

INSIGHTS IN PUBLIC HEALTH

A Model for Reaching Vulnerable and Underserved Populations During Public Health Emergencies Such as COVID-19

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Insights in Public Health is a recurring column from the public health community and is coordinated by HJH&SW Contributing Editor Mapuana Antonio DrPH from the Office of Public Health Studies in the Thompson School of Social Work & Public Health at the University of Hawai'i at Mānoa and Contributing Editor Nichole J. Fukuda MS from the Hawai'i Department of Health.

Acronyms

COVID-19 = coronavirus disease 2019
CDC = Centers for Disease Control and Prevention
HBC = Honolulu Bible Church (HBC)
HDOH = Hawai'i State Department of Health
Housing = Palolo Valley Homes, Ltd, and Palolo Homes
JABSOM = University of Hawai'i John A. Burns School of Medicine
NH = Native Hawaiian
PI = Pacific Islander
Project Vision = Project Vision Hawai'i

Community involvement during public health emergencies such the coronavirus disease 2019 (COVID-19) pandemic can be a very effective way to reach high risk vulnerable and underserved populations.¹ The US Department of Health and Human Services defines underserved and vulnerable populations as those that face health, financial, educational, and/or housing disparities. In other words, barriers that make it difficult to get health coverage and basic health care services, including, but not limited to, lack of coverage, high health care costs, inconsistent sources of care, low health literacy, lack of reliable transportation or other difficulties physically accessing provider's offices, and lack of available providers.² According to the Centers for Disease Control and Prevention (CDC), racial minorities are more likely to become hospitalized or to die from COVID-19 compared to White, Non-Hispanic persons.³ A model for reaching underserved and vulnerable populations is described here. The model describes how positive relations were established through outreach by volunteers and through collaboration between community organizations. This fostered compliance with public health recommendations to improve the health and well-being, including helping to preserve life for underserved and vulnerable populations.

In 2020, volunteers who attend Honolulu Bible Church (HBC) in Palolo, Hawai'i, began to focus their attention on the Palolo Valley Homes, Ltd, (118 units managed by the Hawai'i Public Housing Authority), and Palolo Homes (306 units owned by Mutual Housing Association of Hawai'i). Palolo Valley Homes

and Palolo Homes, collectively referred to as the Housing, have about 1500 registered residents, including, but not limited to Pacific Islanders, Native Hawaiians, and South East Asians. From the authors' observations, Pacific Islanders, appear to be one of the predominate groups living in the Housing.

In 2021, Native Hawaiians (NHs) made up 21% of the state's population and 19% of the COVID-19 cases, while Pacific Islanders (PIs), excluding NH, made up 4% of the state's population and 24% of all cases.⁵ The PI population in Hawai'i that had been diagnosed with COVID-19 had a cumulative risk that was 4 times greater than the next most impacted population (Filipinos) and 12 times that of the least impacted population (Japanese).⁵ Researchers also reported that in 2020 among the PIs, "the COVID-19 infection rate was up to 10 times that in all other groups combined and they accounted for almost 30% of cases."⁶ Thus providing outreach services to the PI population was vital as the pandemic impacted this population at a disproportionate rate.

Food drives began in April 2020 as a means to facilitate the distribution of face masks to the community to help protect them from COVID-19. It was initially observed that there was a hesitancy to wearing masks, as it was a novel practice when first introduced at the beginning of the pandemic. Bento boxes along with face masks were distributed weekly to cars driving through the parking lot of the church. Later, hand sanitizers and bags and boxes of groceries of food items were included in the distribution. Funds were initially provided by a few private donors and HBC for the weekly food distribution. The response from the community was very positive as many people were unemployed or underemployed during the spring and summer of 2020, the height of the shutdown of normal business activities due to COVID-19. Food was later supplied by the United States Department of Agriculture (USDA), the Food Bank of Hawai'i, and private donations.

Volunteers canvassed the Housing door-to-door every weekday to register residents in a database to receive the food and to

provide flyers notifying them of the food distribution schedules. During these early interactions, it was evident to the canvassers that many residents had low English literacy, and did not have the means or the capability of readily accessing internet technology.²⁴ The one time that translators were available to be used, the canvassers noted that it helped with communication. Difficulties coordinating the use of translators from other organizations and lack of funding to hire them specifically for canvassing were the main reasons for not continuing to use them. The food distribution fostered positive relationships with the residents in the Housing. It was a good mechanism to communicate COVID-19 testing and vaccination information to residents in the Housing when they became available later.

