

THE FINAL REPORT OF THE COMMUNITY HEALTH WORKER COVID-19 IMPACT SURVEY: TEXAS RESULTS & METHODOLOGY

A collaborative workforce study

Maternal & Child Health Training Program at the University of
Texas at Houston Health School of Public Health &
The Community Health Worker Core Consensus Project at
Texas Tech Health Science Center El Paso Paul L. Foster
School of Medicine & Texas Tech Health Science Center
School of Biomedical Sciences

Community Health Worker COVID-19 Impact Study

A note from the survey team:

This is the second version of the Community Health Worker COVID-19 Impact Survey Texas Results Report. Due to interest in replication of the survey instrument after circulation of the first version, additional materials have been added to the report. Specifically, two documents are included in the report appendices to aid those interested in replicating or adapting the survey content to their research needs: 1) survey content table with objectives and constructs and 2) high-level information on background, distribution, survey mechanics recommendations.

As the COVID-19 pandemic continues to impact our daily lives, the importance of understanding the experience of frontline workers, including CHWs, is paramount. We recognize the importance of collaboration, as it was an essential element to each phase of the original survey project. The newly developed documents that appear in the appendices are meant to serve as guidance in order to ease the process of survey replication or adaptation.

For the complete survey instrument, please reach out to:

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Thank you for your interest,

The CHW COVID-19 Impact Survey team

January 2021

Executive Summary

In 2019, a novel virus began to rapidly spread in China, then to other countries, including the U.S. The disease, known as COVID-19, is caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). COVID-19 created a global pandemic, and in the U.S., COVID-19 strained many hospital systems. Reports released indicated that doctors and nurses were overwhelmed by the massive influx of COVID-19 patients. The impact of the pandemic on community health workers (CHWs) was unknown.

In the summer of 2020, the **Maternal and Child Health (MCH) Training Program** at UTHealth School of Public Health partnered with the **Community Health Worker Core Consensus Project (C3 Project)** at Texas Tech University to better understand the extent to which the COVID-19 pandemic has affected the community health worker (CHW) workforce. To address this, this study examined the perceptions and experiences of CHWs during the COVID-19 pandemic in order to: 1) understand changes in the CHW workforce, 2) identify training opportunities, and 3) describe priority needs of CHWs and their communities. An inter-professional team, including CHWs, CHW instructors, and researchers,

developed an online survey to understand the perspectives and experiences of CHWs in Texas during the COVID-19 pandemic. The study team distributed the 67-item survey (qualitative and quantitative), available in Spanish and English, via CHW networks and associations and the Texas Department of State Health Services CHW/Promotora Training and Certification Program. 885 CHWs completed the survey.

This report describes: 1) respondent demographics and professional setting; 2) employment changes; 3) changes in roles and skills experienced by CHWs during COVID-19 pandemic; 4) COVID-19-related training needs of CHWs; 5) quality of life impact of CHW employment during COVID-19 pandemic; and 6) CHW perceptions of community assets and challenges during the COVID-19 pandemic. CHWs have been and will continue to be affected personally and professionally by their communities' COVID-19 pandemic response.

This survey created the opportunity for CHWs to describe their experiences working with their communities before and during the COVID-19 pandemic response. The researchers hope that sharing the survey findings will be utilized to inform workforce training in addition to informing the response to current and future public health emergencies.

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This study was reviewed and approved by the Committee for the Protection of Human Subjects (CPHS) of the University of Texas Health Science Center at Houston, Protocol No: HSC-SPH-20-0592.

SUGGESTED REFERENCE

St. John, J., Byrd-Williams C., Rosenthal E. L., Menking, P., Redondo, F., Ewing, M., Herrington, E., Sieswerda, S., Kwentua, V., Dixon, M., & Simpson, J. (2021). The Final Report of the Community Health Worker COVID-19 Impact Survey: Texas Results & Methodology. The University of Texas at Houston Health School of Public Health; Texas Tech Health Science Center El Paso Paul L. Foster School of Medicine; & Texas Tech Health Science Center School of Biomedical Sciences.

This report is available online at

<https://www.c3project.org/resources> and

<https://sph.uth.edu/research/centers/dell/resources/the%20final%20report%20of%20the%20community%20health%20worker.pdf>

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Introduction

Community Health Workers (CHWs) are quintessential members of the healthcare and public health workforce. The Community Health Worker Section (CHW) of the American Public Health Association (APHA) defines a CHW as:

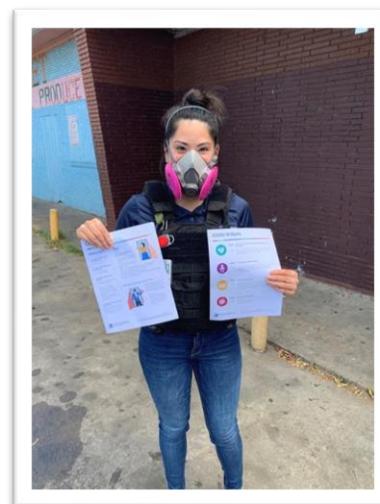
A frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A community health worker also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy (American Public Health Association, 2020).

A more informal definition is:

Local members within a community who love their community and want to see people's health and lives improve—so they give unselfishly of their time and energy (often with no or little pay) not because it's a "job" but because it's a work of love for them. CHWs do everything from holding hands when someone is sick to calling thirty agencies to assist a resident with a particular need (St. John, 2003).

CHWs have numerous titles, including: community health advisor; community health educator; community health representative (CHR); health coach; lay health worker; outreach worker; and promotor(a) de salud (peer health promoter). With their unique knowledge and experience of individual, family and community needs and cultural awareness of behaviors, and attitudes, CHWs often serve as a bridge between their communities and the health and social service industries. CHWs explain the complexities of the health, social service, and public health systems to foster their community's understanding and increase their community's capacity to access services more readily. Similarly, CHWs educate providers, organizations, and systems about individual and community cultures and needs to improve the service delivery system through culturally appropriate services and care. Specifically, CHWs have ten core roles (Rosenthal, Menking, & St. John, 2018):

1. Cultural mediation among individuals, communities, and health and social service systems
2. Providing culturally appropriate health education and information
3. Care coordination, case management, and system navigation
4. Providing coaching and social support
5. Advocating for individuals and communities
6. Building individual and community capacity
7. Providing direct service
8. Implementing individual and community assessments
9. Conducting outreach
10. Participating in evaluation and research



Clearly, CHWs have a huge impact and provide invaluable services to their communities and the healthcare, social service, and public health fields. As such, when the COVID-19 global pandemic hit the U.S. in early 2020, CHWs continued to do what they do best, serve their communities and fill gaps in information and services. With this added threat to their community, questions arose as to the impact of the pandemic on the CHW workforce. To assess this potential impact, an inter-professional team of CHWs, CHW instructors, and researchers developed an online survey distributed to Texas CHWs in July and August of 2020. Specifically, the study examined the perceptions and experiences of CHWs during the COVID-19 pandemic to: 1) understand changes in the CHW workforce, 2) identify training opportunities, and 3) describe priority needs of CHWs and their communities. Texas CHWs answered a 37-item survey (qualitative and quantitative), available in Spanish and English, distributed via CHW networks and associations and the Texas Department of State Health Services CHW/Promotora Training and Certification Program.

