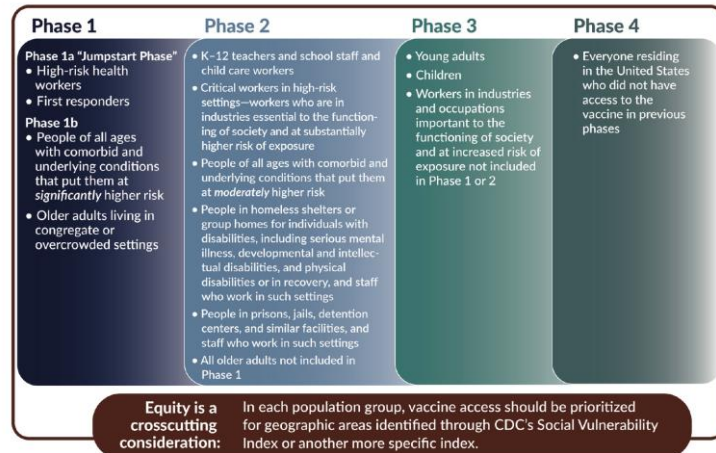


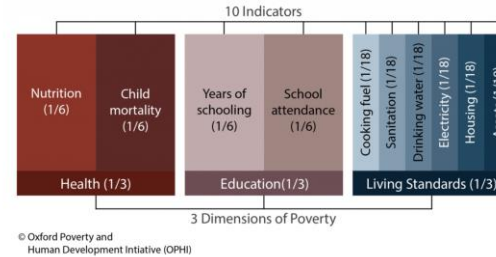
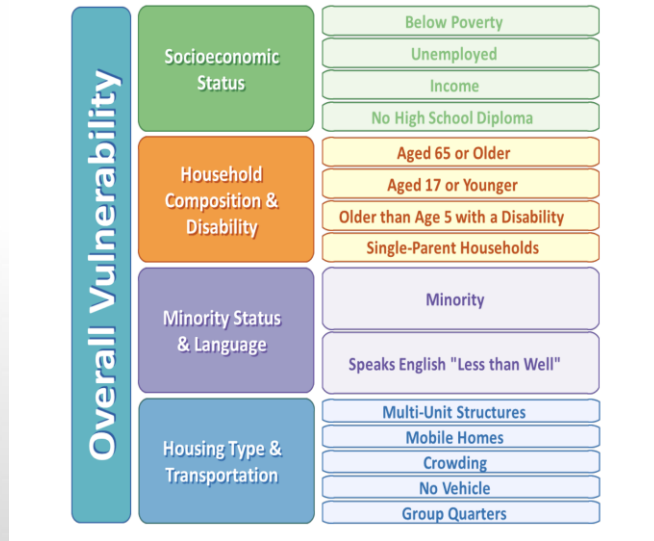
FIGURE 3-2 A phased approach to vaccine allocation for COVID-19.

Incorporate a metric of social disadvantage:

SVI incorporates “variables that the committee believes are most linked to the disproportionate impact of COVID-19 on people of color and other vulnerable populations”:

- set aside 10% of federally available vaccines for vulnerable communities
- States: “special efforts”

Disadvantage Indices: separate, overlapping worlds



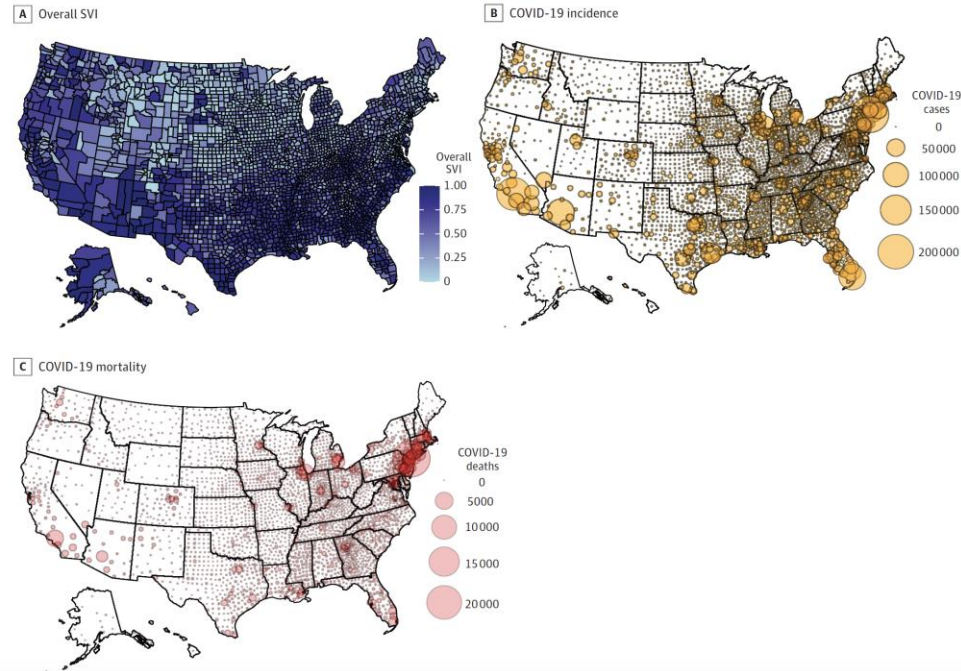
Intersection race/ethnicity, disadvantage

Table 1. Demographics of SVI Quartiles in Minnesota

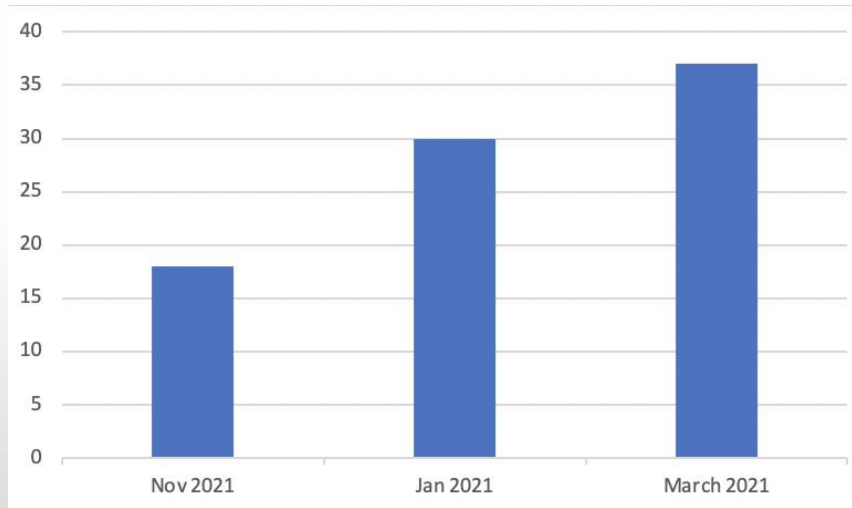
	Q1 SVI (High)	Q2 SVI	Q3 SVI	Q4 SVI (Low)
Race/Ethnicity				
American Indian or Alaska Native	54%	17%	8%	7%
Black or African American	53%	20%	11%	9%
Hispanic or Latinx	47%	22%	17%	14%
Asian or Pacific Islander	24%	22%	22%	26%
White	24%	22%	22%	26%
Multiple	35%	23%	16%	20%
Other	39%	24%	14%	20%

C19 Incidence, mortality and SVI

Figure 1. Heat Map of US Counties Showing Coronavirus Disease 2019 (COVID-19) Incidence and Mortality by Social Vulnerability Index (SVI)



Adoption of disadvantage indices by CDC's 64 jurisdictions, Nov '20 - Mar '21



March 2021:

- 34 states, 3 cities use Index
- 43 states/cities use index/zip

(Note: Analysis of *plans*, not *practice*)

Improving equity in allocations *within* states/jurisdictions

- 1. Larger shares of vaccines to more disadvantaged areas, appointments (n=17/24)**
TN, MA, CA, AK, IL, IN, MI, MN, ND, OH, WI, CT...
 - 2. Define priority groups (17/17)**
AL, AK, FL, GA, Houston, KS, MD, NY, OR, PA...
 - 3. Outreach and communication (n=12/16)**
AK, AZ, CT, LA, MA, MD, MI, NC, NY, VT, WA...
 - 4. Dispensing site locations (n=8/10)**
CT, LA, MI, NC, NH, NJ, Philadelphia, SD
 - 5. Monitor, course-correct (n=4/5)**
CA, MI, NC and OH
-

