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# Measuring the Impact and Satisfaction Rates of *Promotores de Salud*-led Health Programs in Yakima County

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A DNP Project submitted in partial fulfillment of the

requirements for the degree of

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# Abstract

**Purpose:** Increased infection and mortality rates of COVID-19 have disproportionately affected Latine communities as seen in increased rates of infection, hospitalization, and deaths with lower rates of vaccination across multiple states. Yakima County, WA experienced the highest rates on the West Coast within two months of the initial March 2020 lockdown, overwhelming the local healthcare systems and highlighting barriers to accessing healthcare for local Latine communities. In August 2021, 56 percent of COVID-19 cases in Yakima County were Latine yet Latine identifying people only accounted for 49 percent of the county's population.

**Design:** This study is a program evaluation of a community health intervention, the *COVID-19 es Real* campaign, which took place in Yakima County. The program evaluation consisted of Likert survey questions, semi-structured interviews, and analyzed through descriptive mixed methods.

**Results:** Three Yakima Health District (YHD) employees and six *Promotoras de Salud* took the survey. Three YHD employees participated in the semi-structured interview process. The interview responses supported the survey results illustrating that with the assistance of *Promotoras* as a COVID-19 intervention, YHD programming was able to better provide Yakima County with COVID-19 education, resources for testing, vaccinations, and improve community resilience.

**Conclusion:** Without the *Promotoras*, YHD could not have provided education to community members regarding COVID-19 testing and vaccination sites at the rates that they did. The program evaluation showed that *Promotores de Salud* are valuable public health partners to government agencies and communities and can successfully connect with high-risk community members to combat the spread of misinformation, disease, as well as extend the utilization of local resources.

*Keywords: Promotores de Salud, Promotoras*, community health workers, Yakima County, COVID-19, program evaluation

# Introduction

As of July 1, 2022, Latine people in the United States of America (USA) had some of the greatest rates of deaths from COVID-19 for any marginalized group for which data is available (Lemos et al., 2022). Specifically, states like North Carolina, Arkansas, California, and Washington experienced trends at the onset of the COVID-19 pandemic where Indigenous and Latine communities accounted for roughly 40 to 65 percent of COVID-19 cases while only representing 10 to 20 percent of the population (Center et al., 2020; Hendrix, 2021; Riley et al., 2021).

COVID-19 has disproportionately affected Latine communities and can be seen as increased rates of infection, hospitalization, and deaths with lower rates of vaccination across multiple states (Betancourt, 2020; CDC, 2021). COVID-19 health disparities within these communities are attributed to an increased virus exposure related to essential job employment; barriers to accessing healthcare stemming from socioeconomic factors, such as a lack of health insurance; lower health care access, and; low socioeconomic status due to institutional factors such as structural racism, limited language resources, and medical mistrust (Center et al., 2020; Hendrix, 2021; Riley, 2022). The COVID-19 pandemic highlighted the need to identify and address gaps and limitations in public health infrastructure to address the health needs of Latine communities. Barriers to accessing care that were found to be the most prominent within public health were the spread of misinformation and the lack of Spanish-speaking resources that provided accurate education regarding COVID-19 (Ayer, 2022).

To combat these barriers, Yakima County, WA health organizations collaborated with community health workers, known as *Promotores de salud*, to provide trustworthy educational resources for Spanish-speaking individuals to guide community members and prevent the spread of misinformation. *Promotores de salud* have a longstanding history within the public health sector providing assistance to local health organizations, such as Yakima Health District, to reduce disparities present within the healthcare sector of Latine communities for not only

COVID-19 but for HIV/AIDS as well (Foster-Cox et al., 2019). There is also record of *Promotores* assisting in medically underserved environments like the Mexico-USA border disseminating education related to palliative care for chronic diseases (Goebel et al., 2021; Cáceres et al., 2021). However, there is limited literature providing information of the satisfaction of *Promotor de salud* programs among organizations that implemented them, thus a program evaluation of a local *Promotor de salud* program may be useful to anyone designing health promotion programs for disproportionately affected Black, Indigenous, and people of color (BIPOC) communities where access to care, accurate education, and language translation resources are limited. Additionally, a program evaluation can help facilitate the creation of programs and implement measures at the community level to eventually expand the *Promotor de Salud* program to county and state levels. These programs can assist in managing the spread of COVID-19 and other health comorbidities within these populations.

This paper will discuss organizing a program evaluation of the *COVID-19 Es Real en el Valle de Yakima* (COVID-19 is Real in Yakima Valley) program conducted in collaboration with Yakima Health District from September 2020 to June 2022 to assess program satisfaction rates and if expectations were met by the *Promotores de salud* from the perspective of multiple stakeholders. Surveys and key informant interviews were offered to *Promotores* from Yakima County, WA, Yakima Health District staff members, and key community organizers. The intention of gathering data from these groups was to collect information on perceptions and opinions on the role *Promotores* played in Yakima County's COVID response plan.

# **Background and Significance**

COVID-19 infection and mortality rates in Washington state quickly became significant at the onset of the pandemic, especially in Yakima County where the highest rates of COVID-19 cases on the West Coast were recorded among Latines within two months of the initial March 2020 lockdown, overwhelming the local healthcare systems and highlighting barriers to accessing healthcare for local Latine communities (Bravo, 2020). In August 2021, 56 percent of

COVID-19 cases in Yakima County were Latine yet Latine identifying people only accounted for 49 percent of the county's population (Department of Health, 2021). Latine leaders locally and statewide have repeatedly called for improvements in communication, outreach, and contact tracing to address gaps in messaging and outreach to Spanish speaking communities (Ayer, 2022).

Community health workers (CHWs) are an integral, trusted, and connected part of Yakima County and share a special desire to serve their community. This special relationship allows for CHWs like *Promotores de Salud* to act as a link between community members and government health agencies to facilitate access to health services and education. *Promotores de Salud* are typically female identifying nontraditional community health worker, with "shorter training than professional workers," who keeps up to date on health education and resources to act as a liaison between community members and local health services (Early et al., 2016, p.59). To combat the spread of COVID-19 misinformation and provide evidence-based education to community members, the Yakima Health Department enlisted the assistance of two dozen *Promotores/as* to implement *COVID-19 Es Real en el Valle de Yakima*, a program that provided Latine identifying people within Yakima County resources to combat the adverse effects of the COVID-19 pandemic (Ayer, 2022).