This report outlines the results from 885 self-identified CHWs who completed the survey. This report describes: 1) respondent demographics and professional setting; 2) employment changes; 3) changes in roles and skills experienced by CHWs during COVID-19 pandemic; 4) COVID-19-related training needs of CHWs; 5) quality of life impact of CHW employment during COVID-19 pandemic; and 6) CHW perceptions of community assets and challenges during the COVID-19 pandemic. The intent of reporting the experiences and needs of CHW respondents is to help inform current responses to COVID-19 and future public health emergency responses.

Demographics

Some of the key demographics of the respondents included the following:

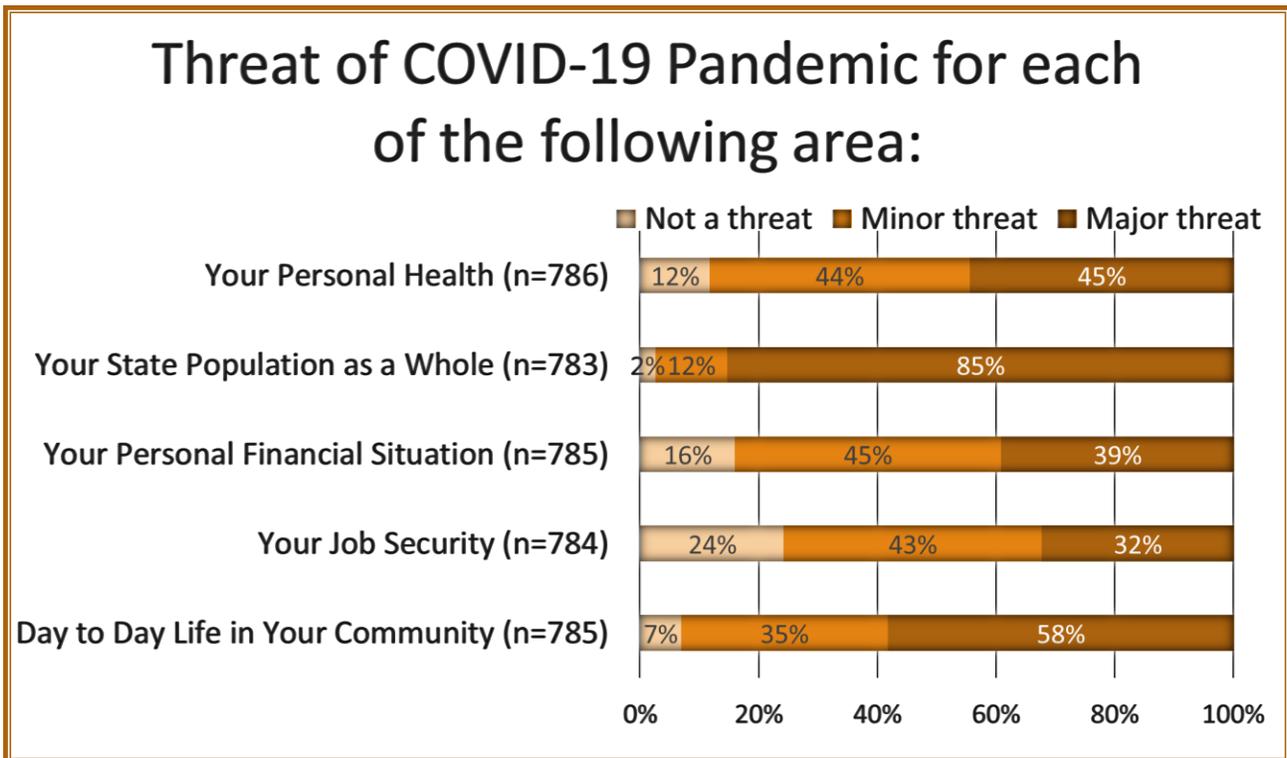
- 46.94 years median age (range 20 years to 75 years)
- 90% female
- Respondent reported race: 63.8% White, 18.4% Black, 0.7% American Indian or Alaskan Native; 3.9% Asian; 9.2% other; 4.0% more than one race
- 64% of Hispanic, Latino, or Spanish origin
- 56.3% lived in a large city; 14.7% suburb; 19.2% small town; 9.8% rural area
- 93% state certified as CHW
- 14% completed the survey in Spanish
- 31% had children under the age of 12 living in their household
- 37.6% of respondents with children under age 12 reported having somewhat or very difficult experiences handling child care responsibilities during the pandemic; 10.7% reported no change
- Mean number years of experience as a CHW was 7.19 years (range of 1 year to 48 years)