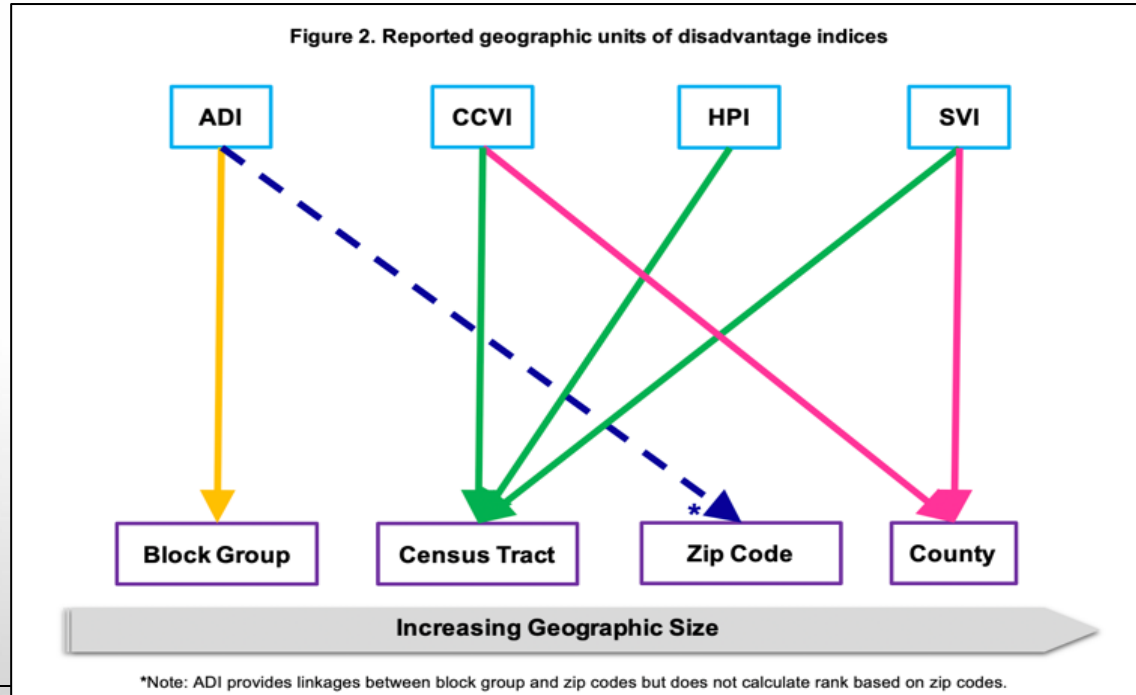
Public acceptability (?)

- Survey experiment, natl. representative sample, week before 'vaccines for all'
- Additional allocations relative to foregrounding a) race, b) structural racism, and c) disadvantage:
 - Approval/support for additional allocations?
 - If additional allocations: how much more?

Indices' use, concepts of disadvantage

- Area **Deprivation** Index (ADI, n=2)
- Social **Vulnerability** Index (SVI, n=29)
- COVID-19 Community **Vulnerability** Index (CCVI, n=5)
- California **Healthy Places** Index (HPI)

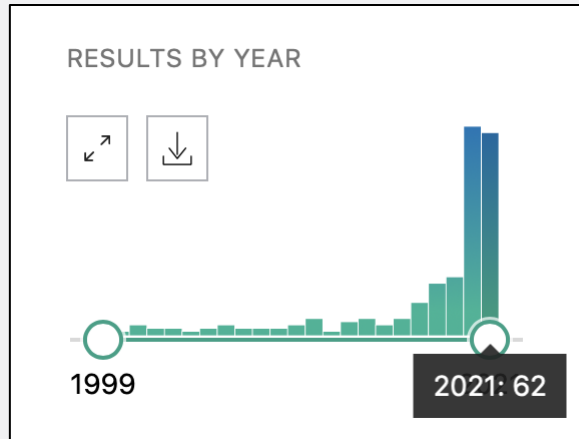
Indices' overlap, differences: domains



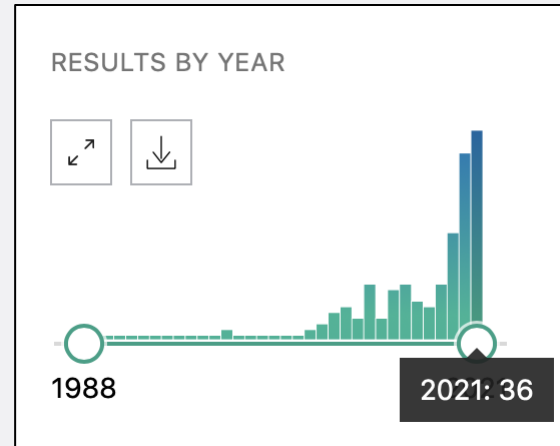
Indices use: Covid, elsewhere

Title/abstract, all fields: “Area Deprivation Index”, “Social Vulnerability Index”

ADI



SVI



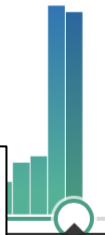
Indices use: Covid, elsewhere

Title/abstract, all fields: “Area Deprivation Index”, “Social Vulnerability Index”

ADI

SVI

RESULTS BY YEAR



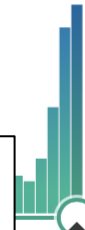
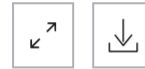
2021: 62

RESULTS BY YEAR



2021: 57

RESULTS BY YEAR



2021: 36

RESULTS BY YEAR



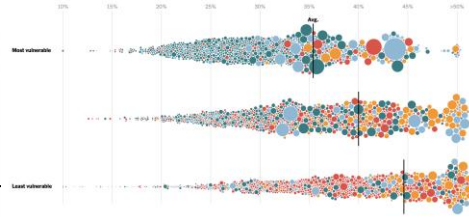
2021: 57

ADI and SVI use (2000-2021), primary focus

	ADI	SVI
Total	126	69
Public health	68	50
<i>Covid</i>	7	24
Clinical	54	16
Methodology	4	3
'Off label'	n/a	58

Note: Prelim data/WiP/ongoing review! Capturing (1988-2021): Country/region; geospatial analytic frame; type of application; Index as equity adjustment vs descriptive use (if former: data on impact)

Conclusion



- Disadvantage indices: unprecedented, rapid and widespread adoption--plausibly mitigated racial, social inequities
- Now: 'vaccines for all': but equity story (still) not over.
Challenges:
 - Co-existing high supply/low 'demand', low supply/high demand
 - Natl: gap most/least advantaged increased
- Universalize index uptake, *esp if/when boosters*
- Look beyond 'needles into arms', to broader index use—where fitting—for social, racial justice



California's Equity Tools for COVID-19: The Healthy Places Index and Beyond



Rohan Radhakrishna MD, MPH, MS (he, him, his)
Office of Health Equity – Deputy Director
California Department of Public Health

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Aug 3rd 2021



Office of Health Equity

Vision:

Everyone in California has equal opportunities for optimal health, mental health and well-being.

Mission:

Promote equitable social, economic, and environmental **conditions** to achieve optimal health, mental health, and well-being for all.

Central Challenge:

Mobilize understanding and sustained commitment to **eliminate** health inequity and improve the health, mental health, and well-being for all.

Statute

Established, as authorized by Section 131019.5 of the California Health and Safety Code, to provide a key **leadership** role to reduce health and mental health disparities to vulnerable communities.



Office of Health Equity

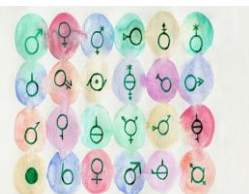
<https://www.cdph.ca.gov/Programs/OHE/Pages/OfficeHealthEquity.aspx>



Health Research &
Statistics



Climate Change &
Health Equity



Gender Health
Equity



COVID-19
Health Equity
in Response &
Recovery



Community
Development &
Engagement



Health in All
Policies and Racial
Health Equity
Initiative



Business
Operations



Advisory
Committee



Healthy Places Index: Unique Approach

Granular

Fine geographic resolution reveals the variation *within* cities, counties, and communities

Validated

Each indicator – and the overall index – is linked to a summary health outcome: **life expectancy at birth**

