

Disparities in Native Hawaiian and Pacific Islander COVID-19 Mortality: A Community-Driven Data Response

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As of March 2021, Native Hawaiians and Pacific Islanders (NHPIs) in the United States have lost more than 800 lives to COVID-19—the highest per capita death rate in 18 of 20 US states reporting NHPI deaths. However, NHPI risks are overlooked in policy discussions. We discuss the NHPI COVID-19 Data Policy Lab and dashboard, featuring the disproportionate COVID-19 mortality burden for NHPIs. The Lab democratized NHPI data, developed community infrastructure and resources, and informed testing site and outreach policies related to health equity. (*Am J Public Health*. 2021;111(S2):S49–S52. <https://doi.org/10.2105/AJPH.2021.306370>)

Native Hawaiians and Pacific Islanders (NHPIs) experience some of the highest COVID-19 death rates of all racial and ethnic groups in the United States.^{1,2}

INTERVENTION

At the UCLA Center for Health Policy Research, the NHPI COVID-19 Data Policy Lab (hereafter referred to as “the Lab”) formed to support community data needs and has a close partnership between NHPI community leaders and researchers working to inform national, state, and local COVID-19 prevention efforts.

PLACE AND TIME

Early in the COVID-19 pandemic, reports from funeral homes, churches, and social networks on NHPIs getting sick and dying of COVID-19 sounded an alarm for community action. A coalition of community leaders and researchers known as the National Pacific Islander

COVID-19 Response Team convened to protect NHPI health and expressed an urgent need for data infrastructure to support their efforts. This led to the formation of the Lab in partnership with the UCLA Center for Health Policy Research in March 2020. The Lab is powered by graduate students and working professionals, several of whom identify as NHPI. Within 5 months, the Lab responded to community guidance to generate data products and launch a NHPI COVID-19 online dashboard, revealing COVID-19 impacts on NHPIs across the United States. To our knowledge, this is the first time a research university in the continental United States committed resources to sustain a pipeline of NHPI researchers to meet the community’s data needs.

PEOPLE

There are more than 1.2 million NHPIs in the United States, and they have a diverse set of cultures and languages.

According to the Office of Management and Budget, NHPI is defined as a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands in Polynesia, Melanesia, and Micronesia.³

High COVID-19 case and death rates among NHPIs are attributable to health and socioeconomic inequities that existed before COVID-19. NHPIs have disproportionately high rates of chronic diseases that are linked to increased risk of COVID-19, including heart disease, diabetes, and asthma.^{4,5} As with other vulnerable communities, NHPIs have relatively high poverty and uninsurance rates.⁵

PURPOSE

The Lab’s dashboard indicates that there are higher COVID-19 death rates among NHPIs than any other racial or ethnic group in 18 of 20 states reporting disaggregated NHPI death data. [Figure 1](#) shows a total of 837 NHPI COVID-19