#### Social Determinants of Health

There are many social determinants of health (SDOH) that influence efforts to attain the highest level of well-being possible among Latine communities including "social, physical, and economic barriers" (Mangel & Mou, 2021, p.37). An individual being affected by one or several of these factors may increase the risk of coronavirus transmission. Research on the correlation between SDOH and COVID-19 transmission rates in Washington state highlighted areas like "occupation, housing, healthcare access, and community structure" (Mangel & Mou, 2021, p.36) as contributors to health disparities in Latine communities leading to disproportionate COVID health outcomes. These individuals often work in jobs deemed "essential," including

construction, agriculture, and the hospitality sector and are more likely to have jobs that prevent them from being able to take paid time off work, socially distance, or work remotely leading to increased risk of COVID exposure and illness (Mangel & Mou, 2021; Moyce et al., 2021). They also often live in multi-generational homes where isolating a sick individual is difficult leading to multiple COVID exposures and transmissions under one roof. In Washington state, BIPOC communities tested positive for COVID infections at significantly higher rates than their White counterparts, with the highest proportions noted among Latines (Mangel & Mou, 2021).

Additionally, language access, including health literacy capacity, is a leading barrier contributing to elevated rates of COVID-19 infection in Latine communities (Macias Gil et al., 2020), posing an additional challenge to state and local health departments for effective messaging during times of health crisis. Language barriers have the potential to increase the risk of COVID-19 exposure, infection, and severe illness in Spanish-speaking populations who cannot understand public health messaging or who are unable to communicate with providers or testing centers (Macias Gil et al., 2020). A study conducted within a rural Latine community found that most participants received their health messaging related to COVID-19 through English-speaking news outlets (Moyce et al., 2021). In rural communities, such as Yakima County, decreased access to care may be exacerbated by unstable internet connections and decreased transportation services. This type of isolation further complicates access to accurate health messaging, especially in the presence of language barriers (Macias Gil et al., 2020). The spread of misinformation during a pandemic, a time of crisis for many, can have profound consequences. In a study conducted by Moyce and colleagues (2021, p.133), a Latine participant reported that they "bathed in bleach" daily to prevent infection from COVID-19, a suggestion that they read from social media as they did not have access to other credible sources in Spanish, further highlighting the urgent need for a system that does not leave out racial/ethnic minorities in the wake of a crisis. Furthermore, those who have immigrated to or been in the United States for five years or less are especially at a considerable risk for poor

health access and outcomes due to limited language literacy, medical insurance status, medical mistrust, and spread of misinformation related to healthcare access or safety (Clark et al., 2020).

There is an urgent need to address barriers which have been contributing to decreased healthcare access during the COVID-19 pandemic for Latine populations (Jones, 2020) that exacerbate COVID-19 infection rate and mortality rate disparities in Yakima County. These include occupation risks, housing, healthcare access, language literacy, immigration status, and level of integration into the local community (Clark et al., 2020; Mangel & Mou, 2021; Salgado de Snyder et al., 2021). When groups of people do not have sufficient language skills, confidence, or knowledge to navigate local government systems, they have the potential to fall through the cracks without their needs being met (Hendrix, 2021). These populations are difficult to connect with due to a certain level of medical mistrust, putting them at greater risk for compromised care in the forms of lack of access to resources, reduced continuity of care, delayed treatment, and misinformation. Recognizing that Latine subgroups exist nationwide, identifying, and addressing factors that create risk for disproportionate infection rates or barriers to care may benefit future program planning for community health interventions (Riley et al., 2021).

# **Community-Based Programs**

National and local statistics indicate a growing need for change in healthcare approaches within Latine populations and their subgroups. Despite well-intentioned public health initiatives, health disparities continue to exist at increased rates within these communities with a lack of significant progress (Zimmerman & Anderson, 2019). Health experts suggest a community-based model for integrating equity into health services during and after the COVID-19 pandemic as one effective intervention for promoting improved health outcomes among Latine communities (Moon et al., 2021). Community and grassroot approaches, with frontline

Latine representation, are critical in identifying and addressing the health needs of disproportionately affected Latine populations (Hendrix, 2021).

Promotores de salud act as frontline public health workers who have a rich history of providing culturally appropriate health education and outreach services within Latine communities (Early et al., 2016; Cáceres et al., 2021). They are embedded in their communities and seen as trustworthy sources of information. In previous studies, *Promotores* have been successful in promoting changes with lifestyle behaviors (Brown et al., 2018), chronic disease management (Goebel et al., 2021), and uptake of cancer-related preventative measures (Fischer et al., 2018). Since the onset of the COVID-19 pandemic, Promotores have become increasingly vital in performing community outreach services in Latine communities experiencing barriers to care (Moon et al., 2021). Programs facilitated by Promotores are typically led by trained individuals who often share a similar cultural background, live in the same community, and share lived experiences with the people they serve (Moon et al., 2021). During the COVID-19 pandemic, Promotores assisted local health organizations and local Latine communities with contact tracing efforts, distributing masks, sanitizers, other protective gear to farmworkers, connecting community members to food pantries, and combating misinformation, sometimes via unconventional outlets such as WhatsApp, Instagram, and Facebook groups (Falicov et al., 2020). By providing information, as well as tangible and emotional support to community members, Promotores serve as agents of change and model behaviors to be emulated. The knowledge and skills they possess are effective in encouraging fellow community members to embrace or adopt positive health related practices (Cáceres et al., 2021).

The development of *Promotores de Salud* programs as public health interventions to increase education in Latine communities and combat the spread of misinformation has been increasingly studied over the last few years and continues to increase after COVID-19 exacerbated health disparities in BIPOC communities (Moon et al., 2021). However, there is

limited literature to describe the relationship that *Promotores* have with their local health organizations after the completion of the program. By understanding the views of *Promotores de Salud* and key staff informants from local health organizations, from an evaluation perspective, after the immediate crisis, future collaborations can further improve public health interventions to better serve Latine communities.

# Purpose and Aims

In this project we organized and performed a program evaluation of the *COVID-19 Es Real en el Valle de Yakima* program (September 2020 to June 2022), conducted in collaboration with Yakima Health District (YHD) and *Promotoras de Salud*. The goal of the program evaluation was to assess community health workers as an intervention, specifically *Promotoras de Salud*. The program under evaluation was implemented at the height of the COVID-19 pandemic in the late Summer of 2020 with a goal of alleviating COVID-related disparities among Yakima County Latine communities experiencing disproportionate morbidity and mortality rates, increased healthcare mistrust, misinformation, and lack of Spanish health resources (Ayer, 2020).