Policy Solutions

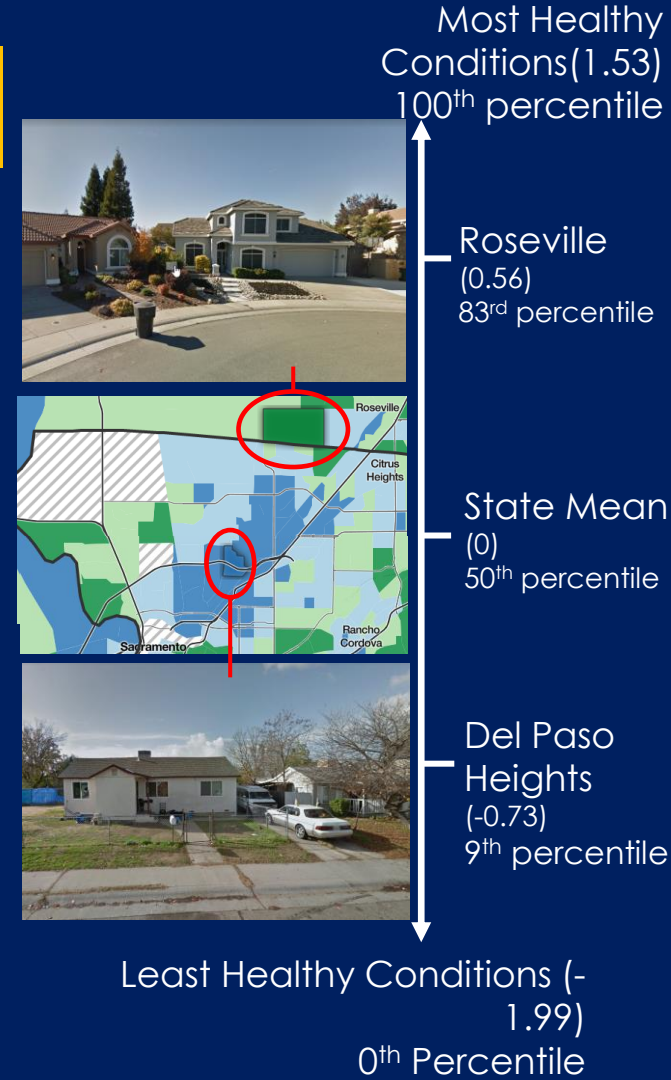
Each indicator is supported by a wealth of policy solutions detailed in the Policy Guides

HPI Indicators

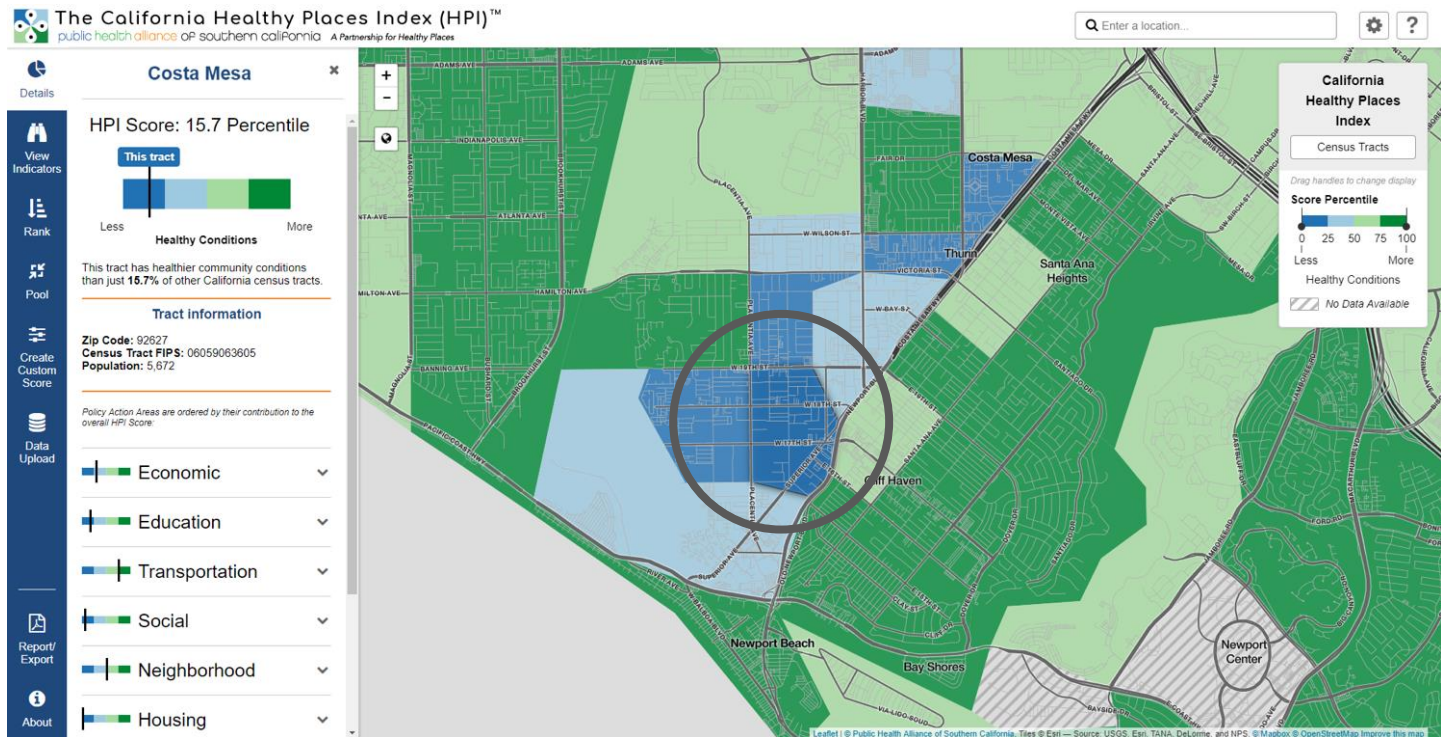


Healthy Places Index | Methods

- Indicator scores are standardized (Z score)
- Policy Action Area score (mean of indicators)
- Policy Action Area weights (predictive of life expectancy)
- Final HPI calculated by:
 - Multiplying each policy action area score with its weight
 - Summing across eight policy action areas