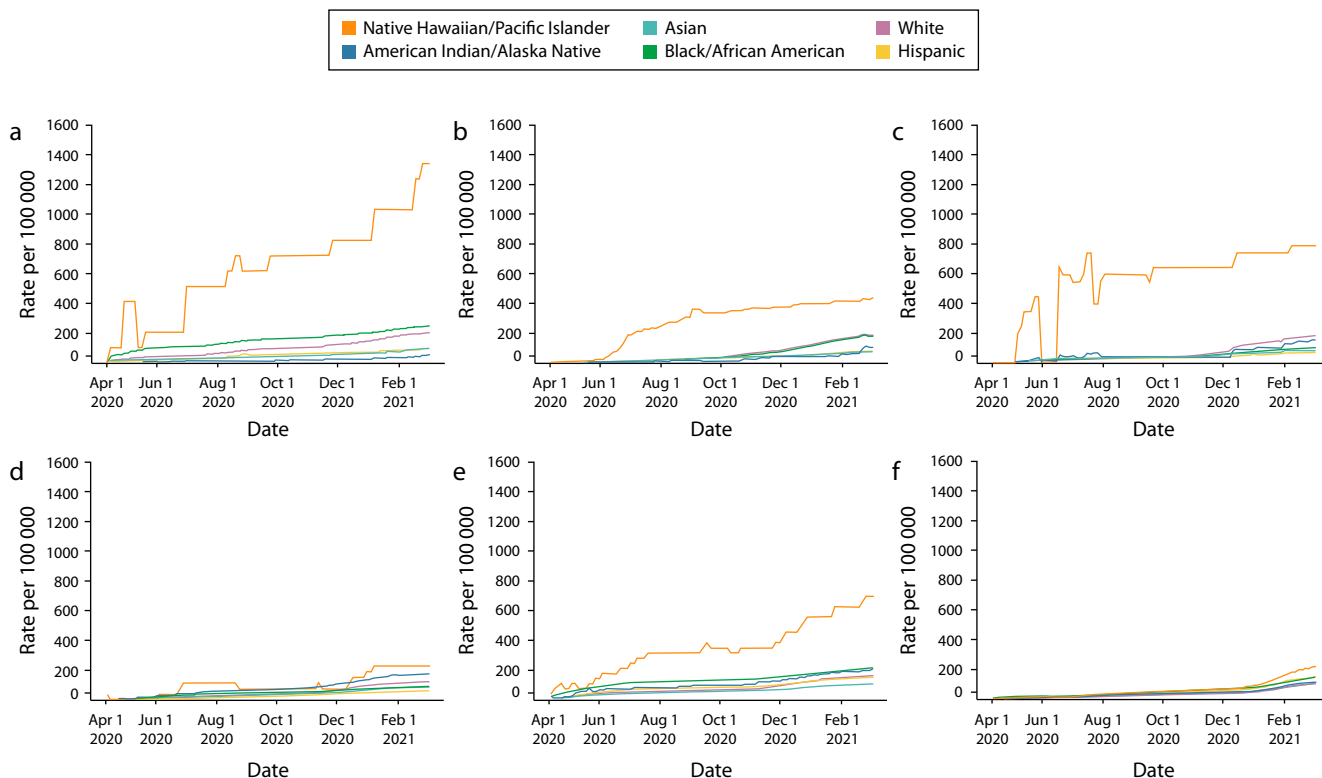


FIGURE 1— State Racial and Ethnic Death Rates per 100 000 as of March 3, 2021 in (a) Louisiana, (b) Arkansas, (c) Iowa, (d) Minnesota, (e) Illinois, and (f) California

Source. COVID Racial Data Tracker.⁷ Last accessed March 4, 2021; US Census Bureau, 5-year American Community Survey, Table DP05.

Note. The Native Hawaiians and Pacific Islanders COVID-19 Data Policy Lab updated the population denominators for calculating case and death rates to use the 2019 American Community Survey 1-year population estimates. The updated calculations continue to match the different definitions of the race and ethnicity states use in their COVID-19 reporting.

deaths reported in the United States. The top 3 states with the highest number of NHPi COVID-19 deaths are California (311), Hawai'i (137), and Washington (80). Louisiana currently has the highest NHPi death rate (1338.83 per 100 000). Before the Lab's research and advocacy efforts, lack of timely reporting of NHPi disaggregated data curtailed public health program and community-based response efforts to address COVID-19 in the NHPi population.

The Office of Management and Budget mandate to provide NHPi disaggregated data in disease reporting holds health agencies accountable for releasing accurate racial and ethnic data. This allows NHPis a voice in policy decision-making, including decisions regarding

allocation of resources to address community health needs.

States lack uniformity for collecting and reporting NHPi disaggregated data; only 42% and 36% of states report NHPi disaggregated case data and death data, respectively.

IMPLEMENTATION

The Lab's methodology consisted of faculty researchers manually scraping case and death data from 11 online state and county COVID-19 dashboards as the National Pacific Islander COVID-19 Response Team requested. Researchers calculated case and death rates using the 2019 American Community Survey 1-year population denominators,

matching the different tabulations of race and ethnicity on the state and county COVID-19 dashboards. Dashboards differed in reporting race as single race, alone, or in combination and in reporting ethnicity (i.e., Hispanic/Latino identification) with race together or separately.