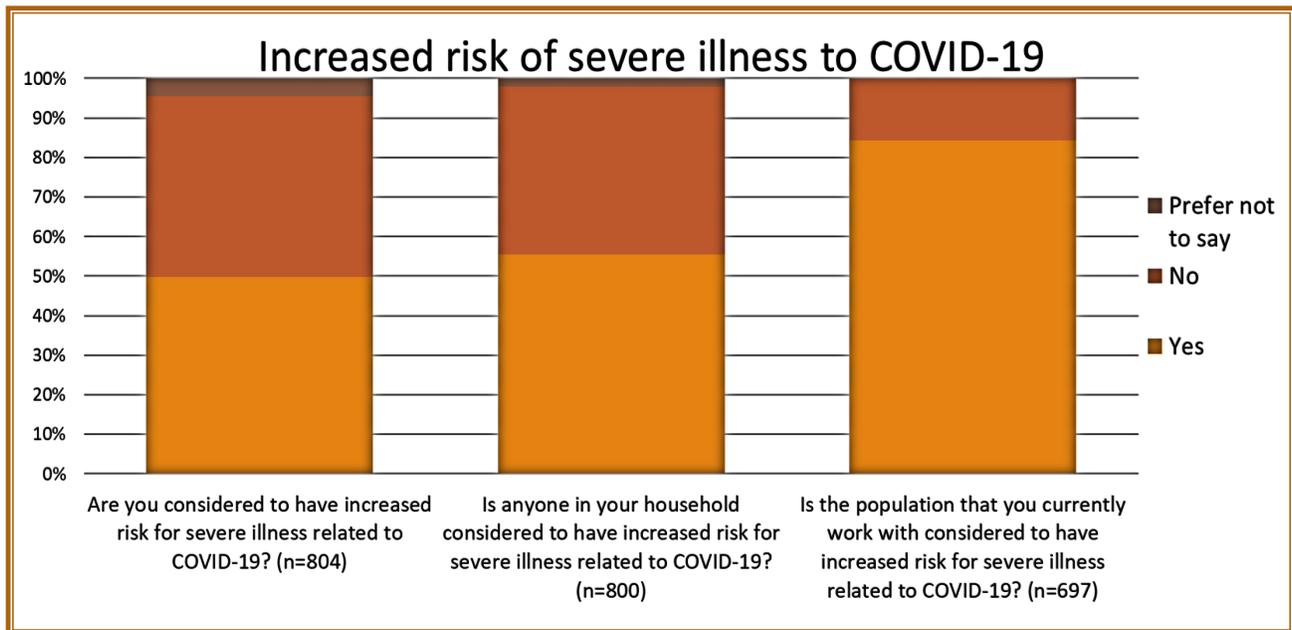
Personal Impact of Covid-19 Pandemic

Almost 50% of respondents reported COVID-19 as a major threat to their personal health (note: the CDC defines those at high risk for COVID as older adults and those with underlying health conditions). More than 40% said the pandemic was a minor threat to their financial and job security. Graph 1 depicts the personal impact of the pandemic on CHW respondents. Almost 60% reported the pandemic as a major threat to day-to-day life in their community. Additionally, over 80% of CHWs reported working with a population considered at high-risk for COVID (Graph 2). While performing duties of the job, about 25% of CHWs reported close contact with a COVID positive individual, 58% reported they had not been in contact with COVID positive individuals, and 16% were unsure (Graph 3).

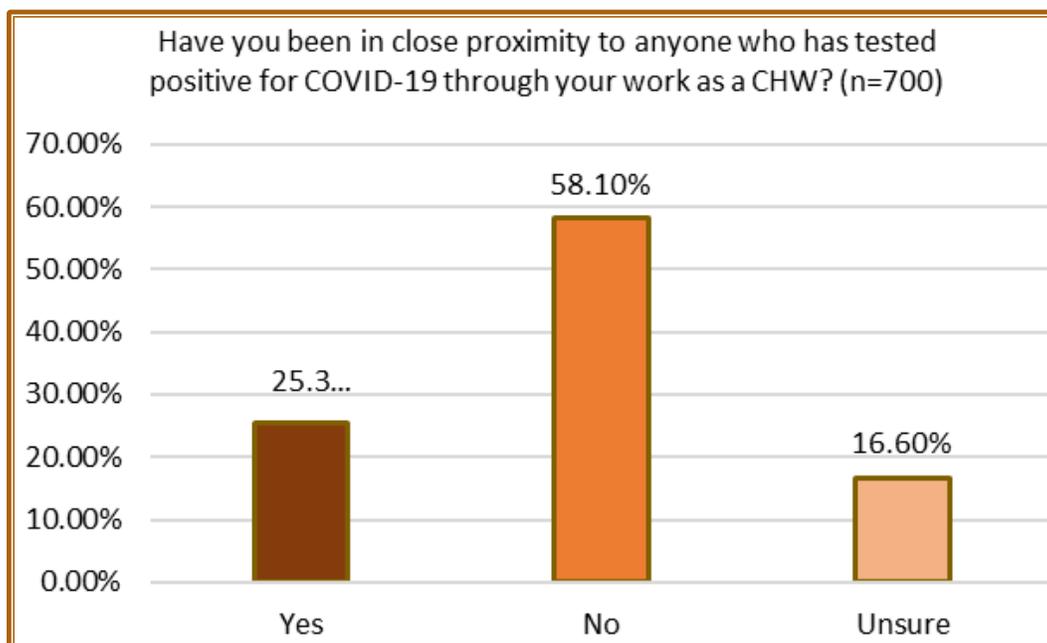
Graph 1: Personal impact of Covid-19 on CHWs



Graph 2: Increased risk of severe illness to COVID-19



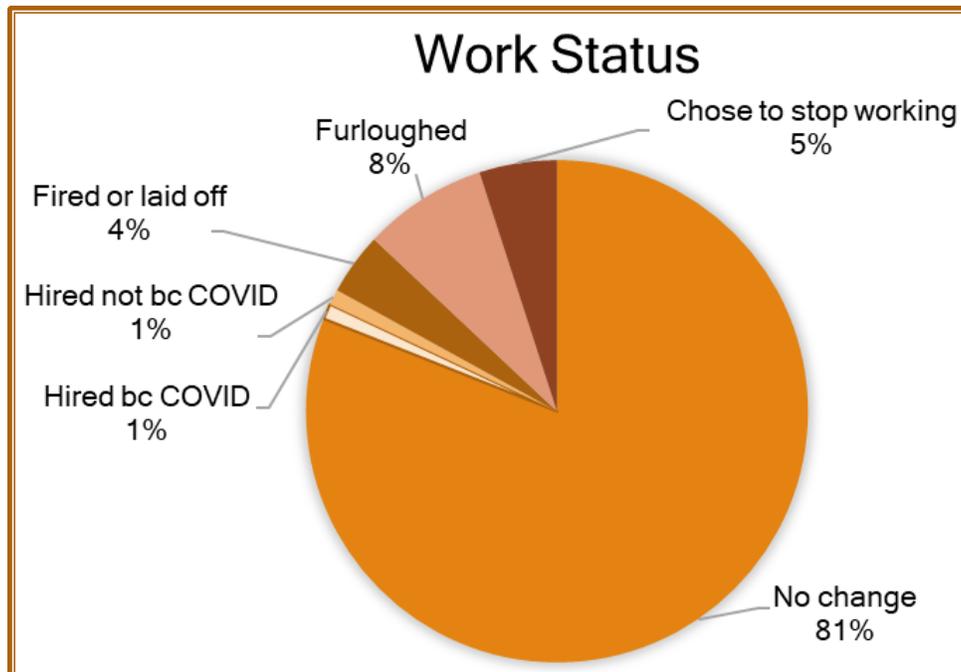
Graph 3: Proximity to a person who tested positive for COVID-19