From Data to Action Using HPI



Healthy Place Index | Policy Guides



Employed



Median Income



Above Poverty



Preschool Enrollment



HS Enrollment



Bachelor's Education



Automobile Access



Active Commuting



2-Parent Households



Voting



Retail Density



Park Access



Tree Canopy



Supermarket Access



Alcohol Availability



Low-Income Renter Housing



Low-Income Homeowner
Housing Cost Burden



Housing Habitability



Uncrowded Housing



Homeownership



Ozone



Fine Particulate Matter



Diesel Particulate Matter



Safe Drinking Water



Insured Adults



Extreme Heat



Impervious Surfaces



Outdoor Workers

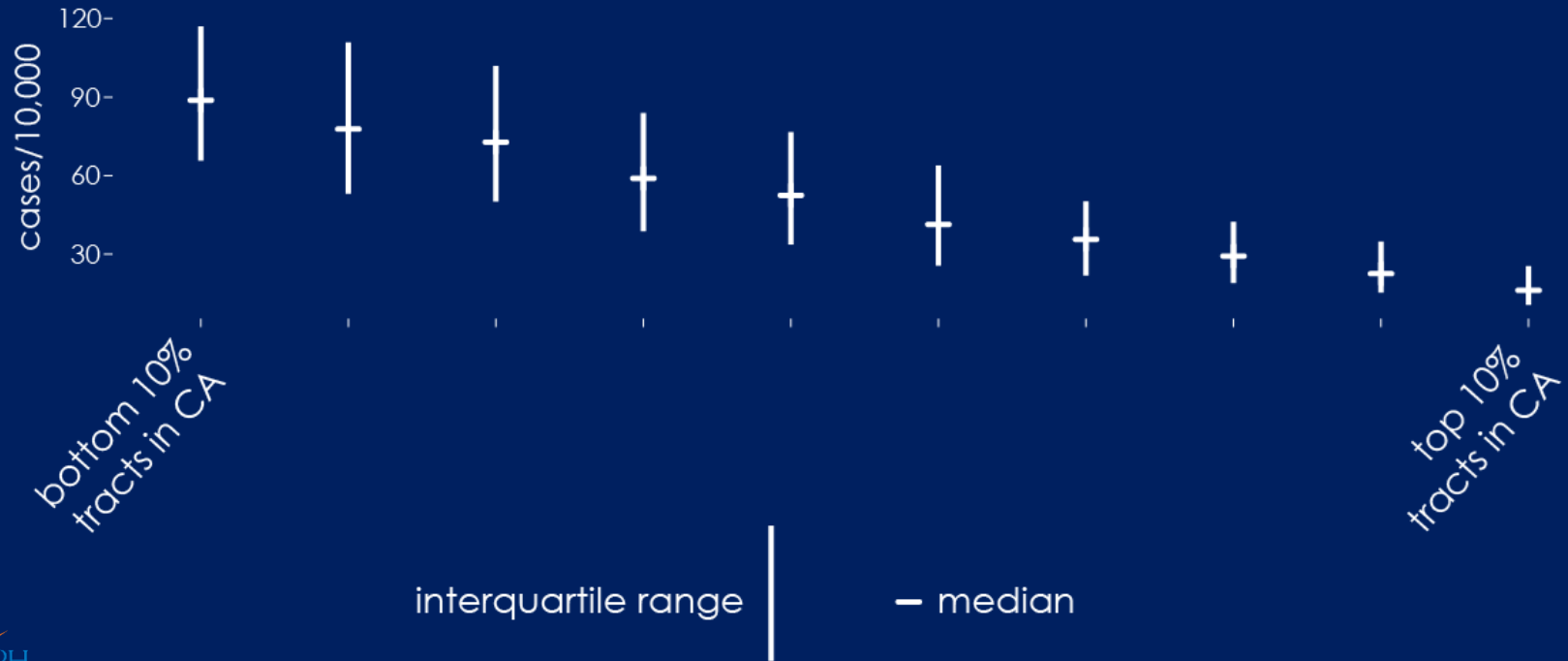


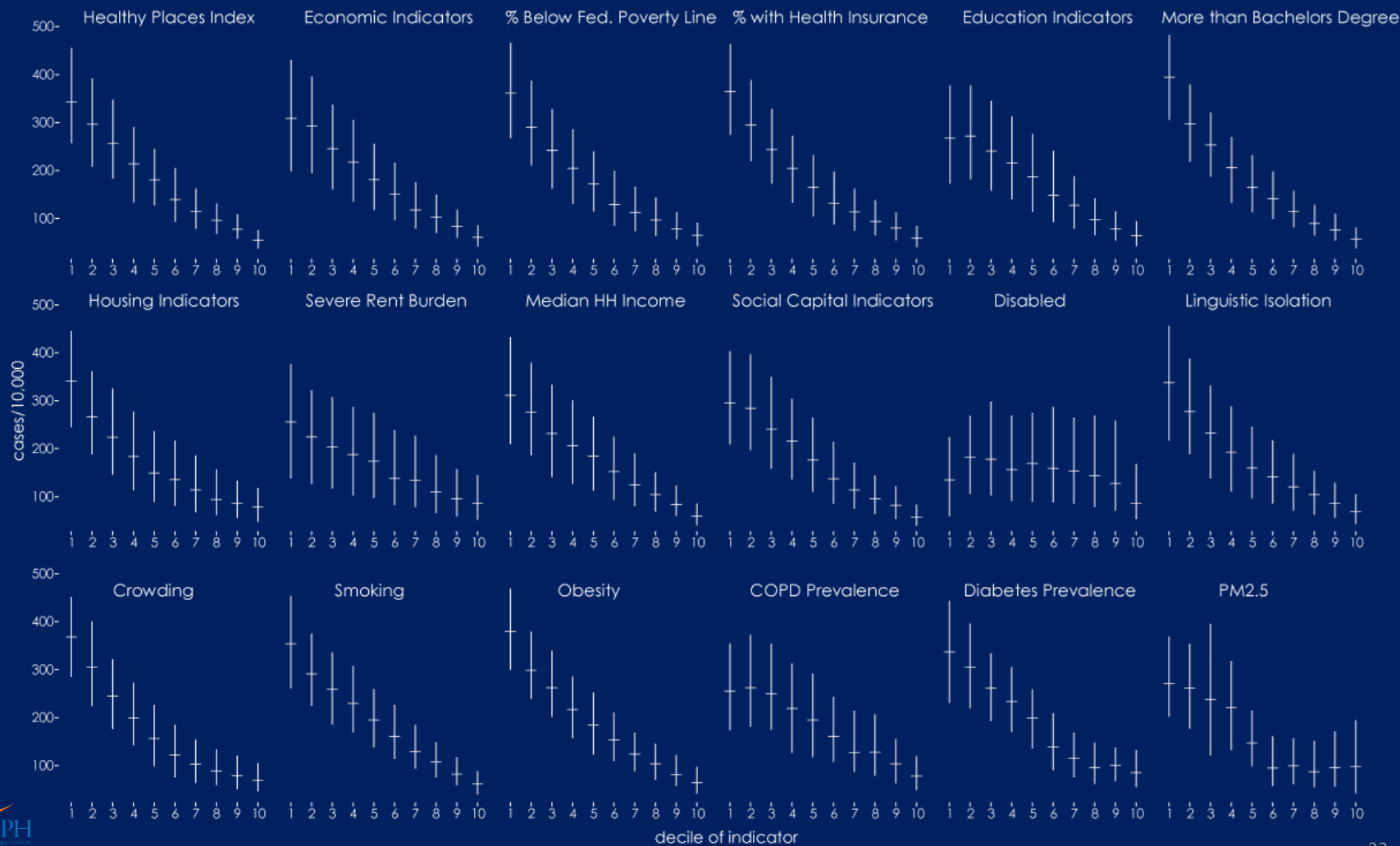
Public Transit Access



Sea Level Rise

Healthy Places Index





Blueprint for a Safer Economy and Equity

- California implemented the Blueprint on August 30, 2020 to reduce COVID-19 in the state with criteria for loosening and tightening restrictions on activities.
- A health equity metric took effect on October 6, 2020. To advance to the next less restrictive tier, a county must meet an equity metric or demonstrate targeted investments to eliminate disparities in levels of COVID-19 transmission, depending on its size.

Higher Risk → Lower Risk of Community Disease Transmission***				
Measure	Tier 1 Widespread (Purple)	Tier 2 Substantial (Red)	Tier 3 Moderate (Orange)	Tier 4 Minimal (Yellow)
Adjusted Case Rate for Tier Assignment** (Rate per 100,000 population* excluding prison cases^, 7 day average with 7 day lag)	> 10	6 - 10	2 - 5.9	< 2
Test Positivity^ (Excluding prison cases^, 7 day average with 7 day lag)	> 8%	5 - 8%	2 - 4.9%	< 2

Blueprint for a Safer Economy Health Equity Metric | Methods

Use HPI scores
to assign
county's census
tracts to
quartiles



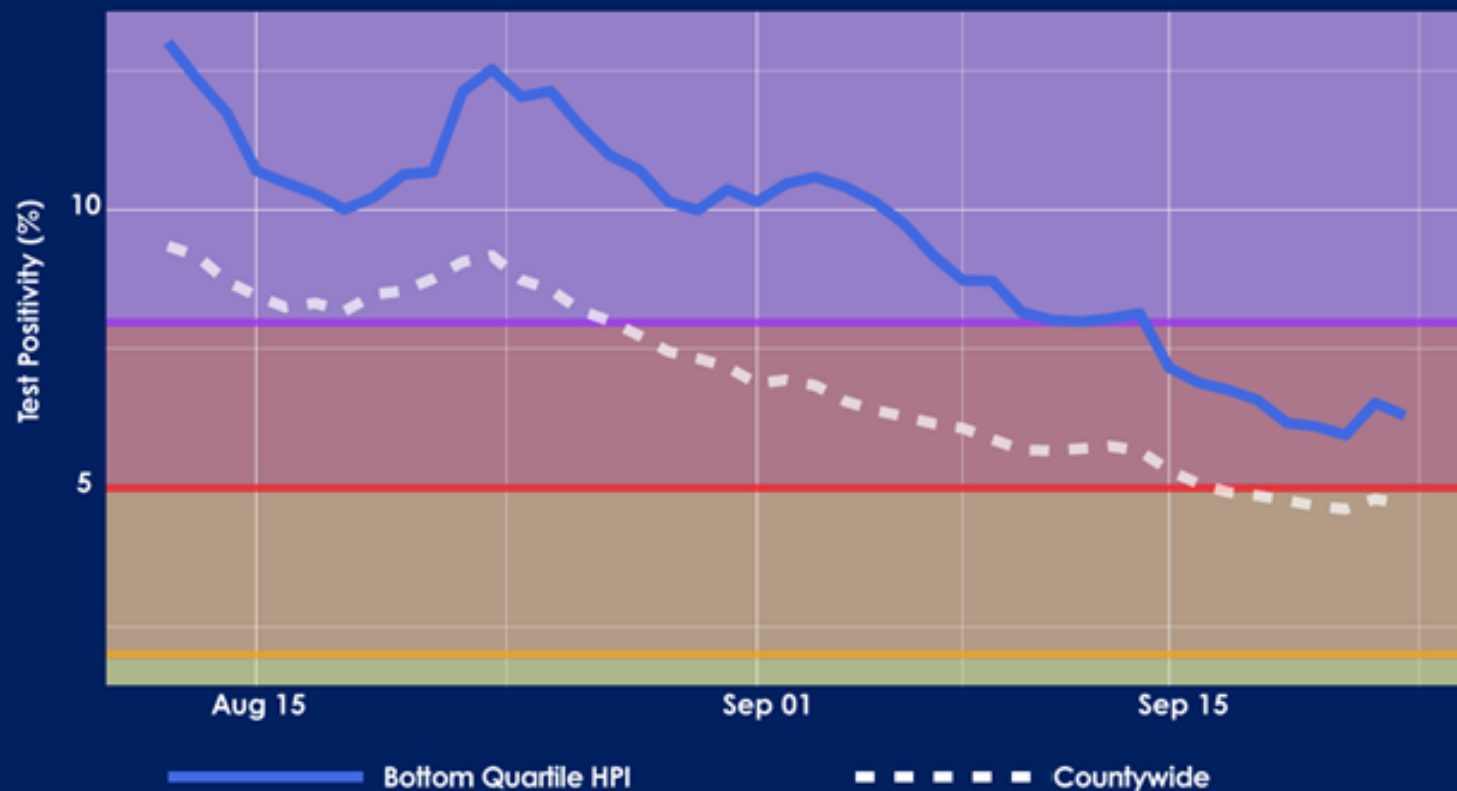
Sum positive tests
and total tests for
the bottom quartile



