

# HPI Into Action During the COVID-19 Pandemic: The State of California's Health Equity and Vaccine Equity Metrics

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The Public Health Alliance of Southern California's [Healthy Places Index \(HPI\)](#) has played a pivotal role in tracking, responding, and planning for recovery efforts related to the COVID-19 pandemic. In 2020, the State of California Department of Public Health (CDPH) selected the HPI as the tool that would guide the state's plan for an equitable and just COVID-19 response and recovery. Since then, the state has used and/or adapted the HPI to direct resources and aid to many under resourced and disproportionately negatively impacted communities. This fact sheet focuses on State of California agency uses during the COVID-19 pandemic. Click [here](#) to see an overview of uses by local health jurisdictions and other sectors.

## THE HEALTH EQUITY METRIC'S ROLE IN ADVANCING AN EQUITABLE AND JUST COVID-19 RESPONSE AND RECOVERY IN CALIFORNIA

The intersection of race and place has been a significant driving factor in the impact of COVID-19. Communities of color and the people living in communities with the least healthy living conditions have experienced the highest rates of COVID-19 mortality in California.

To address community-based inequities in COVID-19 outcomes, the State of California used the [Healthy Places Index \(HPI\)](#) in developing a first-in-the-nation Health Equity Metric (HEM). Utilizing HPI Census tract level data, the HEM compares COVID-19 test positivity rates between Census tracts in the lowest HPI quartile in each county with test positivity rates for the county as a whole.

Tied to the reopening status of more than 60% of California's counties, the [Health Equity Metric](#) compared COVID-19 test positivity rates between county neighborhoods with the lowest HPI scores compared to the overall county test positivity rate. Counties were required to meet certain thresholds for test positivity before they were allowed to move to a less restrictive tier in their reopening process.

Figure 1: California Cumulative COVID-19 Mortality Rates (per 100,000) by Race/Ethnicity

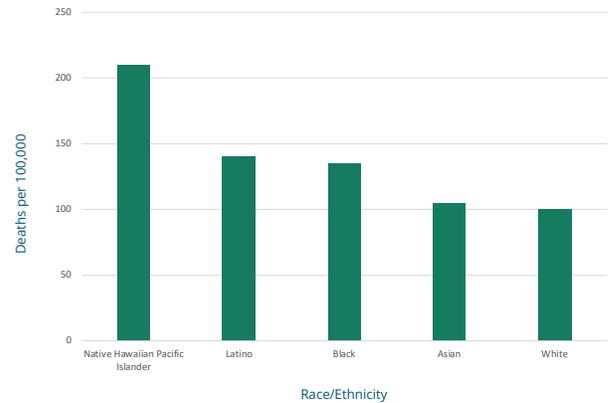


Figure 2: California COVID-19 Mortality Rates (per 100,000) by HPI Quartile (Q1 = Least Healthy)

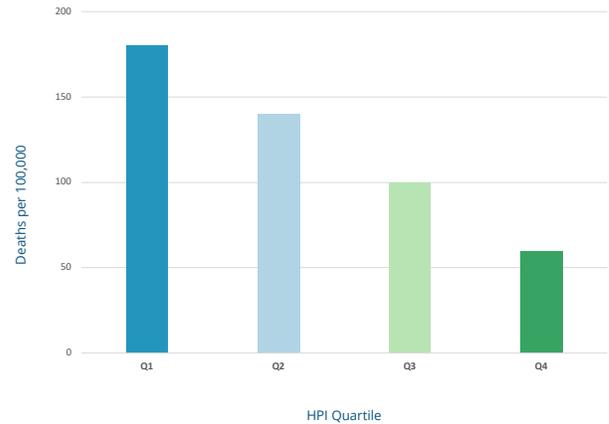
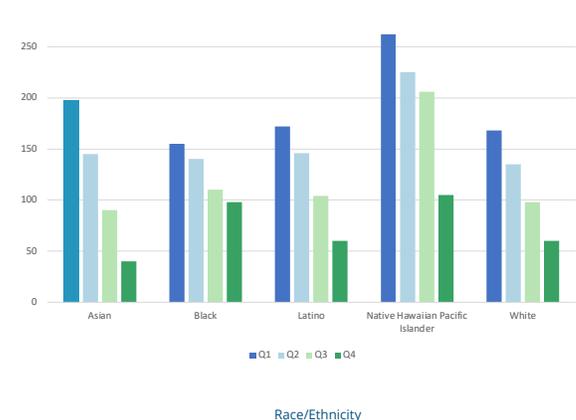