## Methods

# Design

This is the first program evaluation for the *COVID-19 Es Real* program. Surveys and key informant interviews were offered to *Promotores*, YHD staff members, and key community organizers. Data was gathered by primary investigators to assess perceptions and opinions on the role *Promotores* played in Yakima County's COVID-19 response plan. By focusing on various stakeholders for data collection, specifically *Promotores* who have insight at the community level, we intended to align this evaluation with a bottom-up approach where community healthcare workers' feedback is prioritized, valued, and applied to future quality improvement efforts. Seattle University's Institutional Review Board reviewed the project

proposal and deemed the program evaluation study as "*Not Human Participant Research*" (NHPR).

# **Theoretical Framework**

This project used the Centers for Disease Control and Prevention (CDC) Theoretical Framework for a Public Health Program Evaluation to create a roadmap for organizing and performing a program evaluation rooted in stakeholder input to improve community outreach programs in Yakima County, WA where high disparity communities exist. Grounding this Doctoral of Nursing Practice project in the CDC's theoretical framework for a public health program evaluation will build knowledge that can be applied within community health organizations working to address health disparities and determine best practices that sustainably improve health outcomes for high-risk communities (Carman et al., 2019; Centers for Disease Control and Prevention, 1999).

The CDC's framework for a public health program evaluation is a two-part approach that provides clear steps to guide organizations and health initiatives through an effective and collaborative evaluation process (CDC, 1999). This recommended framework for a program evaluation by the CDC consists of six steps: (1) engage stakeholders, (2) describe the program, (3) focus on the evaluation design, (4) gather credible evidence, (5) justify conclusions, and (6) ensure use and share lessons learned (CDC, 1999, p. 4). The second component of this program evaluation includes standards that exist to ensure quality and working potential of an effective and practical evaluation. The CDC framework for public health program evaluations outlines 30 standards grouped into four subcategories including utility, feasibility, propriety, and accuracy. These standards are defined as "guiding principles" to be used during the planning and implementation stages of an evaluation (CDC, 1999, p. 27).

The CDC's theoretical framework's intended use in this project was to create a customized assessment to identify areas of success as well as gaps in community health worker intervention where high disparity communities continue to exist and experience high

rates of COVID-19 infections and mortality in Eastern Washington. The CDC's framework for a public health program evaluation combined with a social awareness of factors leading to disproportionate community health outcomes in high-risk communities can bring lasting systematic change to healthcare settings and ultimately improve patient and community health exchanges and outcomes (Carman et al., 2019). This framework provides a method, for those who apply it, to improve clinical encounters with high disparity populations that do not regularly access health resources by collaborating with various stakeholders or "key change agents," such as *Promotores de salud*. In this case, partnership between Yakima Health District and *Promotoras* aimed to engage, amplify voices, and enable change by promoting better collaborations to perform healthcare outreach and improve local community health outcomes (Carman et al., 2019, p. 2). A lack of effective partnership between communities and health organizations contributes to an on-going population of medically underserved patients (Carman et al., 2019). A delay often exists between the implementation of evidence-based practices in clinical care that promote optimal health outcomes versus the actual care being delivered (Carman et al., 2019). Theoretical frameworks like the CDC's framework for a public health program evaluation can be used to guide the implementation of evidence-based practices in community healthcare outreach with the goal of improving clinical care experiences and outcomes (DeSocio, 2019).

# **Setting & Participants**

Yakima Health District is in rural Yakima County in Eastern Washington and serves a large Latine Spanish-speaking, immigrant population who primarily work in agriculture and essential job roles. Per the Census Reporter, roughly 52 percent of the total population is Latine (U.S. Census Bureau, 2021b). Almost 20 percent of Yakima County's population immigrated with 92 percent of that total being of Latine decent (U.S. Census Bureau, 2021a). The immigration statistics are 20 percent higher than the rest of Washington state and 1.3 times

higher than the rest of the U.S. reflecting the size of the Latine immigrant population Yakima County serves (U.S. Census Bureau, 2021a). Additionally, 45 percent of children ages five to 17 primarily speak Spanish in their home while a reported 39 percent of adults 18 and older are primary Spanish speakers in Yakima County (U.S. Census Bureau, 2021a). That is more than double the rate statewide and nationally among both children and adults (U.S. Census Bureau, 2021a).

YHD staff member Lilian Bravo, the Director of Public Health Partnerships, was contacted by the primary investigators of this project and assisted in establishing a connection with YHD's epidemiologist, Yasmín Barrios to perform this program evaluation. After engaging YHD directors as primary stakeholders, collaborating to address what program evaluation methods and data collection should look like, primary investigators moved on to step three of CDC's theoretical framework to design and modify online survey tools and semi-structured interview questions to meet the goals and needs of Yakima Health District from a program evaluation lens.

Inclusion criteria for the *Promotores de Salud* was that they (a) actively participated in the COVID-19 response program with YHD staff members and (b) completed the initial 11 hours of training to ensure they were equipped with the knowledge and ability to discuss and educate on COVID-19 including what it is, modes of infection, and what resources were available (Ayer, 2022). *Promotores* excluded from this program evaluation were those who did not participate or contribute time to the *COVID-19 Es Real* program or training period. Inclusion criteria for YHD staff members was that they hold an active position with YHD or held one between 2020 and 2023 and that their role supported the *COVID-19 Es Real* program by aiding in the creation and implementation of the program. YHD staff excluded from this project played no role in the creation, implementation, or maintenance of the *COVID-19 Es Real* program. For key community organizers, inclusion criteria consisted of having been a primary stakeholder during

the creation and implementation of the *COVID-19 Es Real* program or through direct interaction with *Promotores de Salud*. Community organizers excluded from this study were those who did not assist in organizing or did not participate in the *COVID-19 Es Real* program. Key community organizers of interest included the medical doctor who trained the *Promotores* with COVID-19 education and response as well as organizers from Latinx Outreach, a community based program who employs *Promotores* regularly and took lead on organizing public health messaging distributed by *Promotores*.

The majority of outreach was conducted online via email. *Promotores* were recruited via email forwarding and social media through YHD staff connections. Email was the most successful for YHD staff recruitment into the survey and interview process. Key community organizers were also contacted via email by the primary investigators using a list developed by Lilian Bravo from YHD. The goal was to survey at least five *Promotores* and at least five YHD staff members and/or key community organizers for a total of at least ten surveys comprised of participants from all groups of interest. We were also interested in performing an equal number of key informant interviews with the survey participants. The hope was to connect with a specific set of stakeholders who collaborated with the *COVID-19 Es Real* campaign in Yakima County via purposive sampling, focusing on those with experience with the program, to gather data with non-random surveys and interviews. Participants had the choice to remain anonymous in their survey submission and only identify themselves if they chose to be interviewed. The sample in this project was intended to be a smaller sample of the greater Yakima County as a whole so data may be applied to generalize larger populations, counties, and states (Rockinson-Szapkiw, 2013).