Divide total positive
tests by total tests
and multiply by 100

County risk level	Adjusted case rate* 7-day average of daily COVID-19 cases per 100K with 7-day lag, adjusted for number of tests performed	Positivity rate** 7-day average of all COVID-19 tests performed that are positive	
		Entire county	Healthy equity quartile
WIDESPREAD Many non-essential indoor business operations are closed	More than 7.0 Daily new cases (per 100k)	More than 8.0% Positive tests	
SUBSTANTIAL Some non-essential indoor business operations are closed	4.0 – 7.0 Daily new cases (per 100k)	5.0 – 8.0% Positive tests	5.3 – 8.0% Positive tests
MODERATE Some indoor business operations are open with modifications	1.0 – 3.9 Daily new cases (per 100k)	2.0 – 4.9% Positive tests	2.2 – 5.2% Positive tests
MINIMAL Most indoor business operations are open with modifications	Less than 1.0 Daily new cases (per 100k)	Less than 2.0% Positive tests	Less than 2.2% Positive tests

The Health Equity Metric | Trends in Test Positivity



COVID-19 Health Equity Playbook for Communities

Immediate COVID-19 Response Strategies

- Testing
- Contact Tracing
- Isolation Support
- Worker Protections
- Vaccinations
- Food Security

Medium and Longer-term COVID-19 Response Strategies

- Housing Security and Homelessness
- Economic Security
- Schools and Childcare
- Transportation / Physical Access and Mobility
- Health in All Policies (HiAP)/Governing for All

Cross cutting strategies

- Data
- Communication
- Language Access and Cultural Competency
- Community and Stakeholder Engagement ³⁷

Technical Assistance

Principles

Strategies

Promising practices and Examples

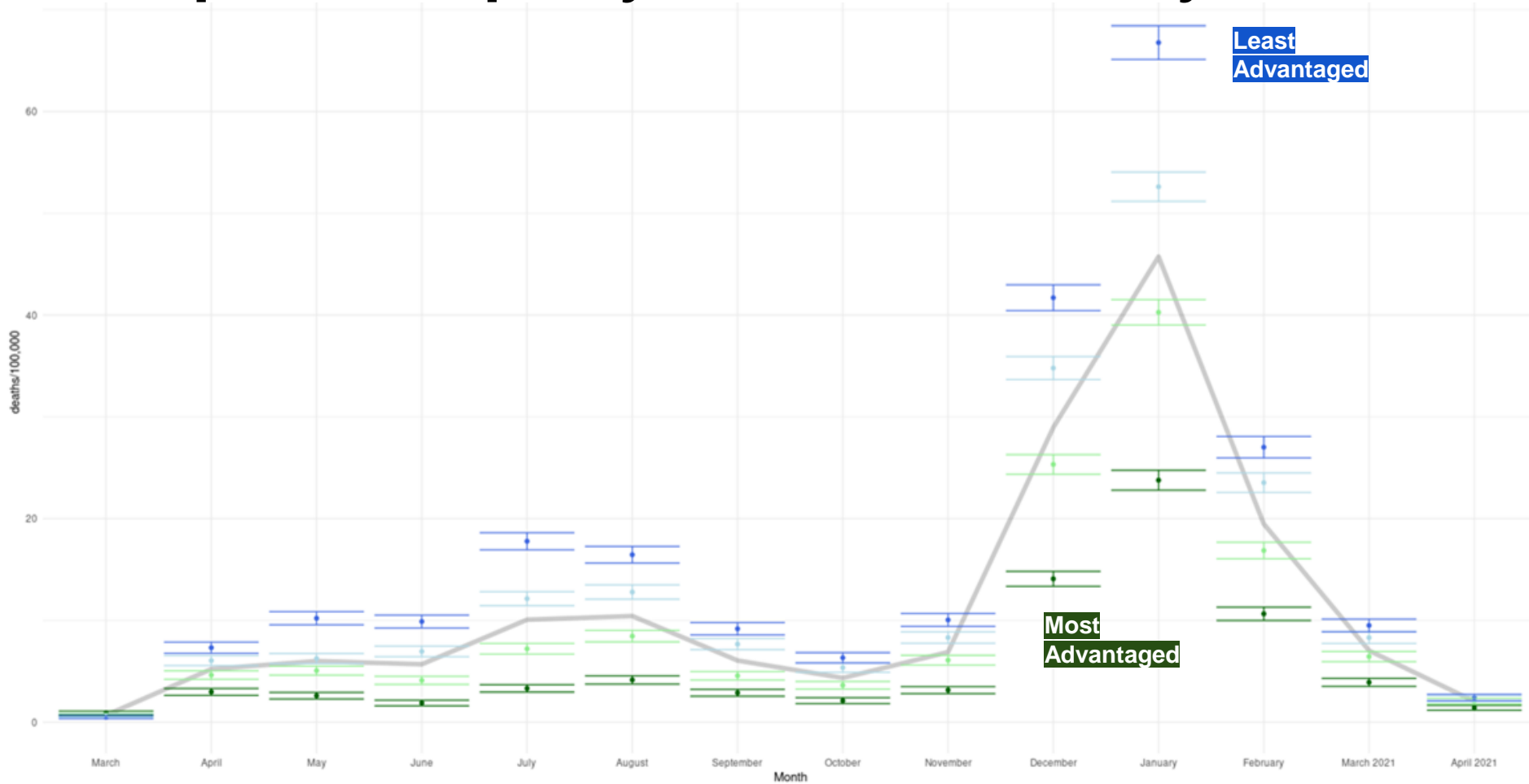
Resources

Goal: to provide fast, responsive regionally relevant technical assistance

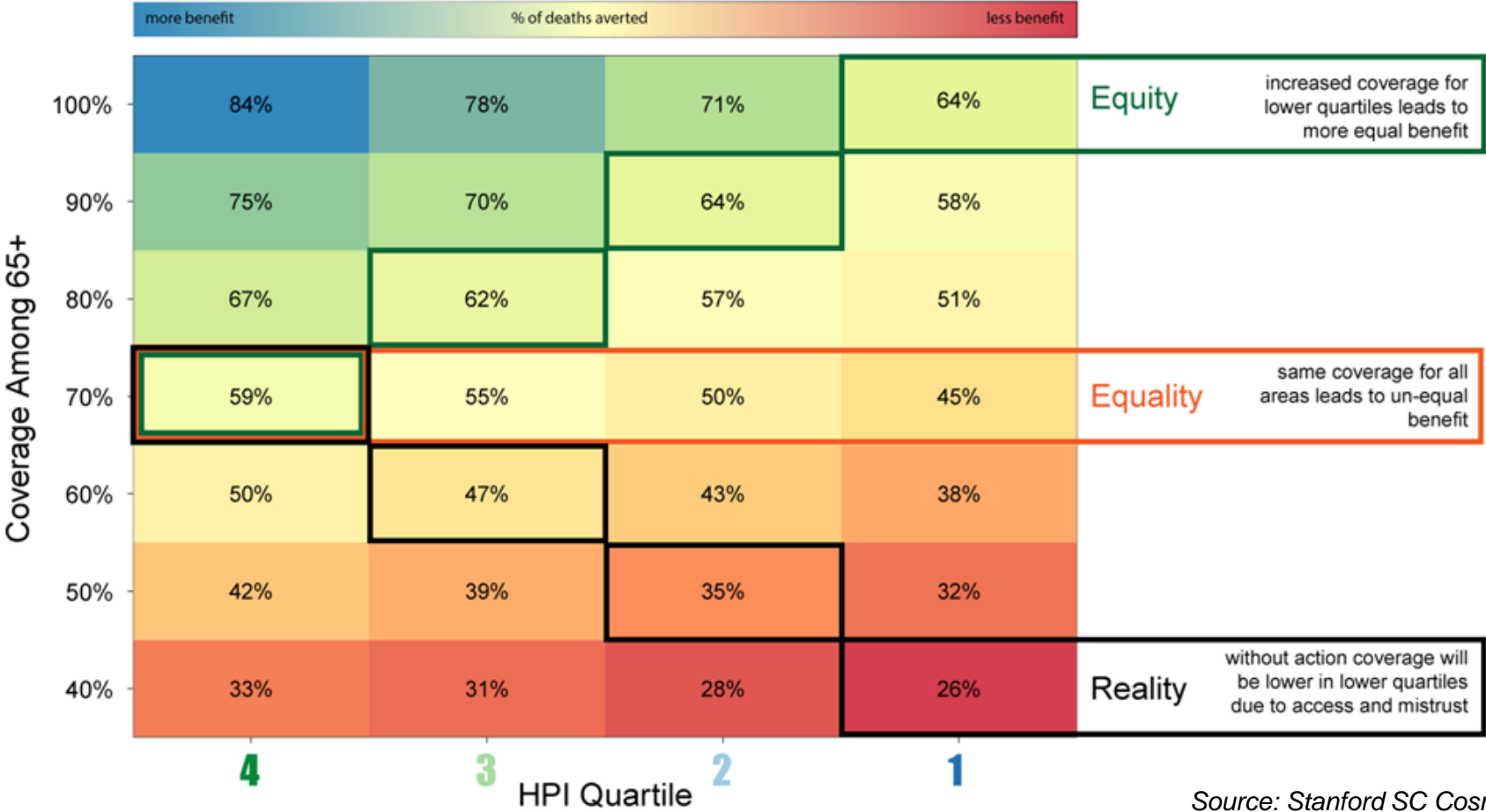
Components

- Local Coordination Team
- ELC funding positions
 - Community engagement
 - Strategic Partnerships
- State Subject Matter Expert (within and outside of Public Health)
- Philanthropic funded efforts + CBOs
 - PHI, Kaiser, Together Toward Health
- Regional Collaborative
 - BARHII, Public Health Alliance of Southern California, San Joaquin Valley Consortium
- Advocacy efforts
 - ChangeLab Solutions, California Pan Ethnic Health Network, Public Health Advocates, Prevention Institute