In April 2020, graduate students and working professionals joined the Lab to increase its capacity for recording data and to automate this process using the programming language Python (Python Software Foundation, Wilmington, DE). By June 2020, the National Pacific Islander COVID-19 Response Team expanded its data requests to 32 states and counties.

To increase efficiency, in August 2020, the Lab shifted to the COVID Racial Data

Tracker Dashboard as a primary source of state-level data to calculate case and death rates, with population denominators aligned to each state's race/ethnicity tabulations of cases and deaths.⁶

The Lab developed an online dashboard in September 2020 featuring NHPI-specific national COVID-19 data, which includes state-level summaries, a US heat map, and line graphs of NHPI cases and deaths over time. The dashboard describes how states not disaggregating NHPI data treat the NHPI category: NHPIs aggregated with Asians, NHPIs aggregated under the "other race" category, or no explanation of how NHPIs are counted.

EVALUATION

Advocates have used the Lab's data to increase awareness of COVID-19 impacts on NHPIs and urge decision makers to support community-driven efforts. At least 10 regional Pacific Islander COVID-19 response teams and the National Pacific Islander COVID-19 Response Team rely on the Lab's dashboard data. The dashboard has been viewed more than 2300 times since it launched. These efforts have the potential to affect more than 1.2 million NHPIs living in the United States.

The Inland Empire Pacific Islander COVID-19 Response Team used the Lab's data to advocate disaggregated NHPI data in Riverside County, California. The county's improved data-reporting practices showed that NHPIs exhibit the highest COVID-19 case rate among all racial and ethnic groups. This motivated the health department to support the Inland Empire Pacific Islander COVID-19 Response Team with more than \$60 000 to combat COVID-19 among NHPIs through interventions.

At the state level, the National Pacific Islander COVID-19 Response Team presented the Lab's research to advocate equitable COVID-19 action during a meeting with the director of the California Department of Public Health in September 2020, which resulted in the California Department of Public Health's commitment to prioritize NHPIs in California's COVID-19 efforts.

In September 2020, the Lab supported a national campaign demanding that the National Academies of Sciences, Engineering and Medicine include NHPIs in their plan for equitable allocation of the COVID-19 vaccine by sending in advocacy letters and providing public comments. These efforts advised the National Academies of Sciences, Engineering and Medicine's final vaccine plan, which recognized NHPIs as a priority population. On September 14, 2020, the Lab submitted video, dashboard, and research materials to the National Committee on Vital and Health Statistics Virtual Hearing on Privacy, Confidentiality and Security Considerations for Data Collection and Use during a Public Health Emergency.

ADVERSE EFFECTS

Because of the size of the NHPI population, public reporting of data is a privacy concern. Nevertheless, the vast NHPI health disparities and the deadly COVID-19 consequences suggest that arbitrary threshold requirements for reporting are barriers to prevention. We argue that NHPI data reporting, even when numbers are small, is necessary to inform swift action to protect populations. The long-standing lack of NHPI disaggregated data before the pandemic contributed to the underreporting of the few organizations with

the expertise to implement culturally competent COVID-19 programs.

SUSTAINABILITY

The investment of resources in community-academic partnerships such as the Lab would increase community capacity and resiliency to address the current COVID-19 pandemic and future health challenges. The Lab recently received support from the Robert Wood Johnson Foundation, which is recognized for its community-centered approach to improving public health data.

PUBLIC HEALTH SIGNIFICANCE

The Lab's accomplishments improve community efforts to democratize NHPI disaggregated data. This work demonstrates that community-engaged research is effective and ensures the completeness and appropriateness of public surveillance and action. We provide a model that is community driven, pipeline building, and scalable for other populations that are overlooked in public health data systems. *AJPH*

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CONTRIBUTORS

C. S. Penaia, B. N. Morey, and K. B. Thomas conceptualized the study and performed the formal analysis and investigation. C. S. Penaia, K. B. Thomas, and R. C. Chang prepared the original draft of the article. R. C. Chang was responsible for the study methodology. All authors wrote, reviewed, and edited the article.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

This research did not involve human participants, so institutional review board approval was not required.

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