COVID-19 testing began in the Housing in May 2020 in conjunction with the University of Hawai‘i John A. Burns School of Medicine (JABSOM). Shortly thereafter, Project Vision Hawai‘i (Project Vision) took over the testing. Project Vision “provides statewide services in communities with significant access-to-care challenges related to income, lack of insurance, geographical location, or cultural conflict.”²⁷ Testing was initially offered at Palolo Park, located across the street from the Housing, with periodic assistance from uniformed personnel, such as police or military. The lead author and the Resident Services Manager of Palolo Homes observed that residents were hesitant to get tested, and attendance was low. As a way to encourage residents to get tested, the COVID-19 testing location was moved to the *Hale*. The *Hale* sits on a central site inside the Housing on Ahe Street and is run by the Honolulu Community Action program for Science, Technology, Engineering, and Mathematics (STEM) activities and computer work.

Similar to the food drive, volunteers continued in May 2020 to canvass door-to-door, on weekdays to sign people up for testing. Residents either signed up during the canvassing or they would contact the lead author to ask to be signed up for testing. The canvassers included volunteers from churches, public health nurses from the Hawai‘i State Department of Health (HDOH), and nursing students from Chaminade University.

Because of residents’ low English literacy and lack of readily accessible internet technology in the Housing, the volunteers would fill out the registrations with the residents and later transfer the information into Project Vision’s online database. Initially, residents were hesitant to be tested due to barriers such as “cost of testing; low health literacy; low trust in the healthcare system; availability and accessibility of testing sites; and stigma and consequences of testing positive.”²⁸ To encourage testing, free bags of rice were given to Housing residents as incentives to those who came to be tested. Using incentives as a strategy appeared to work well to encourage people to be tested based on an increase in attendance and a willingness to be registered for the testing.

When vaccinations became available in the spring of 2021, Project Vision offered vaccinations in the Housing, and were willing to vaccinate homebound individuals in their units. Initially the response was very good, since seniors were anxious to be vaccinated. This positive response continued as the age eligibility dropped to 50 years and above. However, when the eligibility for vaccinations dropped to 18 years old, there was an initial hesitancy among residents to be vaccinated. Misinformation spread throughout the community and contributed to hesitancy and skepticism about the COVID-19 vaccine.⁹ Vaccinations dropped by about 50% compared to previous months. Although individuals 12-17 years old were eligible to receive vaccinations in May 2021, it took a couple of months to get this age group vaccinated. There was an uptick in numbers when vaccinations became available to additional age groups. In addition, when vaccinations became available for individuals 5-11 years old in November 2021, the number of vaccinations in this age group contributed to the increase in vaccinations for the less than 18 years old shown in **Figure 1**.

To help counter the vaccine hesitancy, in the spring of 2021 volunteer canvassers began to confidentially survey the residents to determine how best to encourage vaccinations. The information from the surveys gathered by the canvassers included information on the number of individuals living in each household, their ages, and their vaccination status. Information on the vaccination status of occupants in each household allowed for a targeted approach to know which homes to continue to canvass to encourage eligible unvaccinated individuals. This targeted approach was useful as the age eligibility for vaccinations changed over time. Volunteers went door-to-door every weekday to pre-register residents for the vaccination clinics by helping them to fill out the forms and assigning them time slots. Volunteers would call and remind the residents of their appointments a few days prior to each clinic, and on the day of the clinic.

The survey revealed that \$25-dollar gift cards from a local supermarket would be a good incentive and were initially given to individuals being vaccinated. There was an overwhelming positive response. Initially, gift cards were paid for by private donations and by Project Vision. The participation of the lieutenant governor and a state representative serving the community, and coverage by local news outlets brought positive publicity to the vaccination clinics. As word got around about the clinics in the Housing, private individuals and local businesses provided generous donations of gift cards for pizza and supermarkets to supplement the effort. Based on feedback from the younger residents in the Housing, gift cards from a popular local restaurant chain, were also made available at the vaccination clinics. A Kaiser Foundation grant was awarded to City Church and used to help purchase additional gift cards for the vaccination clinics, in-home test kits, and, later, provide

stipends for some of the principal volunteer canvassers. Project Vision also secured large donations of personal protective equipment for the Housing from Wilson Care Group.

On alternating Saturdays in the spring of 2021, Project Vision made vaccinations and testing available in the Housing at the *Hale*. Residents were far more willing to participate when the clinics were done in a familiar setting close to home. Staff also continued to conduct home visits to vaccinate those who were homebound because of medical conditions, and to provide testing for those who were afraid to come to the testing site. The regular canvassing along with the ongoing food distribution built trusting relationships, and contributed to the willingness of recipients to be vaccinated and tested. The success of outreach was evidenced by improved attendance at the clinics and positive feedback from individuals and the Palolo Homes Resident Services Manager. Comments from individuals such as “You’re so close,” along with appreciation from home-bound residents were often vocalized.