Pandemic's Impact on Employment, Job, and Communities

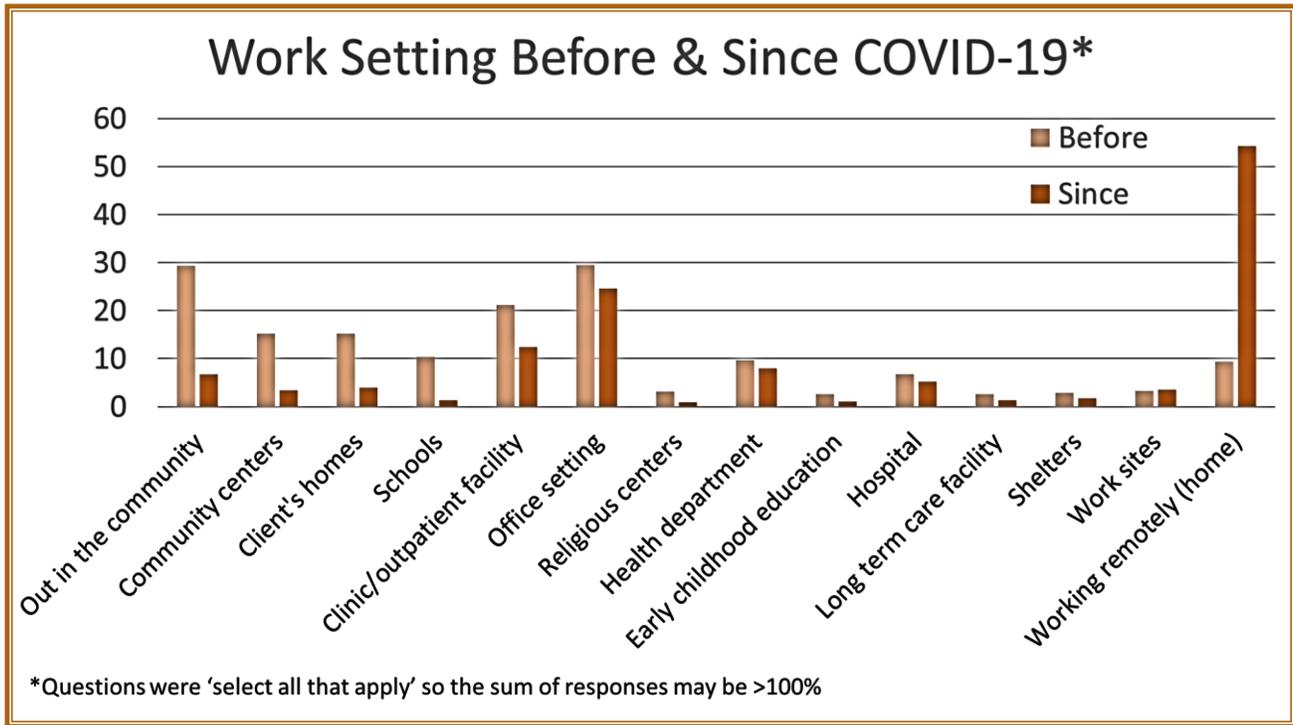
When we asked about how the CHWs employment status changed since the beginning of the COVID-19 crisis, 80% of respondents reported no change in their employment status; 12% were fired, laid off, or furloughed; and 5% chose to stop working (Graph 4). Only 2% of respondents reported being hired, with 1% reported that they were hired in response to COVID. While most respondents reported no change in employment status, there were over 15% who were no longer working as of early August 2020.

Graph 4: Work status the previous six months

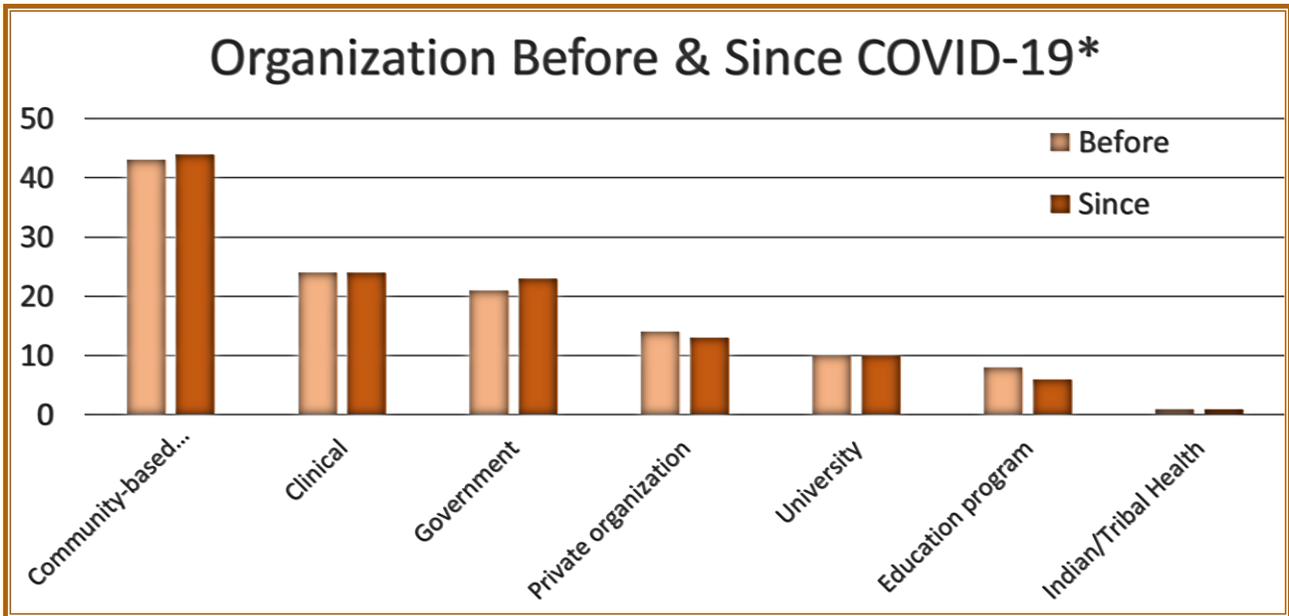


When asked where CHWs worked before and since the COVID-19 pandemic began, one sees an increase of more than 40% in the percentage of CHWs working from home. Further, since the pandemic began, CHWs worked less in the following settings: 'out in the community', 'community centers', 'client's homes', 'schools', and 'clinics'—depicted in Graph 5. Respondents reported little change when asked about organizations they worked for before and since the pandemic; CHWs continue to work primarily in community-based organizations and clinics (Graph 6).

