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1 Title

- 2 Taking Our Lives into Our Own Hands: A Community-Driven Data Response to Native
- 3 Hawaiian and Pacific Islander COVID-19 Mortality Disparities

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Title Taking Our Lives into Our Own Hands: A Community-Driven Data Response to Native Hawaiian and Pacific Islander COVID-19 Mortality Disparities Abstract More attention is necessary to lower the toll of COVID-19 on the Native Hawaiian and Pacific Islander (NHPI) population, but NHPI risks are rarely elevated in policy discussions. We discuss the formation of the community-led NHPI COVID-19 Data Policy Lab to address the evidence gap for NHPIs. The dashboard highlights the disproportionate burden of COVID-19 on NHPIs. The Lab democratized NHPI data, and directly contributed to the creation of resources, development of community infrastructure, and great strides towards health equity.

Intervention

The Native Hawaiian and Pacific Islander (NHPI) population experiences some of the highest case and death rates from COVID-19 compared to all other racial and ethnic groups in the United States (U.S.) [1, 2]. At the UCLA Center for Health Policy Research, the NHPI COVID-19 Data Policy Lab (hereafter, referred to as the Lab) formed to support NHPI community data needs. The Lab represents a close partnership between NHPI community leaders and researchers working to inform national, state, and local COVID-19 prevention efforts

Place and Time

When the COVID-19 pandemic began, a coalition of community leaders and researchers known as the National Pacific Islander COVID-19 Response Team (NPICRT) convened to protect NHPI health. NPICRT expressed an urgent need for a data infrastructure to support their efforts. This led to the formation of the Lab in March 2020, which is powered by graduate students and early career professionals, several of whom identify as NHPI. Within its first 6 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 U.S. This is the first time a research university on the U.S. continent committed resources to sustaining a dedicated pipeline of NHPI researchers to meet the community's data needs.

People

There are over 1.2 million NHPIs in the U.S. with a diverse set of traditions, 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 [3]. Approximately 20 NHPI subgroups are counted and fall under three main groups: Polynesia, Melanesia, and Micronesia.

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

143 rates of chronic health conditions linked to increased risk of severe illness from COVID-19, 144 including heart disease, diabetes, and asthma[4][5]. As with other vulnerable communities 145 NHPIs have relatively high poverty and uninsurance rates [5]. 146 147 **Purpose** 148 149 The Lab's data dashboard indicates higher NHPI COVID-19 death rates than any other 150 racial or ethnic group in 10 of 18 states reporting disaggregated NHPI death data. Figure 1 shows 151 a total of 290 NHPI COVID-19 deaths reported in the U.S. The top three states with the highest 152 number of NHPI COVID-19 deaths are California (78), Arkansas (44), and Hawai'i (39). 153 Louisiana currently has the highest NHPI death rate (640.71 per 100,000). Prior to the Lab's 154 research and advocacy efforts, lack of timely reporting of NHPI disaggregated data curtailed 155 public health program efforts to address COVID-19 in communities. 156 157 FIGURE 1 HERE 158 159 The OMB mandate to provide NHPI disaggregated data in disease reporting plays a 160 critical role in holding health agencies accountable in releasing accurate racial and ethnic data. 161 This allows NHPIs a voice in policy decision-making, including decisions regarding allocation 162 of resources to address community health needs. 163 States lack uniformity for collecting and reporting NHPI disaggregated data, as seen in 164 Table 1[6]. Only 42% and 36% of states report NHPI disaggregated case data and death data, 165 respectively.

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TABLE 1 HERE

Implementation

The Lab's methodology consisted of faculty researchers visiting online state and county COVID-19 information dashboards to manually scrape case and death count data as requested by the NPICRT. At first, the Lab routinely collected data for 11 states and counties.

Researchers calculated case and death rates using 2018 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 or alone or in combination, and in reporting ethnicity (i.e. Hispanic/Latino identification) with race together or separately.

In April 2020, volunteer graduate students and early career professionals joined the Lab to increase capacity for manually recording data. By June 2020, the NPICRT expanded its data requests to 32 states and counties. Experienced graduate student programmers joined the Lab to facilitate the automation process of scraping data from sources using Python.

To increase efficiency, in August, the Lab shifted to the COVID Racial Data Tracker (CRDT) Dashboard as a primary source of state-level data to calculate case and death rates with selected denominators [7].

To increase speed of diffusion, the Lab developed and launched an online dashboard in September 2020 featuring NHPI-specific national COVID-19 data which includes state-level summaries of NHPI cases and death counts, a U.S. heat map of NHPI case and death rates, and line graphs of NHPI case and death rates 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 worldwide have used the Lab's data to increase awareness of COVID-19 impacts on NHPIs and urge decision makers to support community-driven efforts.