# **Data Collection**

The fourth step of the CDC's theoretical framework is gathering credible evidence (CDC, 1999). Primary investigators moved onto this step by distributing electronic surveys via email to be easily accessible from any device with Internet access in Yakima County. Informed written

consent was acquired prior to the survey. The first page of the survey was created to be the consent form and in agreeing to proceed, the participant indicated consent. The survey was made available in English and Spanish for all groups, especially for the Promotor group which consisted primarily of Spanish-speakers. All participants surveyed were presented with contact information for both primary investigators with instructions to schedule a key informant interview via email in either English or Spanish to gualify for a VISA gift card after completion of the interview. All YHD staff opted out of receiving a VISA gift card due to organizational rules but volunteered to participate in both the survey and interview process. The semi-structured interviews were held on Zoom so all participants could access the call conveniently from any device with Internet access. Verbal consent was acquired prior to recording interviews to later be reviewed to pull quotes from. Surveys were distributed and open for a two-week period in March 2023 while key informant interviews were held over a two-week period in April 2023. Due to receiving less than five responses from the groups of interest during the initial data collection period, the opportunity to participate in survey responses and key informant interviews was extended by two weeks. Data was analyzed and results documented after data collection was concluded. Quantifiable survey methods and qualitative key informant interviews were low cost, easy to distribute, and easily accessible for most participants.

## **Data Collection Tools**

Immersion into the literature highlighted CHWs as an effective intervention for community health outreach (Moon et al., 2021), but literature was limited on information relating to relationships between *Promotores de salud* and community health agencies. Surveys and interview questions were developed after identifying and outlining subgroups that worked to gather data related to interpersonal relationships between *Promotores*, YHD staff, and key community organizers who participated in the *COVID es Real* campaign. These subgroups included trust, satisfaction, job role completion, and COVID-19 response.

Data was collected using a two-step approach beginning with gathering survey feedback as shown in Appendix A. The survey data was then turned into quantifiable data assessing medians and modes to measure opinions of *Promotor* COVID response based on a mutual collaboration with Yakima Health District to perform community health outreach. Survey tools were designed in English and Spanish to fit the needs of this program evaluation. The bilingual online Likert scale surveys reflected subgroup categories as trust and satisfaction, job role completion, and COVID-19 response to organize and evaluate various stakeholder point of views. The second step was for these groups to be offered the opportunity to interview and respond to the interview questions shown in Appendix B with primary investigators via Zoom or in person in English or Spanish. Transcriptions of the semi-structured interview audio recordings were analyzed to pull quotes that related to the themes identified. Quotes were not associated with specific respondents, and any information in these quotes that would identify them was redacted before use. Only primary investigators had access to these recordings. Once this project is concluded, the recordings will be destroyed.

# Data Analysis

Descriptive statistics were the primary method used for quantitative data and content analysis for qualitative data in this evaluation of the *COVID-19 Es Real en el Valle de Yakima* program. Through an extensive review of the CHW literature, primary investigators identified characteristics of successful CHW programs such as satisfaction of the stakeholders with the program implementation, confidence and trust with one another, job role completion, and COVID-19 response. These key terms were used to create and organize the survey questions. Each term was represented as a single category survey question with numerical code options as answers. Available answers were listed numerically in a 5-point Likert scale format with the choices ranging from (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree. The lower numerical value coincided with more negative feelings and higher ratings with more positive feelings, except 3 as a neutral answer. Using the same themes

used in the survey, open ended questions were created for data collection via semi-structured interviews. Although the same data coding system was used across all groups, we were interested in gathering and separating data by job role subgroups: *Promotores de Salud*, YHD staff program participants, and key community organizers.

Survey data was transferred into an Excel workbook with an original copy being saved and unchanged so the original data set could be preserved. Due to the 5 to 10 overall expected respondents, we understood there was not a big enough sample size in each subgroup to draw any strong conclusions. Therefore, data was described primarily in aggregate and by subgroups. A workbook Excel copy was used to assess the datas' medians and modes to attempt to better understand the perceived differences and similarities in perception of COVID-19 response in Yakima County through the lens of *Promotoras*, YHD staff program participants, and key community organizers. To reduce bias or inaccurate conclusions, missing data sets were omitted to promote integrity of the dataset (Kang, 2013). Data cleaning included ensuring the numerical value system was followed as intended when data was transferred into the Excel workbook.

Conventional and directed content analysis, as outlined in an article by Hsieh and Shannon (2005), followed key informant interview completion. Conventional analysis was used to describe qualitative data from interview results where current research is limited. Specifically, relationships between *Promotores de salud* and community health agencies that support positive interpersonal relationships as well as areas of disconnect between groups. Recorded semi-structured interview questions conducted by primary investigators were transcribed to retrieve relevant quotes that further supported survey responses. Interview questions were primarily and supplemented with specific probing questions designed from survey results specifically relating to opinions on COVID education and preparation. Transcript data was organized in accordance with previously outlined subgroups and allowed for primary researchers to assess participant elaboration per subgroup. Directed content analysis was used

to describe qualitative data from interview results that supported existing knowledge that CHWs are an effective community health intervention. Data was reviewed with the understanding that data collection in rural Yakima County was limited and underrepresented segments of the population may not have been reached (Puma et al., 2017). This is especially true with purposive sampling.

# Results

Quantitative and qualitative data are presented in this section. With the assistance of *Promotores* as a COVID-19 intervention, Yakima Health District community programming was able to better provide COVID-19 education, resources for testing, vaccinations, and improve community resilience. Contact tracing was not a goal for YHD, but they were able to identify positive cases and follow up on infectious members of the community.

# Quantitative Survey Data

Of the three groups of interest who worked with the *COVID Es Real campaign*, six *Promotores*, three YHD employees, and zero key informants participated in the survey as shown in Table 1 with the response rate for each group.

Participant Group	Number of Participants	Total Number Emailed	Response Rate per Group (Percentage)
Promotores	6	15	40%
YHD Staff	3	3	100%
Key Informants	0	2	0%

# Table 1. Survey Participants per Interest Group

# Survey Data: *Promotoras*

*Promotoras* overall were satisfied working with YHD program directors and felt that they had their best interest in mind while working together on community health outreach as shown in Table 2. Additionally, all *Promotoras* strongly agreed that they completed their job role

according to the job description that was provided to them by YHD directors which included educating community members about COVID-19 as shown in Table 3. Yakima County *Promotoras* strongly felt that there was significant COVID-19 misinformation in the Latine community, and their role decreased the spread of false information while promoting education about COVID-19. However, two *Promotoras* felt that they were not well educated on COVID-19 by YHD staff and three *Promotoras* felt that YHD staff could have provided more resources or services to combat COVID-19 among Latinx community as shown in Table 4.