Graph 5: CHW work setting pre and since Covid-19 pandemic



Graph 6: Type of CHW employer/organization pre and since Covid-19 pandemic



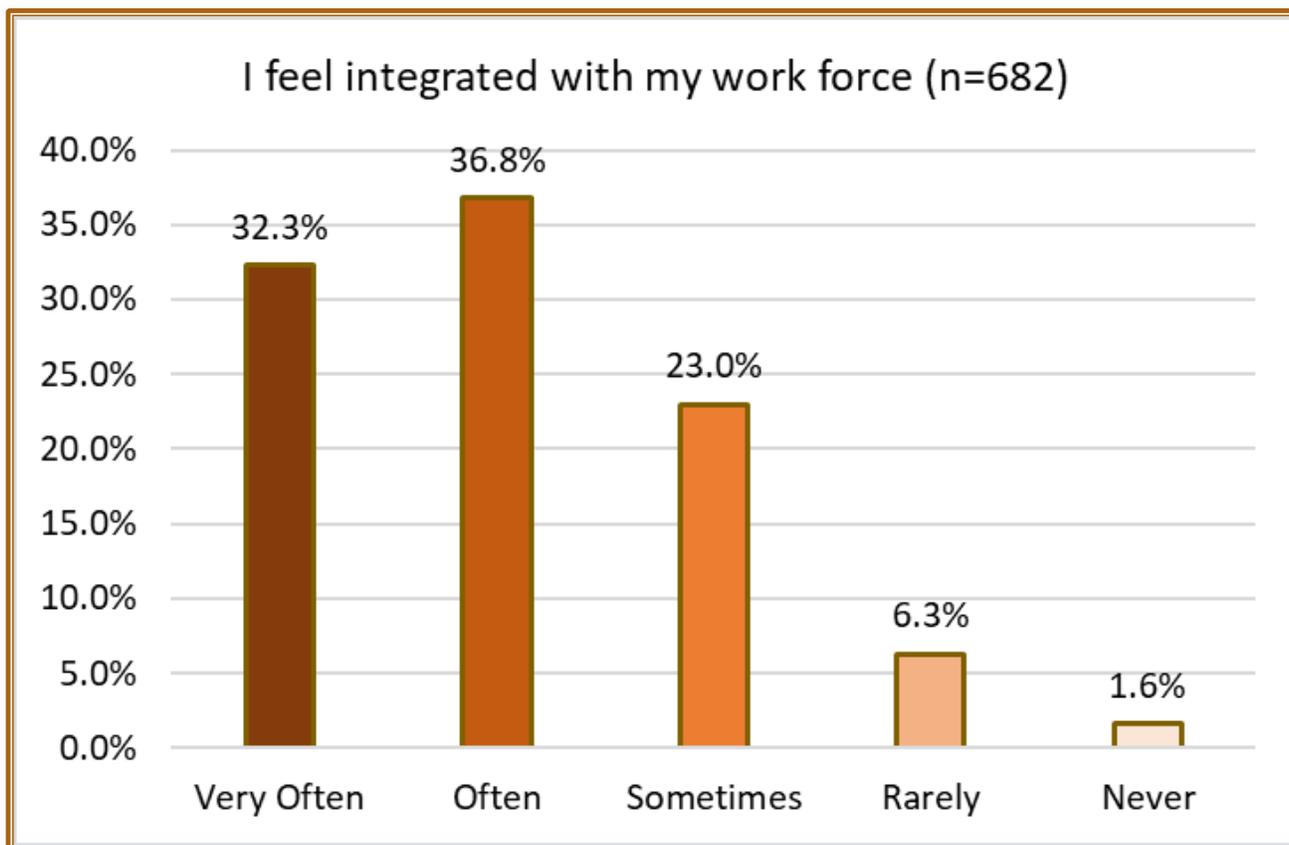
Paid hours worked by CHWs since the beginning of the COVID-19 pandemic have remained around the same since before the pandemic, averaging 36.5 hours weekly. The number of unpaid or volunteer hours worked by CHWs increased from an average of 15 hours to 28 hours each week. Additionally, CHWs report an average of 16 hours of paid work each week related directly to COVID-19 (Table 1).

Table 1: Average paid and unpaid hours worked as a CHW before and since COVID-19

Average paid & unpaid hours worked as CHW before & since COVID-19, mean(SD)		
	Before	Since
Paid hours worked as CHW/ week	37 (12)	36 (14)
Unpaid hours worked as CHW/week	15 (12)	28 (17)
Paid hours work related to COVID-19	n/a	16 (14)
Unpaid hours work related to COVID-19	n/a	n/a

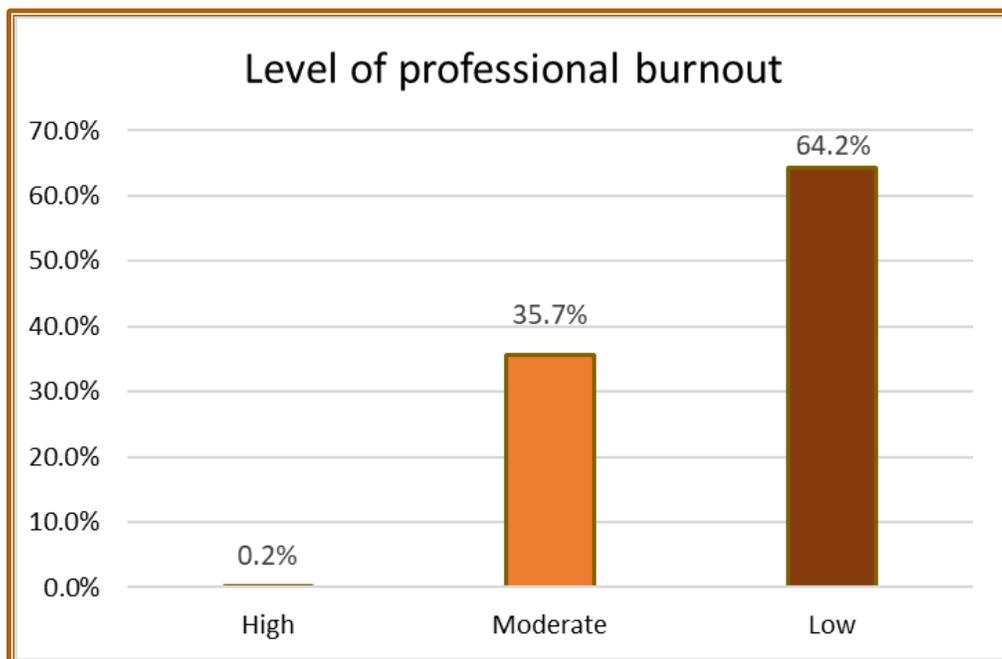
Professional quality of life for CHWs can be assessed by feelings of integration and connection with the workforce and feelings of professional burnout. Most CHW respondents reported feeling integrated into their workforce 'often' or 'very often' (Graph 7).