The Inland Empire Pacific Islander COVID-19 Response Team (IE PICRT) utilized the Lab's data to advocate for NHPI data to be disaggregated from Asians on Riverside County's

COVID-19 dashboard. The county's improved data reporting practices showed that NHPIs exhibit the highest COVID-19 case rate compared to other racial and ethnic groups. This motivated the health department to support the IE PICRT with over \$60,000 to combat COVID-19 among NHPIs through interventions.

At the state level, the NPICRT utilized the Lab's research to advocate for equitable COVID-19 action during a meeting with the director of the California Department of Public Health (CDPH), in September 2020. This resulted in the CDPH's commitment to prioritize NHPIs in California's COVID-19 efforts.

In September 2020, the Lab supported a national campaign that demanded the National Academies of Sciences, Engineering and Medicine (NASEM) to 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 NASEM's final vaccine plan, which recognized NHPI as a priority population. On September 14, 2020, the Lab submitted video, dashboard, and research materials from the Lab 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

Due to the size of the NHPI population, public reporting of the community's data is a privacy concern. Nevertheless, the vast health disparities among NHPIs and the deadly impact of COVID-19 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 pre-pandemic likely contributed to the under-resourcing of the few organizations with the expertise to implement cultural and linguistically competent COVID-19 programs.

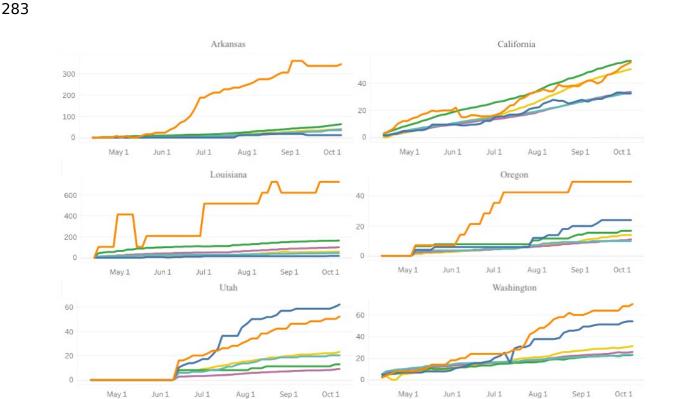
Sustainability

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.

Public Health Significance

The Lab's accomplishments uplift the conscious community effort 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 population subgroups that are invisible or misrepresented in public health data system.

238 239 References 240 241 COVID-19 deaths analyzed by race and ethnicity. APM Research Lab. Available at: 1. 242 https://www.apmresearchlab.org/covid/deaths-by-race. Published September 15, 2020. 243 Accessed October 15, 2020. 244 Morey, B., et al., Structural racism and its effects on Native Hawaiian Pacific Islanders in 2. 245 the U.S.: issues of health equity, census undercounting, and voter disenfranchisement. AAPI Nexus Journal: Policy, Practice, and Community, 2020; (Special Issue Inflection 246 247 Point 2020: Coronavirus, Census and Elections for AAPIs?). 248 Revisions to the standards for the classification of federal data on race and ethnicity. 249 Available at: https://obamawhitehouse.archives.gov/omb/fedreg 1997standards. 250 Executive Office of the President, Office of Management and Budget. Published October 251 30, 1997. Accessed October 10, 2020. 252 4. Galinsky AM, Z.C., Simile C, Barnes PM. Health Conditions and Behaviors of Native 253 Hawaiian and Pacific Islander Persons in the United States. Vital Health Statistics. 2014; 254 (40:1-99).255 5. Empowering Pacific Islander Communities and Asian Americans Advancing Justice. A 256 community of contrasts: Native Hawaiians and Pacific Islanders in the United States, 257 2014. Los Angeles, California: EPIC and Asian Americans Advancing Justice; 2014. 258 6. Chang, R.C., C. Penaia, and K. Thomas. Count Native Hawaiian and Pacific Islanders in 259 COVID-19 data—it's an OMB mandate. Health Affairs, August 27, 2020. 260 7. The COVID Racial Data Tracker. The Atlantic. Available at: 261 https://covidtracking.com/race/dashboard. Published April 12, 2020. Accessed October 7, 262 2020. 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278



Note: In October 2020, the Lab updated the population denominators for calculating case and death rates to use the 2019 American Community Survey 1-Year population estimates (instead of 2018 data). The updated calculations continue to match the different definitions of the race and ethnicity utilized by states in their COVID-19 reporting.