Survey Question	Median Response	Mode Response
I am satisfied working with Yakima Health District to collaborate on community health outreach programs.	Strongly Agree	Strongly Agree
I trust Yakima Health District to have my best interests in mind when I collaborate to do community health outreach.	Strongly Agree	Strongly Agree
I feel confident working with Yakima Health District to do community health outreach.	Strongly Agree	Strongly Agree

# Table 3. Promotoras survey data on job role completion

Survey Question	Median Response	Mode Response
I was successful in completing my role as a Promotora for Yakima Health District.	Strongly Agree	Strongly Agree
I was provided with the appropriate resources to educate the community members.	Strongly Agree	Strongly Agree
I believe I am a trusted individual among the Latinx community.	Strongly Agree	Strongly Agree

Table 4.	<b>Promotoras</b>	survey	data on	COVID-19	response
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Survey Question	Median Response	Mode Response
I believe my role as a Promotora decreased the spread of misinformation within the community members.	Strongly Agree	Strongly Agree
I believe there was a lot of misinformation among the community members about COVID-19 when I began working with Yakima Health District.	Strongly Agree	Strongly Agree
I believe the spread of misinformation among the Latinx communities was mostly due to social media.	Agree	Agree
I was not well educated by Yakima Health District about the details of COVID-19.	Strongly Agree	Strongly Agree
I believe Yakima Health District could have provided additional services or resources to combat the spread of COVID-19 in the community.	Neutral	Disagree

# Survey Data: YHD Staff

YHD staff that participated in the survey were satisfied working with *Promotoras de Salud* and felt confident working with them to complete community health outreach as shown in Table 5. YHD staff felt that they completed their job role of being available to the *Promotoras* via regular check-ins with them as shown in Table 6. Additionally, all YHD staff strongly agree that without *Promotoras de Salud*, they could not have completed as many COVID-19 tests or vaccinations within the local Latine community as well as promote community resiliency as shown in Table 7.

# Table 5. YHD survey data on trust and satisfaction with Promotores

Survey Question	Median Response	Mode Response
I am satisfied working with Promotores to collaborate on community health outreach programs.	Agree	Agree
I trust Promotores to have my best interests in mind when I collaborate to do community health outreach.	Agree	Agree
I feel confident working with Promotores to do community health outreach.	Agree	Agree

# Table 6. YHD survey data on job role completion

Survey Question	Median Response	Mode Response
I completed my role of routine check-ins with Promotores to assess for any needs related to completing their role.	Neutral	Neutral
I was readily available to Promotores to provide any kind of support they required.	Strongly Agree	Strongly Agree

# Table 7. YHD survey data on COVID-19 response

Survey Question	Median Response	Mode Response
Without Promotores, we would not have completed as many COVID-19 tests within the Latinx community.	Strongly Agree	Strongly Agree
Without Promotores, we would not have completed as many COVID-19 vaccinations within the Latinx community.	Strongly Agree	Strongly Agree
Without Promotores, we would not have been able to	Strongly Agree	Strongly Agree

complete contact tracing in the Latinx population.		
Promotores contributed to increasing community resiliency during the COVID- 19 pandemic.	Strongly Agree	Strongly Agree

# **Survey Data: Key Informants**

Key organizers of interest, including the community contact for the *Promotoras* and the doctor that provided medical training to the *Promotoras* did not complete the survey or the interview process.

# **Qualitative Data: Semi-Structured Interviews**

Once the surveys were collected, out of the three groups of interest, three YHD employee interviews were conducted via Zoom, all in English. The *Promotoras* who completed the survey chose not to participate in the interview process. After transcribing the recordings of the interviews, the first set of themes that were identified were that the *COVID-19 Es Real en el Valle de Yakima* program were: (1) that the program was viewed as a successful intervention, (2) the work completed by *Promotoras* increased community resiliency, and (3) YHD interviewees felt they provided the *Promotoras* with the appropriate amount of education to put the program into action despite *Promotoras* feeling they could have received better education and more resources. The second set of themes emerging from interviews included: (4) areas for improvement for future programming, (5) limitations due to the state of emergency response.

# Theme 1: COVID-19 Es Real en el Valle de Yakima program was a successful intervention

This theme related to the overall evaluation of the *COVID-19 Es Real* program's success and was pertinent in assessing if *Promotoras* as a community health intervention provided Yakima Health District with the results they were hoping for against combating COVID-19 in Yakima County. The initial program goals were to lower the rates of COVID-19 related infection and mortality as well as to provide the local Latine population with appropriate health resources and education. Selected quotes illustrating perceptions from YHD staff members showing program success as a public health intervention against COVID-19 include:

- "...we served as a [successful] model with limited capacity... to help lower [COVID] rates and help as many people as we did. Yakima County and this specific *Promotora* group were doing something worth replicating."
- "...we were able to prevent further disease, and serious illness for people, and provide people with the information needed, so that they could protect themselves and make decisions... getting themselves resources such as the vaccine, or such as testing before they go somewhere..."
- "...we were able to track some of the at-home tests that were utilized, and we know they
  were directly related to the *Promotoras* so we do know that they were a key part in
  improving testing."
- "...having direct contact with people that could provide more like one-on-one education or one-on-one services really helped keep them informed and educated on what was going on, and so that really helped them know what steps they needed to take, to stay safe."
- "...they reached about 60,000 individuals since the start of the program, and until the end, so that's a that's a big reach that we wouldn't have been able to do on our own...
   They also provided in person help with at home test kits, or setting up people for vaccine appointments, etc..."

# Theme 2: The work completed by the Promotores increased community resiliency

A second qualitative data theme pertained to the community's strength and ability to overcome the negative effects of COVID-19 with the aid of the *Promotoras*. It was reported that through the *COVID-19 Es Real* program, the local Latine community was able to overcome the difficulties that COVID-19 brought with the *Promotoras* being readily available for the community

members to provide assistance in various ways. Selected quotes illustrating interviewees impressions grouped in this thematic area include:

- "... [Promotoras] were able to be there whether it was through text message, or FaceTime, and dropping off supplies at people's homes like test kits or if later they tested positive, food supplies..."
- "... [they were] able to still continue outreach in a safe manner and have the community feel like not forgotten."
- "...the technical training that was provided to *Promotoras* are skill sets that they're going to continue to utilize moving forward...in any other emergency now these individuals are connected to their neighbors and family members with information, and they know where to get information in the future..."
- "...the beauty of the *Promotora de Salud* program is that you inject all this information into a trusted community messenger and now you can't take that education away from them [now] they know how to navigate the system...once you give it out, it's only going to provide dividends..."
- "... they were the hardest hit by the virus just due to the nature of that work...having direct contact with people that could provide more one-on-one education [and] services really helped keep them informed and educated..."
- "... even after the program ended, I think that knowledge has stayed with a lot of community members, and they are a little more familiar with where and what resources are available to them. I think it really has empowered the community..."