Figure 3: California COVID-19 Mortality Rates (per 100,000) by Race/Ethnicity and HPI Quartile (Q1 = Least Healthy)



SOURCE FOR FIGURES 1-3: CDPH

*HPI was chosen by CDPH because of its granularity, the variation of geographic regions, comprehensive social determinants of health that were validated and linked to life expectancy at birth, and finally, paired with policy guides.*

—Dr. Rohan Radhakrishna, Deputy Director, Office of Health Equity California Department of Public Health

The HPI was chosen by the State after extensive data analysis found that it was extremely effective in identifying place-based impacts that are also correlated to race. The State also found consistently higher test positivity rates among census tracts in the lowest HPI quartile.

The Health Equity Metric was not only a consistent approach for protecting the health and wellness of communities most vulnerable to the impacts of the COVID-19 crisis, but it was also part of a statewide effort to prioritize the investment of resources more broadly in communities facing inequities.

The HEM required that local health jurisdictions (LHJs) develop [Targeted Investment Plans](#), which outlined how resources would be allocated to communities with scores in the lowest HPI quartile.

Using the HEM, approximately \$272 million in federal COVID-19 funding was directed to these communities, including to community-based organizations representing different smaller sub-groups of racial and ethnic populations such as Black, Latinx, and Native Hawaiian and Pacific Islanders, which have seen some of the worst-case and fatality rates.