Graph 7: Integration and connection with workforce



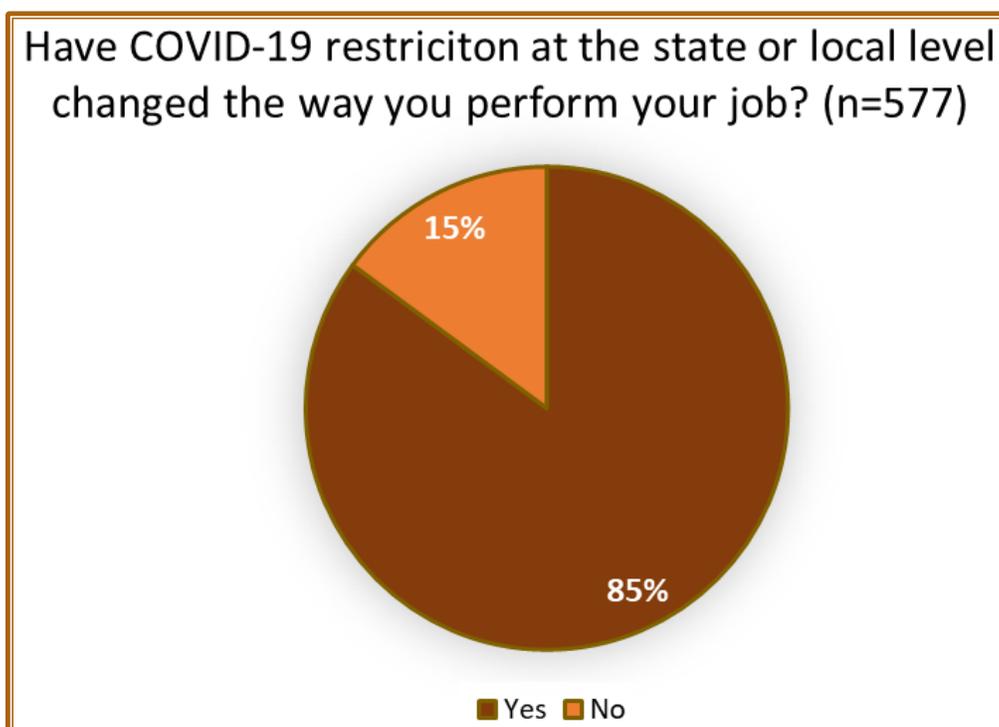
Feelings of professional burnout, evaluated using the Professional Quality of Life Measure (ProQOL V) Burnout Scale (Stamm, 2010), are rated as 'low' the majority of the time, with 37% reporting a 'moderate' level of professional burnout (Graph 8).

Graph 8: Professional burnout



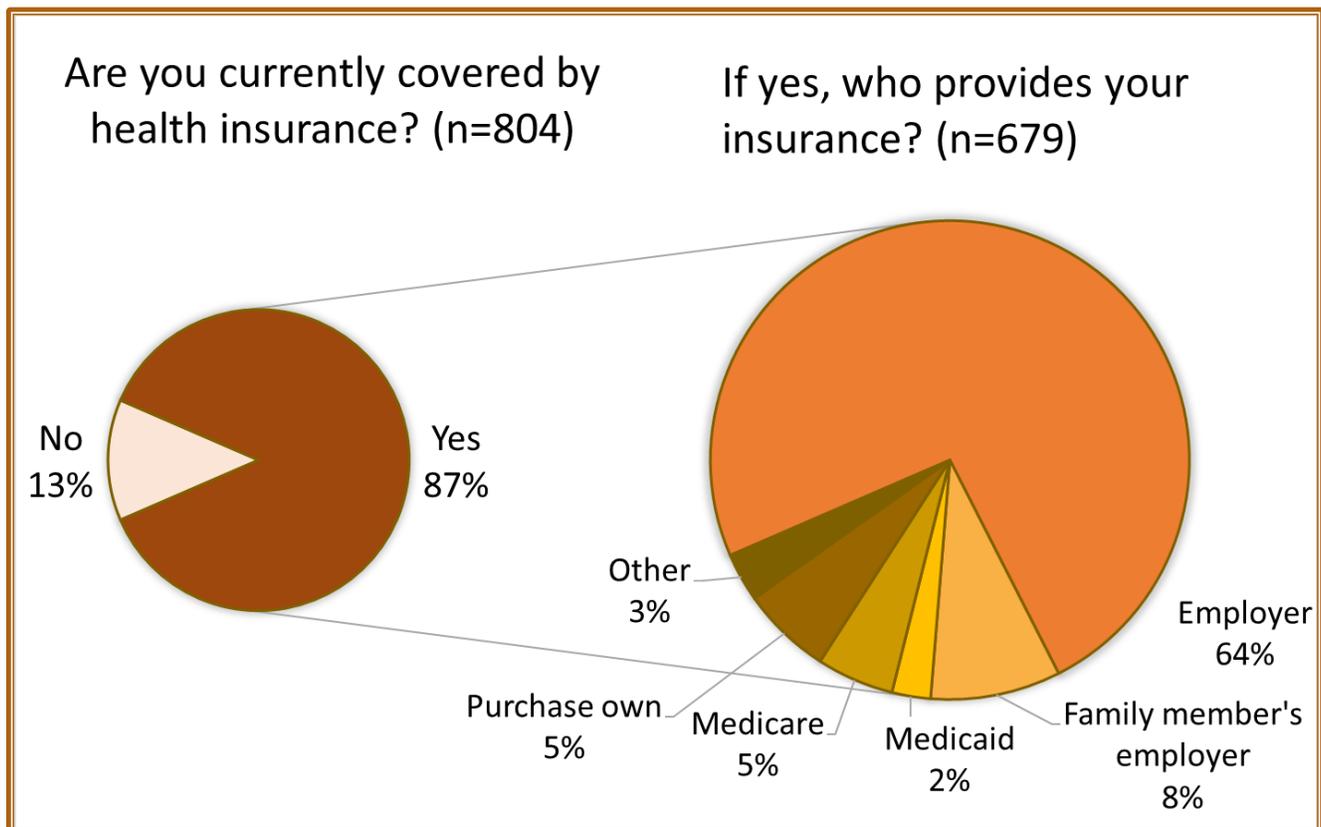
A large majority of CHW respondents report COVID restrictions, either at the state or local level, impacted how the job is performed (Graph 9).

Graph 9: Effect of state COVID-19 on job execution



While 87% reported having personal health insurance coverage, 13% were not covered by any form of health insurance. Of those with insurance, 64% are provided insurance by their current employer. Other forms of insurance included Medicare, Medicaid, private insurance, family member's employer, or an unspecified coverage (Graph 10).