HPI captures disparity in COVID mortality



Equal is not Equitable: Use Age AND Place



HPI informed the vaccination strategy

San Francisco Chronicle

SPECIAL OFFER:
16 WEEKS FOR \$95

Sign In

LOCAL

California is changing its vaccine system to allocate 40% of supply to lowest-income ZIP codes

Catherine Ho

March 4, 2021 | Updated: March 4, 2021 9:58 p.m.

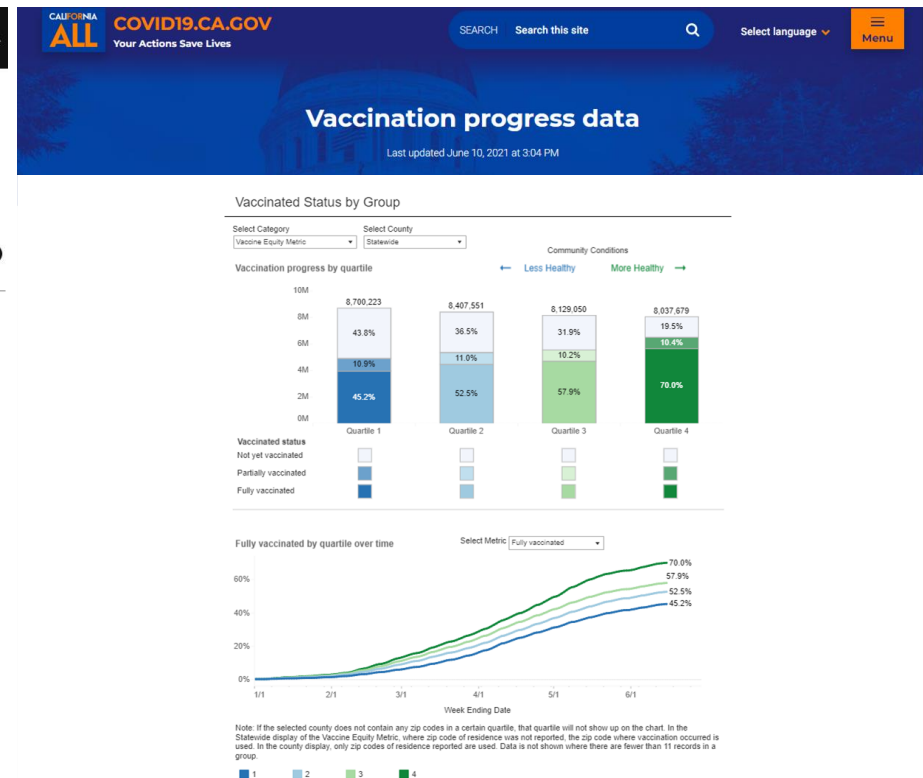
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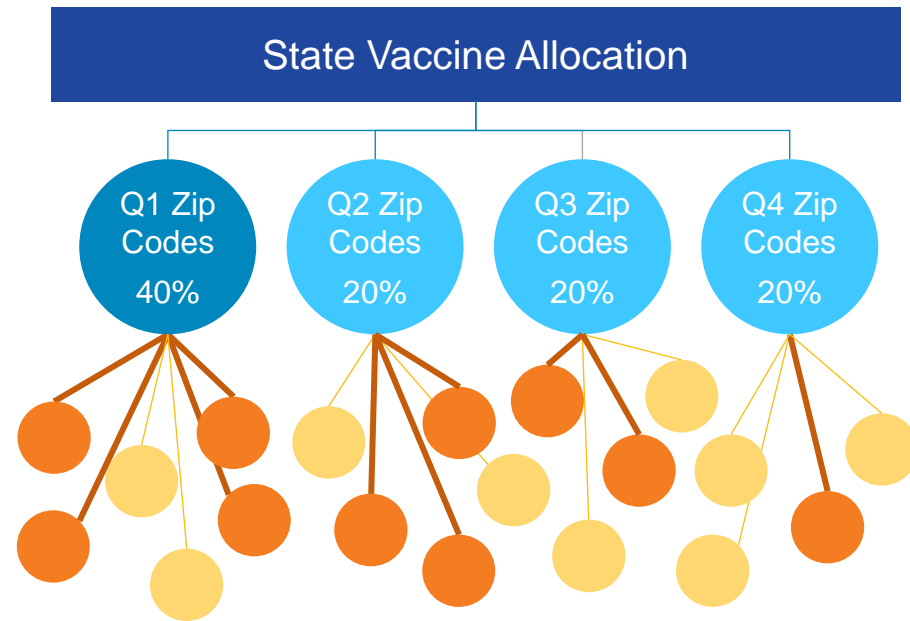
<https://www.sfchronicle.com/local/article/California-to-allocate-40-of-vaccine-supply-to-15999065.php>



<https://covid19.ca.gov/vaccination-progress-data/>

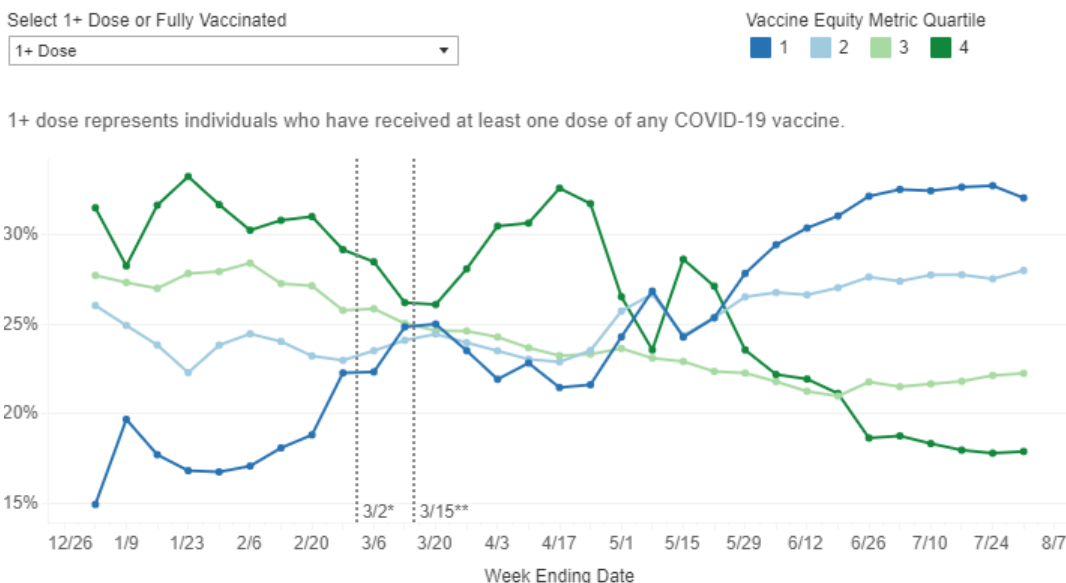
Vaccine Equity Metric (VEM) Used for Allocation Strategy & Provider Prioritization

- On March 2nd, CA started allocating 40% of vaccines to zip codes in the lowest VEM quartile (Q1)
- This matched Q1's disproportionate share of COVID-19 case and death burden at 40%
- CA allocation strategy incorporates equity metrics where providers best at reaching Q1 or other priority communities get larger vaccine allotments



Using VEM To Track Equity Trends Over Time

- CA monitors vaccination rate trends by quartile to identify policies, events, or eligibility changes that impact equity
- Expanding eligibility to high-risk occupations and implementing the 40-20-20-20 allocation policy led to higher Q1 shares
- Eligibility expansion to all adults led to lower Q1 shares