#### TARGETED INVESTMENT PLAN FUNDING

**\$27M**

#### HEALTH EQUITY PILOT FUNDING

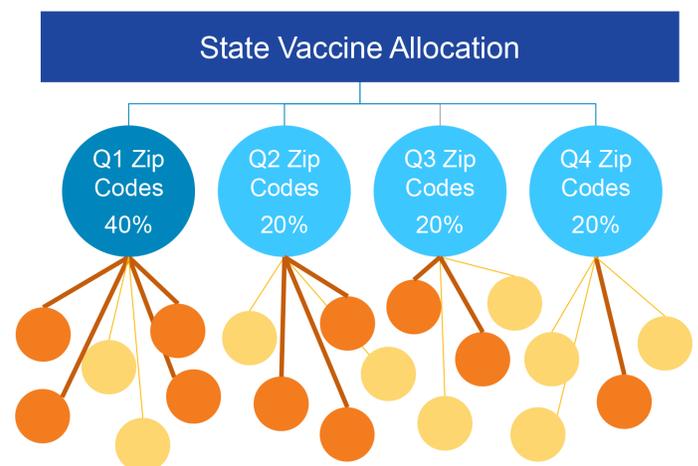
**\$5M**

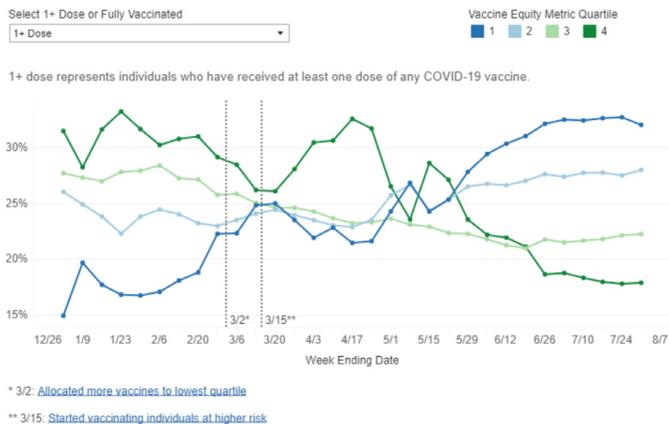
## USING THE VACCINE EQUITY METRIC FOR JUST AND EQUITABLE VACCINE DISTRIBUTION

Building on the success of the Health Equity Metric (HEM), the State released the [Vaccine Equity Metric \(VEM\)](#) in March 2021. The VEM combined HPI scores at the ZIP Code level with CDPH-derived ZIP Code scores (CDZS). The VEM also imputed scores for ZCTAs that were excluded from HPI due to concerns with statistical reliability and validity. The State also shifted the level of comparison. While the Health Equity Metric used HPI at the Census tract level and used within-county comparisons, the Vaccine Equity Metric used HPI at the ZIP Code level and used statewide comparisons. This shift in granularity was not recommended by the HPI team, as it dilutes the ability to see localized inequities.

The VEM utilized Vaccine Equity Quartiles to prioritize COVID-19 vaccine distribution to communities most impacted by inequities. When vaccines were in short supply in March 2021, the State used the VEM to prioritize allocation of 40% of vaccine doses to the lowest VEM quartile. This strategy was an essential tool to lower the rate of community infection, hospitalization and deaths, and limit the spread of emerging variants in disproportionately impacted community while the most critical barrier to vaccination was limited supply. The State also has been stratifying vaccination rates by quartiles in order to monitor vaccine coverage and demand over time.

According to Dr. Rohan Radhakrishna, Deputy Director of the CDPH Office of Health Equity, this meant 800 shots in arms per day to people living within the lowest VEM quartile that otherwise wouldn't have been prioritized during a time of vaccine scarcity.





SOURCE: CDPH



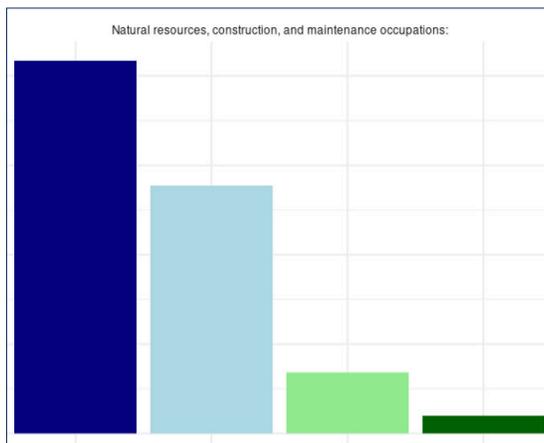
The information described in this fact sheet demonstrates that HPI has proven to be an effective tool in advancing an equitable and just COVID-19 recovery by the State of California. To see how other sectors have put HPI into action, see our companion fact sheet [here](#). To see the hundreds of ways HPI has been put into action, including the allocation of [more than one billion dollars](#) in investments directed to communities most in need, check out our [HPI Into Action Snapshot](#).

## COVID-19 DATA DASHBOARD

HPI continues to communicate and inform Californians about the state of COVID and equity in the state.

Within the [COVID-19 Data Dashboard](#), there is open access to data and graphs illuminating the impact and current state of the pandemic in various communities, including case rates, mortality statistics, and vaccination progress in relation to community conditions. In addition, the CDPH continues to present information by HPI quartile in official presentations and briefings.

For example, The State has been able to examine the number of people working in high-risk occupations by HPI quartile, and have found that a much larger share of workers in the natural resources, construction and maintenance occupations live within the lowest HPI quartile.



SOURCE: CDPH

FOR MORE INFORMATION, PLEASE VISIT OUR WEBSITES:

<http://thepublichealthalliance.org> & <http://healthyplacesindex.org>

Questions? Please contact [info@thepublichealthalliance.org](mailto:info@thepublichealthalliance.org)