# Theme 3: YHD staff felt that they provided the *Promotoras* with the appropriate amount of education

This theme addressed the conflicting survey results between *Promotoras* and YHD program directors regarding their perception of the amount of education and resources provided to *Promotoras* to aid in their work with the Latine community. Survey results from *Promotoras* 

indicated that they could have received additional education and support from YHD staff while YHD staff believed that they did as much as they could with the urgency of the situation. The following are selected quotes from YHD staff interviews supporting this theme:

- "It was hard to give the best type of training for the frame of work without it dragging and dragging ...cliff notes to being a community health worker [were provided] but knowing... most of the *Promotoras* had done some sort of community work previously. So it was, it wasn't like teaching someone who's never worked with a *Promotor* or had been a *Promotor* before."
- "...we provided ample opportunity for feedback and for people to ask questions so that they were giving out the appropriate information."
- "Mexican trained doctor, doctora Consuelo Rodriguez... the lead trainer for the community health workers... [taught] them the basics about COVID-19; how it spread, the biology behind the virus, also teaching them how to... talk to community members like some tips for interviewing them, or encouraging them to take precautions... when the vaccine was released, educating them about the vaccine, resources that community members could utilize to find vaccination sites for any other type of COVID-19 resources, such as face masks, and food kits if they were in isolation and quarantine."

# Theme 4: Areas for improvement for future programming

This theme emerged from asking YHD staff members what they would change or improve if they had to implement a similar *Promotores* program in the future or if they were asked to provide advice to another health district that wants to implement a CHW program. In response to these interview questions, YHD staff offered these areas for future improvement:

"...the hardest part is being able to provide them [the *Promotoras*] what they're being asked for [from the community] and then checking in with them to see how they're doing."

- "I think we understand now that there's going to be some gray area or some unknown, and feeling more comfortable with being able to tell individuals we don't know, or we don't have this information at this time..."
- "... what we've learned could help us...we learned from mistakes or what we could have done better or what agencies to collaborate to expedite what services we're needing."
- "...not being able to accurately track and monitor how this was set up, our process, how many people we reached, what kind of questions they had."
- "I hope that in the future there's ways to monitor and evaluate early on to measure progress to continue to improve."
- "... we have this quality data in terms of our lived experience to base it off of but when you think through about systems and infrastructure and how to recreate it again, we would basically be starting from scratch."
- "We weren't really able to gather a lot of information on how those interactions with families were. I think that was the hardest part was getting that insight and really seeing what the impact was overall."
- "...it can be improved by first really developing the program well ahead before it starts [and] getting someone to help us with designing an evaluation framework ahead of time for following through with the data collection and evaluation processing throughout the program would really be helpful to be able to share back reports and data on how this was impactful..."
- "... that along with just having more time dedicated to meeting more frequently with the *Promotoras* and having more of that consistent communication."

# Theme 5: Limitations due to state of emergency response

This last theme that emerged from YHD staff interviews with primary investigators was the limitations that YHD programming experienced in creating and implementing the COVID-19

*Es Real* program due to the "state of emergency" declaration for COVID-19 and the challenges it created. Selected quotes describing these challenges follow:

- "...with local government there's obviously some bureaucracy...[which] hinders how much support we could provide."
- "...government policies and procedures tend to be a bit restrictive for community-based work."
- "...systems don't have the infrastructure to support this type of contract work."
- "...if we take [this] program and apply it today it wouldn't be as successful because it took place during a time where there was what's called emergency rulings... there [weren't] as many policies and procedures that have to be followed as stringently."
- "...we did go through some staff changes throughout the program, and so maybe I think at times they weren't sure who to follow up with at YHD to get more information, and so I think that may have been a barrier for them to get more information or support."

# Discussion

Overall, findings showing positive impact by the *Promotores de Salud* can lead to strengthening partnerships between community and government agencies (Center et al., 2020; Clark et al., 2020; Salgado de Snyder et al., 2021). Implementing a community health program urgently during a public health state of emergency proved to be difficult for YHD programming, however the findings from this program evaluation supports evidence for CHWs, specifically *Promotores de Salud*, as a successful community health intervention. The program evaluation conducted in this project supports the literature that *Promotores* are valuable public health partners to government agencies and communities and can successfully connect with high-risk community members to combat the spread of misinformation, disease, as well as extend the utilization of local resources (Brown et al., 2018; Goebel et al., 2021; Fischer et al., 2018; Moon et al., 2021). The YHD staff and *Promotoras* surveyed unanimously felt *Promotoras* proved to be a successful intervention in Yakima County for providing culturally competent education to

community members regarding COVID-19, as well as providing access to resources like athome testing kits, and knowledge of local testing and vaccination sites. Per YHD staff interviews, *Promotoras* went as far as providing food kits and supplies for families that tested positive to reduce the necessity of breaking quarantine. They provided direct contact, follow-up, and case management to ensure people were using the resources available. During interviews, YHD staff noted that part of the impact made on behalf of the *Promotoras* work was increased community resiliency not only against COVID-19 but long term with the use of community health resources.

YHD staff members identified restrictive government processes and procedures as a major limitation in employing Promotoras de Salud as a resource for providing a successful emergency response in Yakima County. Factors like CHWs with informal education, a lack of a valid social security, paying CHWs or *Promotores* for overtime hours worked, and as needed purchases were identified as areas of government policy flexibility that would not be possible today and outline barriers in government resources partnering with CHWs, specifically *Promotores de Salud.* Government policy and procedures require employers to provide benefits, health insurance, and track hours worked for funding purposes, but CHWs specifically Promotoras work full time jobs in the community and serve as Promotoras as an additional job. Per YHD staff, current government systems in Yakima County and statewide "don't have the infrastructure to support this type of contract work." Some of these government restrictions were loosened during the public health emergency, but now as the state of emergency is over, YHD programming would have to rethink how Promotoras de Salud would operate logistically as an intervention. Despite fewer restrictions under a state of emergency, contracting with key organizers as a third party like Latinx Outreach who already employs Promotores, under their own regulations, was key to maximizing community health workers as a community resource, allowing this model to work to its best capacity.