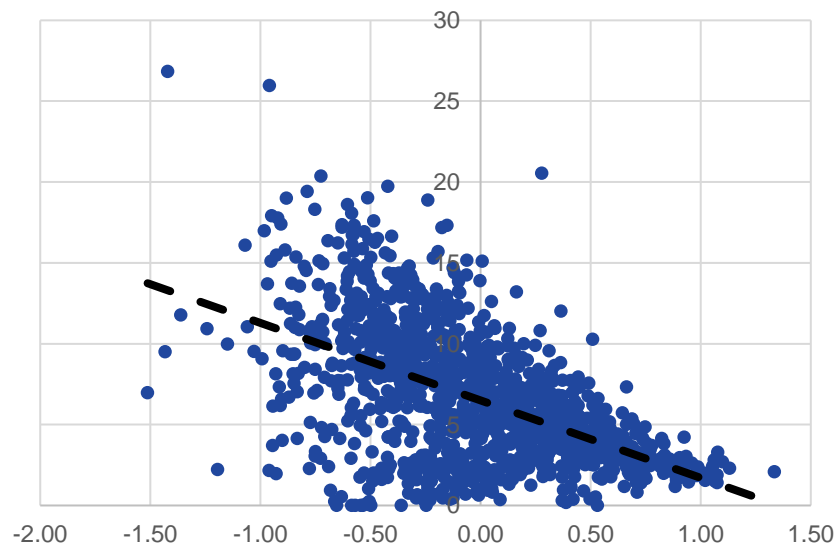
* 3/2: [Allocated more vaccines to lowest quartile](#)

** 3/15: [Started vaccinating individuals at higher risk](#)

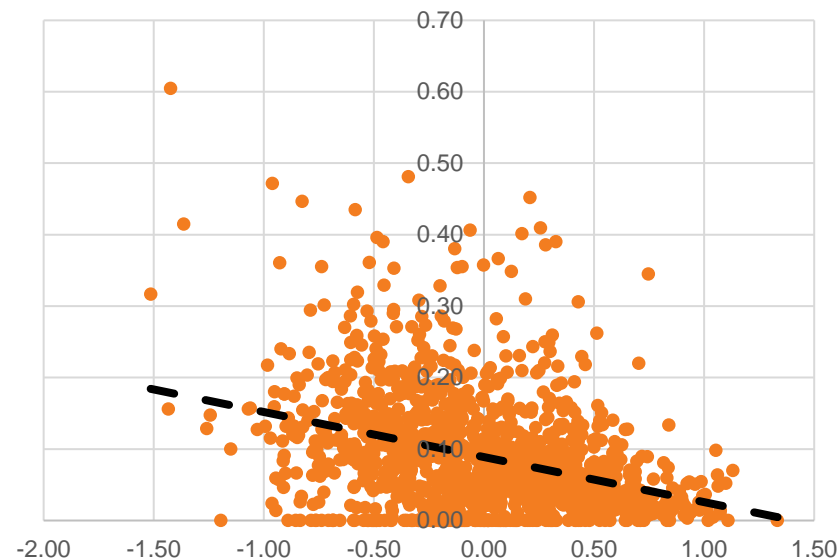
Doses administered in the Vaccine Equity Quartile (statewide)	Tier 1 Widespread (Purple)	Tier 2 Substantial (Red)	Tier 3 Moderate (Orange)	Tier 4 Minimal (Yellow)
Less than 2 million doses administered	Case Rate > 7	Case Rate 4 - 7	Case Rate 1 - 3.9	Case Rate < 1
Goal #1: 2 Million administered	Case Rate > 10	Case Rate 4 - 10	Case Rate 1 - 3.9	Case Rate < 1
Goal #2: 4 Million doses administered	Case Rate > 10	Case Rate 6 - 10	Case Rate 2 - 5.9	Case Rate < 2

Correlations between VEM and COVID-19 Case/Death Rates as of March 2021 (when VEM was developed)

VEM and COVID-19 Case Rates

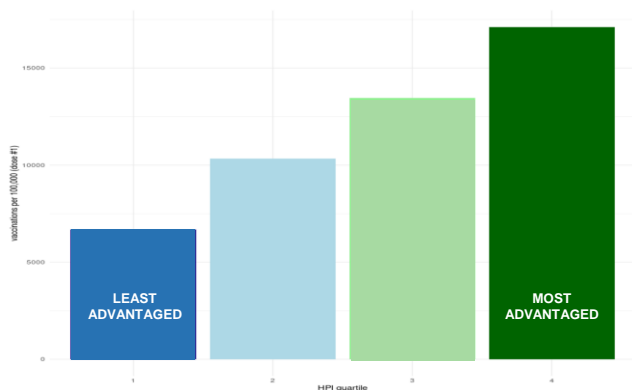


VEM and COVID-19 Death Rates



HPI can help monitor equity in vax coverage

After 5M Doses Statewide

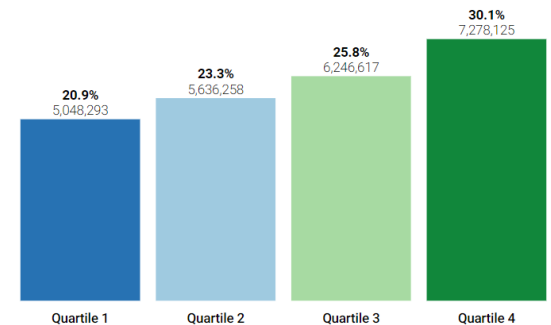


After 20M Doses

Vaccinations by doses administered

Number of vaccine doses given in California

■ % of total and number of doses administered



Least healthy community conditions

Most healthy community conditions

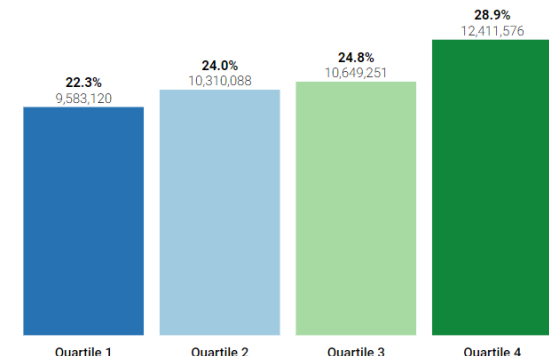
Updated April 16, 2021 with data from April 15, 2021. "Unknown/undifferentiated" includes those who declined to state, whose gender information is missing, or who identify as transgender, gender non-binary, gender queer or intersex.

After ~43M Doses

Vaccinations by doses administered

Number of vaccine doses given in California

■ % of total and number of doses administered



Least healthy community conditions

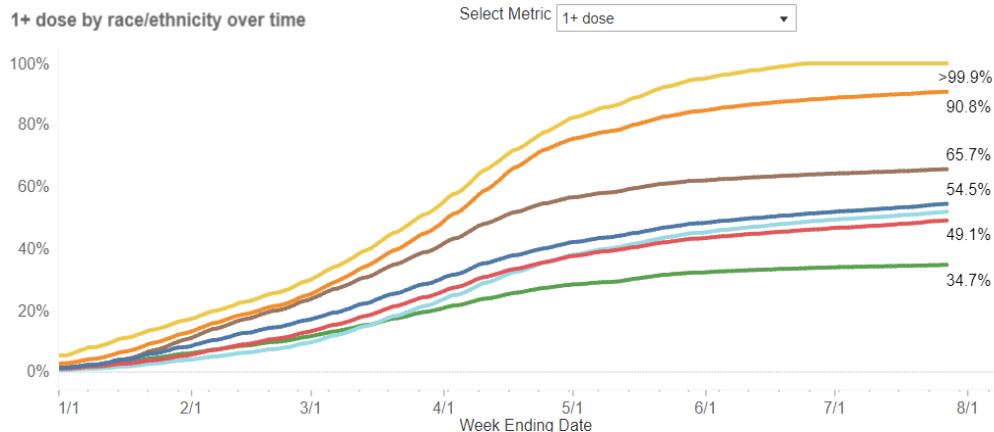
Most healthy community conditions

Updated July 28, 2021 with data from July 27, 2021.

The challenges are systemic and persistent

Total vaccinations by race/ethnicity over time

Race/ethnicity data as reported by State vaccination dashboard



Note: Population estimates do not include "other" or "unknown" race and ethnicity categories, therefore their percentage of state population is not available. Some race/ethnicity groups in this county may have small populations. Where the county of residence was not reported, the county where vaccinated is used. Data is not shown where there are fewer than 11 records in a group.