Graph 10: Health insurance coverage and provider

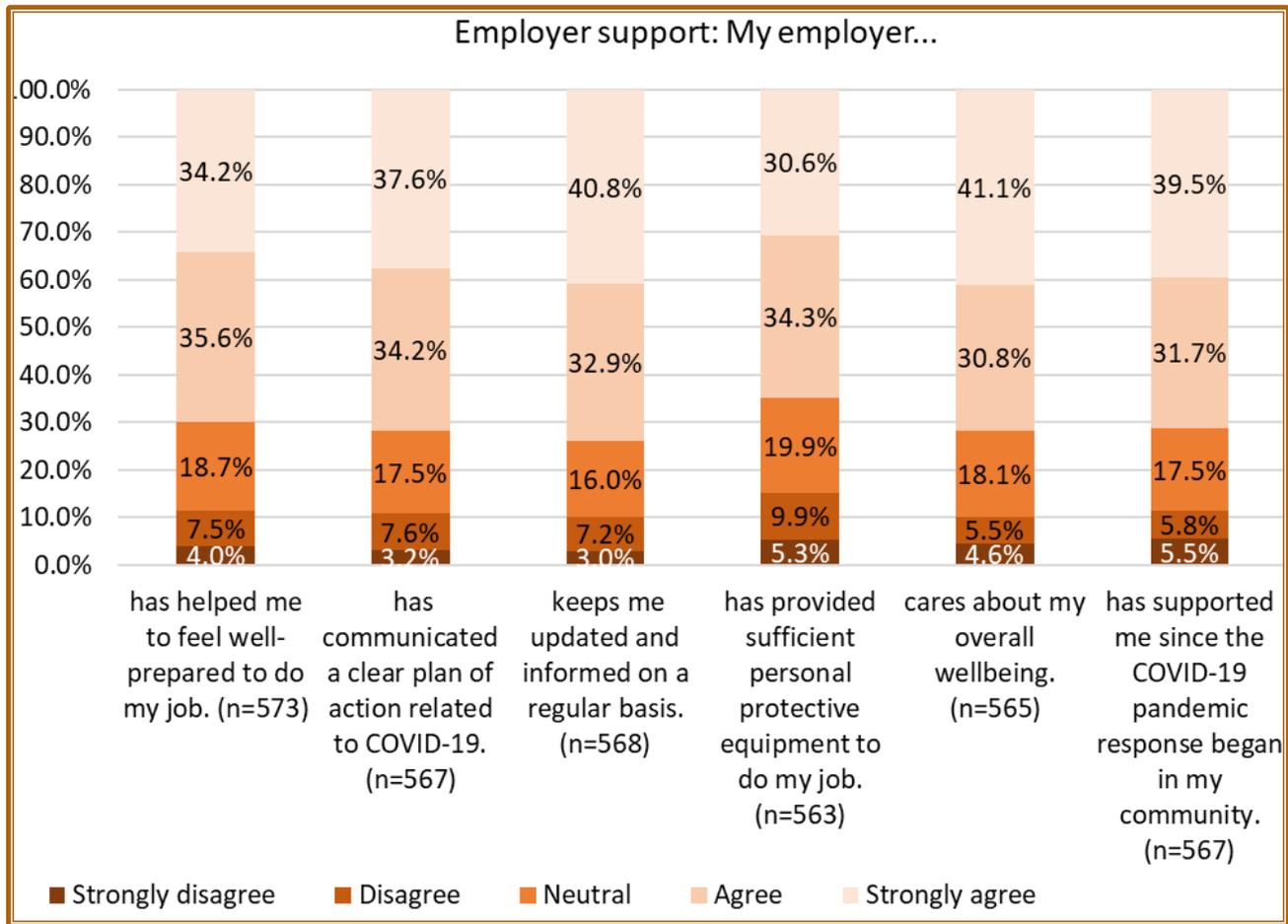


CHWs reported overall positive employer support in response to the COVID pandemic. Positive support includes preparation and training for the job, overall communication, supply of personal protective equipment, and care about their well-being (Graph 11).

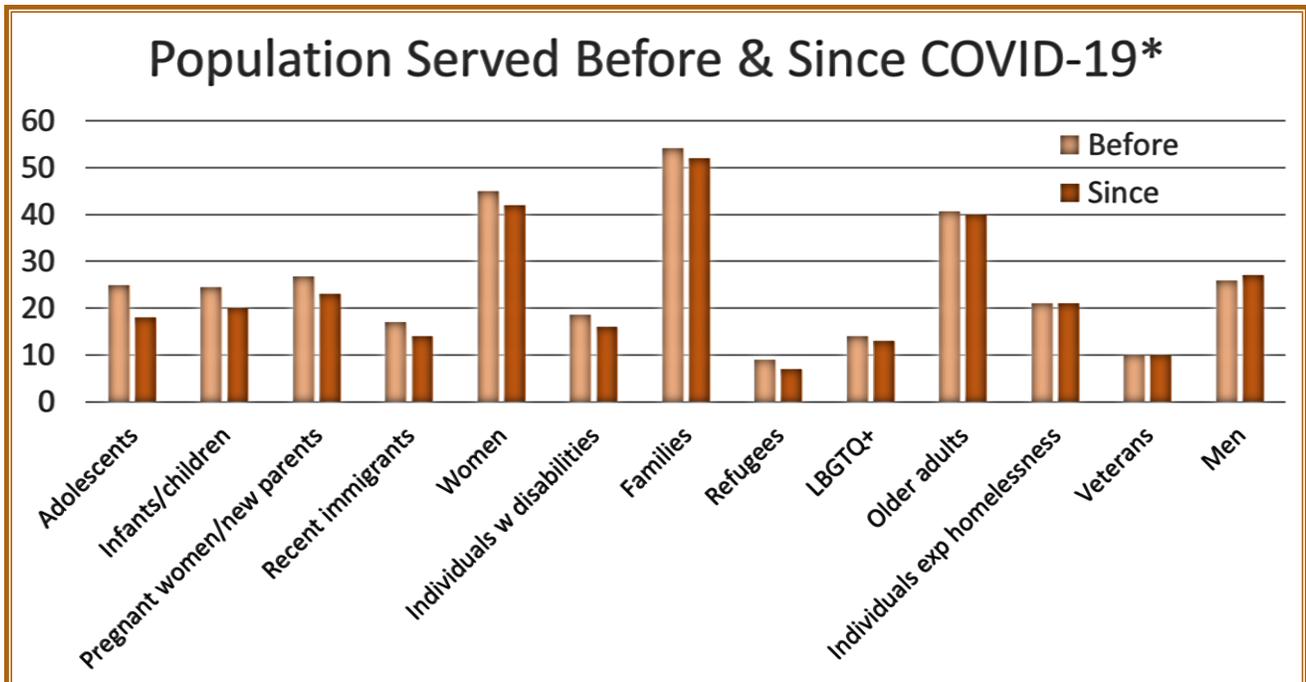
When asked about which populations CHWs served before and since the beginning of the pandemic, findings show most CHWs have continued working with families and that slightly fewer CHWs are working with adolescents, infants, children, and pregnant women (Graph 12). When asked which racial and ethnic groups CHWs served before and since the pandemic, most respondents report working with Hispanic and Black populations, which has not changed much since onset of the pandemic (Graph 13).