During the vaccination clinics individuals from the HDOH Public Health nursing staff, residents from the Housing, nursing students and staff from Chaminade University, and churches helped with logistics. Other volunteers included many medical professionals who assisted with providing vaccinations and testing to the residents on site and as well as for residents who were homebound in the Housing.

As of May 19, 2022, Project Vision survey results compiled from the vaccination clinics revealed that a total of 1754 vaccinations were administered in the Housing between February 21, 2021 and April 12, 2022 to 1048 unique, unduplicated individuals. The vaccinated individuals by age group were as follows: 5-11 years 10%, 12-17 years 16%, 18-64 years 62% and 65 years and older 12%. **Figure 1** shows the trend of the percent of total

vaccinations each month given in the Housing by age group from February 12, 2021 to April 12, 2022. From February 2021 to September 2021, Project Vision administered the initial primary series. In October 2021, boosters were administered in addition to the primary series. Then in November 2021, *keiki* 5-11 years old were eligible to receive the primary series.

The vaccination clinics ended in May 2022, due to low turnout after the state dropped safe travel and indoor mask mandates in March 2022. However, masks, hand sanitizers, and in-home test kits continued to be distributed in the Housing upon request. Food distribution continues monthly by volunteers from HBC and the community, with food supplied by the Hawai‘i Food Bank and through private donations.

This model for reaching vulnerable and underserved populations proved to be highly effective and may be a useful template for future public health emergencies. The most important element of this model was regular door-to-door canvassing by volunteers to build trust with the residents, and to gather and to share information. Other successful elements included assisting residents to register for testing and vaccinations, using incentives such as food and gift cards, providing the clinics at the residential site as well as going into resident’s homes when necessary, enlisting volunteers who were familiar with the residents, and coordinating the efforts of many organizations and individuals for help with the food distribution, testing, and vaccination clinics. One element that would have been very useful for this model would have been translators for non-English speaking residents. Translators could have assisted in better communicating important public health information on testing and vaccinations. Overall, this model fostered long lasting positive community relations between the volunteers and with those who were served. This collaboration brought together individuals from all walks of life using their many gifts of service, talents, and resources

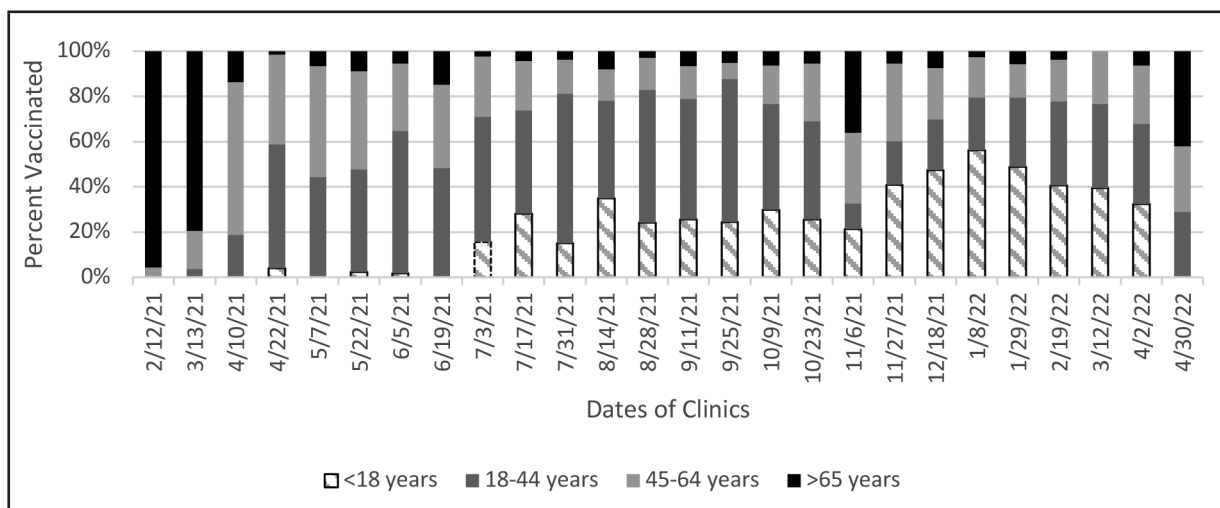


Figure 1. COVID-19 Vaccinations Given in the Housing by Age Group and Date from February 12, 2021 to April 12, 2022

Source: Project Vision Hawai‘i Data

for the public good. Most importantly, it fostered compliance with public health recommendations to improve the health and well-being, including helping to preserve life, for vulnerable and underserved populations.

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