1. Equity Ops team deployed 5/3

Source: <https://covid19.ca.gov/vaccination-progress-data/> as of 7/29/2021, 7am PT

~66% white population

Of white 12+ population is vaccinated 1+ dose as of 7/27, compared to 56% of white 12+ population as of 5/1¹

~52% LatinX population

Of LatinX 12+ population is vaccinated 1+ dose as of 7/27, compared to 38% of LatinX 12+ population as of 5/1¹

~49% Black population

Of Black 12+ population is vaccinated 1+ dose as of 7/27, compared to 37% of Black 12+ population as of 5/1¹

As the State move from “surge to surgical”, the continuous impact assessment suggests that tailored combinations of levers can keep driving equity

To help **inform decision making** about where to scale vaccination efforts, an **operational impact assessment** was conducted based on **insights from Local Health Jurisdictions, surveys, and site-level vendor data**

Initial learnings: Specific combinations of levers/resources may be more effective for different communities or geographies than others, some examples include:

Geography/ Population ¹	Levers			Potential lever ‘recipes’
Racially or culturally diverse communities	1	3	4	Host clinics at sites with a high degree of community trust (e.g. schools, FBOs, SMBs)
Urban areas and large cities	1	2	3	Ensure incentives are immediately distributed and tailored to the targeted community
Small and dispersed communities	1	3		Focus door-to-door canvassing around highly convenient and well-known sites
Agricultural and other working communities	1	4		Pair walk-in availability and off-work hours with extensive local signage
Linguistically diverse communities	1	4		Provide multi-lingual services at every stage of vaccination (e.g. outreach, education, on-site)

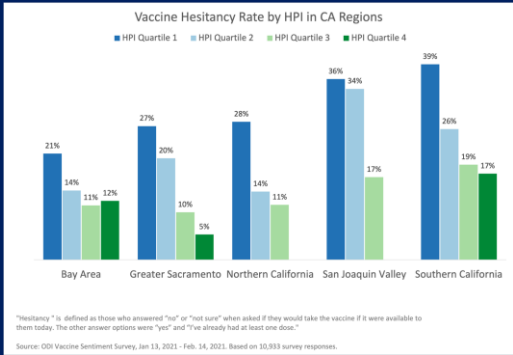
1. Geography/Population can overlap

Note: 1. Increasing public awareness and amplifying education 2. Encouraging vaccination 3. Increasing vaccination site convenience 4. Ensuring vaccination accessibility

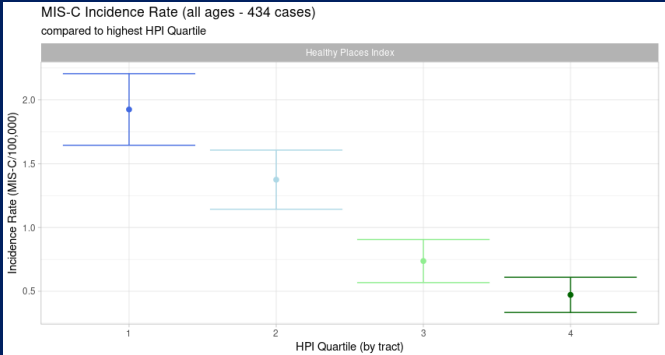
Source: CDPH Equity Operations workstream

HPI can be the common language for addressing inequities

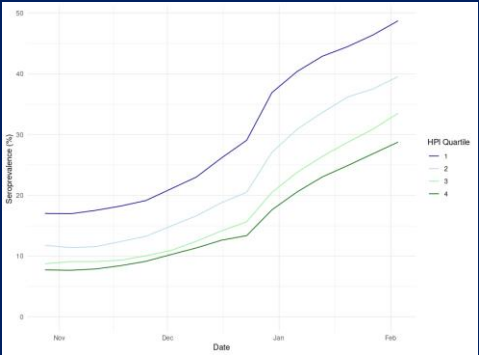
Vaccine 'Hesitancy'



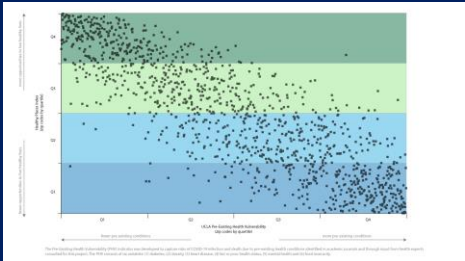
MIS-C Cases



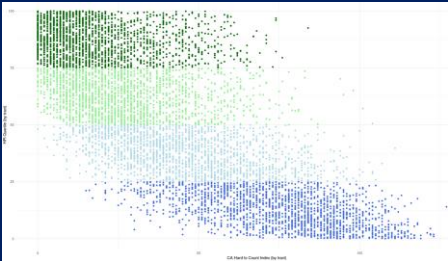
Seroprevalence



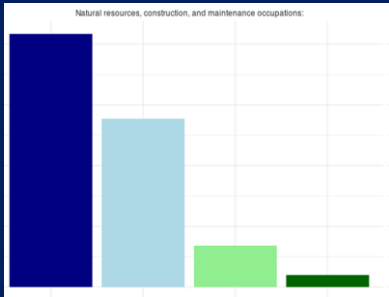
Pre-existing Conditions



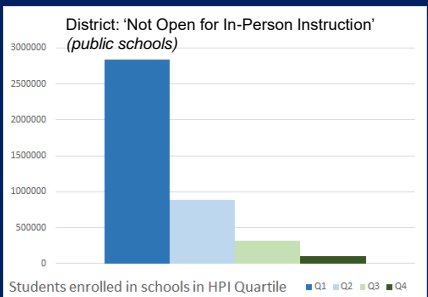
Hard-to-Count Populations



High Risk Occupations



School Reopenings





HPI Into Action Statewide

Over \$450 million in grant funding



EQUITABLE GRANT MAKING

Caltrans

[Sustainable Transportation Planning Grants](#)
(\$25M/yr)

[Adaptation Planning Grants](#) (\$6M/yr)

California Strategic Growth Council

[Transformative Climate Communities](#) (\$25M in 2018)

California Transportation Commission

[Active Transportation Program](#) (~\$220M/yr)

California Air Resources Board

[Community Air Protection Program](#) (\$5M/yr)



ASSESSMENT & DECISION-MAKING

California Department of Public Health (CDPH) – Nutrition & Obesity Prevention

Development of 3-Year Implementation Workplans

CDPH – Maternal, Child and Adolescent Health Division

Community Birth Plan to Reduce Preterm Births in African American Women in Los Angeles

CDPH – Office of Health Equity

Mortality Rates Among Caucasian Men in Central San Joaquin Valley

California Air Resources Board

[Research Call](#) – Mapping and Evaluating Transportation Access and Built Environment



PLANNING GUIDANCE

Governor's Office of Planning & Research

[General Plan Guidelines](#)

Senate Bill 1000 Guidance

[Integrated Climate Adaptation](#) – CA Executive Order B-30-15

[Resilient CA](#) – State Adaptation Clearinghouse

California Natural Resources Agency

[Safeguarding California Plan](#)

California Transportation Commission

[Regional Transportation Plan Guidelines](#)

[Comprehensive Multimodal Corridor Guidelines](#)

California Environmental Justice Alliance

[SB 1000 Toolkit](#) – Environmental Justice Element

HPI Into Action Locally & Regionally



Southern California Association of Governments

[Sustainable Communities Planning Grants](#)

Kaiser Permanente, Southern California

Mental Health & Wellness Initiative: Local Partnership Grants

Riverside University Health System – Public Health

Adverse Childhood Experiences Score Program
Census Tract Identification for Increased Women, Infant & Children Program Outreach

Ventura – Community Memorial Health System

Wellness Collaborations - Prioritization by Census Tracts

Contra Costa County, Department of Public Health

Targeting Home Energy Efficiency Resources



Kaiser Permanente, Southern California

Catalyst of Organizational Assessment and Equity Framing
Community Health Needs Assessment

Los Angeles County Department of Public Health

85+ [City and Community Health Profiles](#)

Santa Barbara County Public Health Department

Presentations on Federal Budget Impacts on Health, and Community Health Needs Assessment

Santa Monica – St. John's Medical Center

Community Health Needs Assessment

Solano County Public Health Department

Local Community Indicator Comparison Project

Sutter County Public Health Department

Community Health Assessment, Community Health Improvement Plan, and Strategic Plan



Southern California Association of Governments

2016 and 2020 Regional Transportation Plan
Active Transportation Database

Prevention Institute – Healthy, Equitable, Active Land Use Network

[Strategic Planning Guide](#) for Public Infrastructure Spending

Hospital Association of Southern California

Communities Lifting Communities Initiative

Ventura County

[General Plan 2040 Update](#)

Solano County Public Health Department

Maternal and Child Health Verification of Cumulative Health Impacts from Social Factors

Equity Index Best Practices

Work closely with locals

Make it explainable and transparent with the public

Check fidelity often and use creatively to prioritize resources

Carrots & Sticks

Vaccine Allocation

Provider Prioritization

Targeted Outreach (Air Game & Ground Game)

Mobile Clinic Deployment

Demonstrate the impact



Equity Index Challenges & Lessons Learned

Not a “cure all” always look at race/ethnicity & special pop.

Resource allocation decisions can invite methodology critiques. Document science-based responses to concerns

Expect tradeoffs, keep equity as your North Star for practical impactful choices