Five out of six Promotora respondents reported they were satisfied working with Yakima Health District and endorsed trusting YHD program directors to have their best interests in mind when collaborating to do community health outreach. Despite this, findings from the Promotora surveys also showed disconnects between YHD staff and Promotora expectations related to COVID competency training and lack of resources provided to combat COVID-19. Two of six Promotoras who took the survey strongly agreed that they felt they were not well educated by Yakima Health District about the details of COVID-19. Similarly, two Promotoras agreed, and one strongly agreed that Yakima Health District could have provided additional services or resources to combat the spread of COVID-19 in the community. Unfortunately, Promotoras did not participate in the interview portion of this program evaluation, so they were not able to elaborate on survey results. These findings contrasted with surveys and interviews of YHD staff. Survey results showed YHD staff felt they were readily available to provide support as needed although one YHD staff respondent felt "neutral" about not feeling confident about working with Promotoras to do community health outreach. A review of the literature notes that there are "no standardized training programs for Promotores" (Early et al., 2016, p.75; Larkey et al. 2012; Moralez et al. 2012) and those working in rural settings tend to undergo "more on the job training" from program leads or other *Promotores* instead of formal educational training (Early et al., 2016, p.76). The key to successful *Promotor de Salud* programming for community health outreach requires "training, coaching, and ongoing mentoring from health professionals and/ or experienced Promotores" (Early et al., 2016, p.76). YHD program directors and community organizers were able to provide training and coaching but due to the ongoing state of emergency related to COVID, had difficulty providing ongoing mentoring to the Promotoras doing outreach in Yakima County. YHD staff acknowledged this as a gap in the program during the interview process.

# Limitations

We acknowledged that part of the limitations of this program evaluation include our sample size and that those who chose to participate in this evaluation were those who trusted and collaborated with Yakima Health District agencies. Data collected is limited to program participants and not all *Promotores* from the greater Yakima County. Additionally, the data collected is limited to the views of YHD staff and Promotoras de Salud who participated. Key community organizers did not complete the survey or the interview process and were not able to contribute their insight or perspective on the COVID es Real program despite playing a key role in subcontracting the *Promotoras* and aiding in expanding the capacity in which they could operate. Six *Promotoras* completed the survey but all declined participation in the interview despite multiple communication and outreach efforts. A series of emails were sent to YHD staff member Lilian Bravo to be forwarded to the *Promotoras* and their contacts for their participation, including three of the *Promotoras* directly followed up by Lilian Bravo, but there was no further response. Primary investigators of this project did not have direct relationships or contact with Promotores or key community organizers. A future program evaluation working in community health may consider in person outreach to build personal connections and trust in order to connect with community health workers like Promotores de Salud, community leaders, and community organizers to increase participation in surveys and interviews.

To assess the effectiveness of the program from the perspective of the community members who engaged with it, another study would be needed. A larger statewide study may be required to assess the impact of *Promotores de Salud* across county lines in Washington. Many migrant farmworkers in Yakima County are Spanish speaking which is why a program with predominantly Spanish resources was created by Yakima Health District (Ayer, 2022; U.S. Census Bureau, 2021a). While this is useful to a substantial majority, it does not account for local Latine Indigenous populations with limited Spanish language skills who also experience COVID-19 disparity at high rates with low healthcare access (Pinzón & Vásquez, 2021; Yakima

Health District, 2022). In addition, there is a well-documented migratory pattern of Indigenous Oaxacan farmworkers traveling from Southern Mexico who primarily settle along the U.S. West Coast and Washington state seeking agricultural work (Holmes, 2006; Pinzón & Vásquez, 2021). This community experiences "significant lack of culturally sensitive programs and limited native language materials" contributing greatly to COVID health disparities related to lack of access to health resources (Pinzón & Vásquez, 2021, p. #686). *Promotor*-led health programs that primarily serve Spanish speaking populations (Early et al, 2016) face language barriers when attempting to support non-Spanish speaking Indigenous Latine communities due to the inability to provide resources in the appropriate languages (Pinzón & Vásquez, 2021). Hiring *Promotores* who can speak relevant native languages spoken by local Yakima community members is needed to assess how community health outreach affects local Indigenous farmworker populations. While remaining conscious of the barriers to data collection in rural counties, data should be assessed and reviewed with the understanding that local data may be limiting and underrepresented segments of the population may not have been reached (Puma et al., 2017).

## **Sustainability Plan**

The *Promotor*-led program under evaluation was implemented at the height of the COVID-19 pandemic in the summer of 2020 with a goal of alleviating COVID-related disparities among Yakima County Latine communities experiencing disproportionate morbidity and mortality rates, increased healthcare mistrust, COVID-19 misinformation, and a lack of Spanish-language COVID-19 resources (Ayer, 2020). The program evaluation conducted in this project supports the idea that *Promotores* are valuable public health partners to government agencies and communities. YHD program directors can use this data to support funding and expand existing programs. One goal of this project is for this data to be used in support of continued expansion and funding of *Promotor-led* resources and *Promotores* themselves. Yakima Health District program directors will utilize this data to compare it with data from other programs

showing satisfaction with *Promotor-led* services, confidence in collaborating on health outreach, and consistent job role completion and COVID outreach are indicators of a positive impact by *Promotores* that can lead to strengthening partnerships between community and government agencies (Center et al., 2020; Clark et al., 2020; Salgado de Snyder et al., 2021). Data will be compared to other Promotor-led programs across U.S. states to assess continuity or discrepancies in trends. Due to the collaboration with YHD staff and key community organizers, Promotoras de Salud were able to successfully create spaces to discuss vaccines safety, hand hygiene, and other health practices, as well as educate about where to seek language appropriate health resources, for immigrant Latine populations in Yakima County (Bravo, 2020). For these community collaborations to continue to perform successful health outreach in the future, data from this program evaluation can be used to identify gaps in interpersonal relationships and experiences. This data can be used to better understand how improvements can be made to better connect agencies with each other and vulnerable communities facing barriers to accessing healthcare resources. Fortunately, Yakima Health District program directors have been engaged stakeholders and partners that fully support a program evaluation centering on *Promotora de Salud* voices while pledging time and resources.