Table 1. State status of disaggregated NHPI COVID-19 case and death data as of October 7, 2020

	Status of Disaggregation of NHPI	Status of Disaggregation of NHPI
State	COVID-19 Cases	COVID-19 Deaths

	T	
Alabama	Alabama does not specify NHPI are included under a grouping it labels "Other."	Alabama does not specify NHPI are included under a grouping it labels "Other."
Alaska	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Arizona	Arizona reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Arizona reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Arkansas	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
California	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Colorado	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Connecticut	Connecticut reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Connecticut reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Delaware	Delaware reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Delaware reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Florida	Florida includes NHPI under a grouping it labels "Other."	Florida includes NHPI under a grouping it labels "Other."
Georgia	Disaggregates NHPI Cases	Disaggregates NHPI Deaths

Hawaii	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Idaho	Disaggregates NHPI Cases	Idaho does not report disaggregated NHPI death data.
Illinois	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Indiana	Indiana includes NHPI under a grouping it labels "Other."	Indiana includes NHPI under a grouping it labels "Other."
Iowa	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
lowa	Disaggregates Will I Cases	Disaggregates Will I Deaths
Kansas	Kansas does not specify if NHPI are included under a grouping it labels "Other race."	Kansas does not specify if NHPI are included under a grouping it labels "Other race."
Kentucky	Disaggregates NHPI Cases	Kentucky does not report disaggregated NHPI death data.
Louisiana	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Maine	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Maryland	Maryland does not specify if NHPI are included under a grouping it labels "Other (Non-Hispanic)."	Maryland does not specify if NHPI are included under a grouping it labels "Other (Non-Hispanic)."
Massachusetts	Massachusetts does not specify if NHPI are included under a grouping it labels "Non-Hispanic Other."	Massachusetts does not specify if NHPI are included under a grouping it labels "Non-Hispanic Other."

Michigan	Michigan reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Michigan reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Minnesota	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Mississippi	Mississippi does not specify if NHPI are included under a grouping it labels "Other (Non-Hispanic)."	Mississippi does not specify if NHPI are included under a grouping it labels "Other (Non-Hispanic)."
Missouri	Missouri includes NHPI under a category it labels "Other."	Missouri includes NHPI under a category it labels "Other."
Montana	Montana does not specify if NHPI are included under a grouping it labels "Other race."	Montana does not specify if NHPI are included under a grouping it labels "Other race."
Nebraska	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Nevada	Nevada does not specify if NHPI are included under a grouping it labels "Other."	Nevada does not specify if NHPI are included under a grouping it labels "Other."
New Hampshire	New Hampshire includes NHPI under a grouping it labels "Other."	New Hampshire includes NHPI under a grouping it labels "Other."

	New Jersey includes NHPI under a grouping it labels "Other (non-	New Jersey includes NHPI under a grouping it labels "Other (non-
New Jersey	Hispanic)."	Hispanic)."
	1	
	New Mexico does not currently	New Mexico does not currently report
New Mexico	report disaggregated NHPI data.	disaggregated NHPI data.
	1	
	Race/ethnicity data is reported	
	separately by New York City and	Race/ethnicity data is reported
	the rest of New York State. NYC	separately by New York City and the
	reports Asian as a panracial	rest of New York State. NYC reports
	category including Asian Pacific	Asian as a panracial category
	Islander and Native Hawaiian.	including Asian Pacific Islander and
	New York State exlcuding NYC	Native Hawaiian. New York State
	reports a grouping it labels	exlcuding NYC reports a grouping it
New York	"Asian."	labels "Asian."
North		
Carolina	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Caronna		
	North Dakota does not report any	North Dakota does not report any
	racial or ethnic COVID-19 case	racial or ethnic COVID-19 case or
North Dakota	or death data.	death data.
Norm Dakota	oi ucatii uata.	ucani uata.
Ohio	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
L		

Oklahoma	Oklahoma reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Oklahoma reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Oregon	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Pennsylvania	Pennsylvania does not specify if NHPI are included under a grouping it labels "Other."	Pennsylvania does not specify if NHPI are included under a grouping it labels "Other."
Rhode Island	Rhode Island does not specify if NHPI are included under a grouping it labels "Non-Hispanic other."	Rhode Island does not specify if NHPI are included under a grouping it labels "Non-Hispanic other."
South Carolina	South Carolina does not specify if NHPI are included under a grouping it labels "Other."	South Carolina does not specify if NHPI are included under a grouping it labels "Other."
South Dakota	South Dakota does not specify if NHPI are included under a grouping it labels "Other."	South Dakota does not specify if NHPI are included under a grouping it labels "Other."
Tennessee	Disaggregates NHPI Cases	Disaggregates NHPI Deaths

Texas	Texas does not specify if NHPI are included under a grouping it labels "Other."	Texas does not specify if NHPI are included under a grouping it labels "Other."
Utah	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
Vermont	Vermont does not specify if NHPI are included under a grouping it labels "Other race."	Vermont does not specify if NHPI are included under a grouping it labels "Other race."
Virginia	Virginia reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Virginia reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Washington	Disaggregates NHPI Cases	Disaggregates NHPI Deaths
West Virginia	West Virginia does not specify if NHPI are included under a grouping it labels "Other."	West Virginia does not specify if NHPI are included under a grouping it labels "Other."
Wisconsin	Wisconsin reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.	Wisconsin reports Asian as a panracial category including Asian Pacific Islander and Native Hawaiian.
Wyoming	Disaggregates NHPI Cases	Wyoming does not report disaggregated NHPI death data.