# **Implications for Advanced Practice**

Step six of the CDC framework for program evaluations is to ensure use and share lessons learned (CDC, 1999). The findings of this program evaluation assisted in identifying areas of growth for future community health programming and helped to create a body of knowledge that demonstrated successful implementation of a CHW based intervention by Yakima Health District. The findings can be used in future YHD programs or other health district programs centered around CHWs to create even more robust programs that address gaps that were discovered through this program evaluation. Our findings also add to the body of knowledge that supports the utilization of community health workers like *Promotores* as trusted members of the community to provide evidence-based education related to various diseases

and health resources among marginalized populations to improve health outcomes. Additionally, documenting the application of the Promotora model across other health districts provides a blueprint that allows for quick and effective implementation of community health worker programs for current and future epidemics or pandemics that are disproportionately affecting high-risk populations. Current and future advanced practice providers should educate and direct their patients to seek credible online resources when searching for information related to public health issues or fact check information they retrieve from the internet with healthcare professionals. Additionally, current and future advanced practice providers should educate themselves on the impact of CHWs like Promotores as a successful community health intervention especially in rural areas where resources are limited or among non-English speaking populations who experience unique barriers to accessing care. Learning more about this and staying up to date on research may allow advanced practice providers to support and seek assistance from CHWs like *Promotores de Salud* to assist in bettering community health outcomes. Through the utilization and support of CHWs, current and future advanced practice providers can empower local community members by providing them with an accessible way to engage with education and resources to aid in combating a public health crisis like COVID-19, which in turn decreases the number of visits that the provider conducts that are related to the spread of illness or misinformation or due to a lack of resources, allowing the provider to maximize their time and resources.

#### Conclusion

Findings from this program evaluation identified a positive impact in Yakima County Latine communities via *Promotores de Salud* as a community health intervention. *Promotores de Salud* are valuable public health partners to government agencies and Latine communities and can successfully connect with high-risk community members to combat the spread of misinformation, disease, as well as extend the utilization of local resources. Without *Promotoras*, Yakima Health District as an organization could not have provided education to

community members regarding COVID-19 testing and vaccination sites at the rates that they did. If gaps in collaboration between *Promotores*, government agencies, and community health organizations are addressed including ongoing health training and mentorship throughout the outreach period, this could lead to strengthened partnerships and improve future community health programing.

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## Appendix A

## Likert Scale Survey

Appendix A1. Survey for YHD Staff

Trust and Satisfaction with Promotores					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I am satisfied working with <i>Promotores</i> to collaborate on community health outreach programs.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I trust <i>Promotores</i> to have my best interests in mind when I collaborate to do community health outreach.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I do <u>not</u> feel confident working with <i>Promotores</i> to do community health outreach.					
Job Role Completion as YHD staff member					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree

I completed my role of routine check-ins with <i>Promotores</i> to assess any needs related to completing their role.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I was readily available to <i>Promotores</i> to provide any kind of support they required.					
COVID-19 Response					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Without <i>Promotores</i> , we would <u>not</u> have completed as many COVID-19 tests within the Latinx community.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Without <i>Promotores</i> , we would <u>not</u> have completed as many COVID-19 vaccinations within the Latinx community.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Without <i>Promotores</i> , we would <u>not</u> have been able to complete contact tracing in the Latinx population.					

	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
<i>Promotores</i> contributed to increasing community resiliency during the COVID-19 pandemic.					

Appendix A2. Survey for Key Organizers

Trust and Satisfaction with Promotores					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I am satisfied working with <i>Promotores</i> to collaborate on community health outreach programs.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I trust <i>Promotores</i> to have the community's best interests in mind when they do community health outreach.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I do <u>not</u> feel confident working with <i>Promotores</i> to do community health outreach.					

Role Completion as a key organizer					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I feel my role contributed to the success of the Yakima Health District and <i>Promotor</i> COVID response program.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I feel I supported <i>Promotores</i> during YHD's COVID response program through the role I played.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I was readily available to <i>Promotores</i> to provide any kind of support they required.					
COVID-19 Response					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Without <i>Promotores</i> , we would <u>not</u> have completed as many COVID-19 tests within the Latinx community.					

	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Without <i>Promotores</i> , we would <u>not</u> have completed as many COVID-19 vaccinations within the Latinx community.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Without <i>Promotores</i> , we would <u>not</u> have been able to complete contact tracing in the Latinx population.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
Promotores contributed to increasing community resiliency during the COVID-19 pandemic.					

Appendix A3. Survey for *Promotores de Salud* 

Trust & Satisfaction in Yakima Health District					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I am satisfied working with Yakima Health District to collaborate on community health outreach programs.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree

I trust Yakima Health District to have my best interests in mind when I collaborate to do community health outreach.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I do <u>not</u> feel confident working with Yakima Health District to do community health outreach.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I felt supported completing my work as a <i>Promotora</i> for Yakima Health District.					
Completion of Job Role as a Promotora					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I was successful in fulfilling my role as a <i>Promotora</i> for Yakima Health District.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I was provided with the appropriate resources to educate the community members.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I believe I am a trusted individual among the Latinx community.					

COVID-19 Response					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I believe my role as a <i>Promotora</i> decreased the spread of misinformation within the community members.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I believe there was a lot of misinformation among community members about COVID-19 when I began working with Yakima Health District.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I believe the spread of misinformation among the Latinx communities was mostly due to social media.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I was <u>NOT</u> well educated by Yakima Health District about the details of COVID- 19.					
	1- Strongly Disagree	2- Disagree	3- Neutral	4- Agree	5- Strongly Agree
I believe YHD could have provided additional services or resources to combat the rise of COVID-19 in the community.					

## Appendix B

## Semi-Structured Interview Questions

Appendix B1. Semi-structured interview questions for YHD staff members.

Tell me about your role and actions in dealing with the Promotores.

Do you feel *Promotores* contributed to increasing community resiliency during the COVID-19 pandemic? In what ways?

What was the hardest part about working with the Promotor program? Why?

What was the most important gain made from the program? Why?

How can these experiences be improved?

Appendix B2. Semi-structured interview questions for key organizers.

Tell me about your role and actions in dealing with the *Promotores*.

Do you feel *Promotores* contributed to increasing community resiliency during the COVID-19 pandemic? In what ways?

What was the hardest part about working with the *Promotor* program? Why?

What was the most important gain made from the program? Why?

How can these experiences be improved?

Appendix B3. Semi-structured interview questions for *Promotoras de Salud*.

How can these experiences be improved?

What role did you play in Yakima Health district's COVID response program?

Do you feel you contributed to improving the health of Yakima County residents?

Do you feel like the program expectations and goals were clearly explained?

Tell me about your role and actions for participating in Yakima's COVID response.

What was the hardest part about working with the *Promotor* program? Why?

What was the most important gain made from the program? Why?

Do you feel like you contributed to increasing community resiliency during the COVID-19 pandemic? In what ways?