When asked about to rate the well-being of the community they served before and since the COVID-pandemic began, 52% rated their community as "well" before and 12% rated "well" since the pandemic before. Additionally 9.5% rated their community as "unwell" before and 60% rated "well" since the pandemic before.

Graph 11: Employer support during the COVID-19 Pandemic



Graph 12: Populations served by CHWs pre and since Covid-19 pandemic



Graph 13: Race/Ethnicity of populations served by CHWs pre and since Covid-19 pandemic

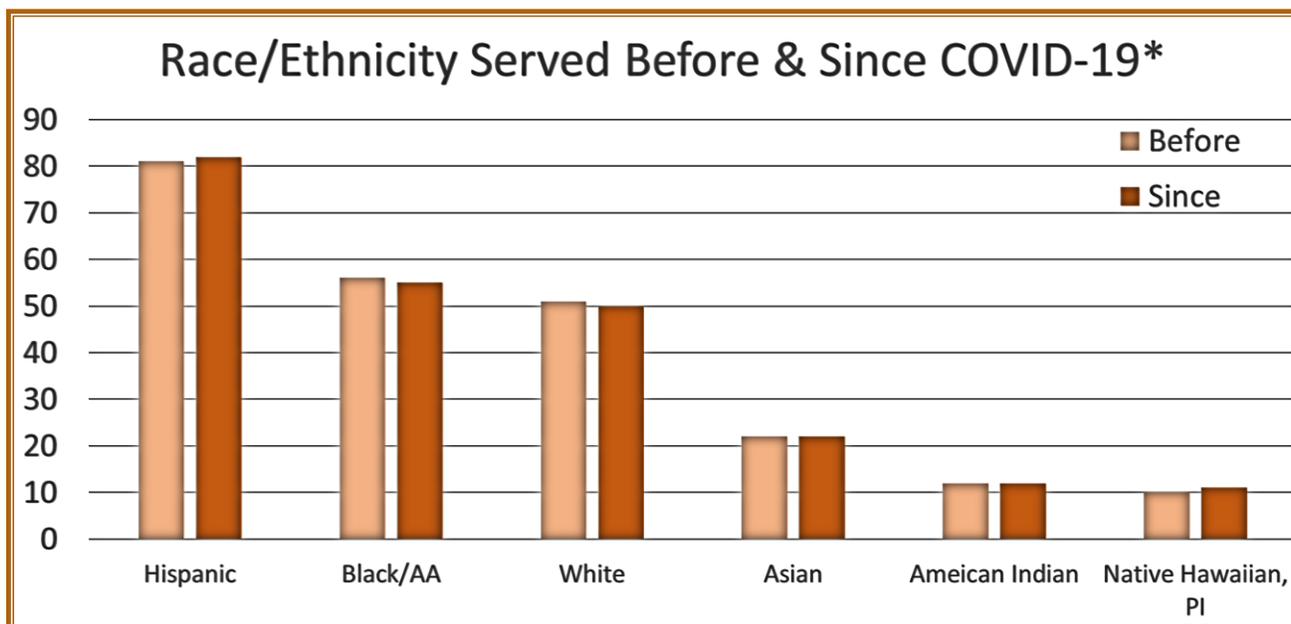


Table 2: Community wellbeing before and since COVID-19

How would you rate the well-being of the community that you serve before and since COVID-19?			
	Before	Since	Change
% CHW who rate community as well	52	12	-40
% CHW who rate community as unwell	9.5	60	50.5
% Change	0.18	5	NA

Maternal and Child Health Training Program at UTHealth School of Public Health

The Maternal and Child Health (MCH) Training Program was funded by the Health Resources and Services Administration (HRSA) from 2009 to 2020. Based at the University of Texas School of Public Health, the MCH Training Program was housed within the Michael & Susan Dell Center for Healthy Living, whose organizational vision of “healthy children in a healthy world” aligns strongly with the purpose of the MCH Training Program.

The MCH Training Program continues to provide education, both online and in-person, for MCH professionals. The online training modules make continuing education accessible for MCH professionals who serve diverse MCH populations in isolated, geographic, and rural areas. The program collaborated with community organizations to assess the most pertinent training needs of the MCH workforce and then developed specialized, interdisciplinary training modules. The majority of the trainings are approved by the Texas Department of State Health Services (DSHS) for continuing education units for CHWs. Trainings are available free of cost at <https://go.uth.edu/MCHTraining>.

Training needs assessments and evaluation measures provided valuable insights into the interests and needs of the Texas CHW workforce. The COVID-19 professional impact survey is a collaboration between the C3 CHW Core Consensus Project and the MCH Training Program in which the teams integrated their unique expertise of the CHW workforce.

C3 CHW Core Consensus Project

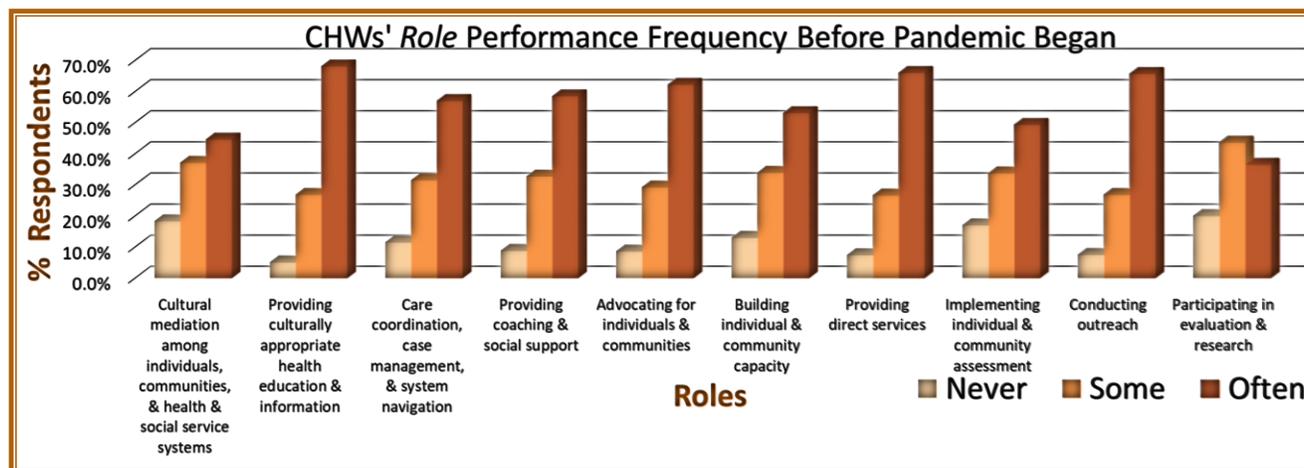
This section briefly describes a national study (C3 project) that informed CHW roles, skills, and qualities, which this CHW Covid-19 study examined. The Community Health Worker Core Consensus Project's (C3 Project) aimed to expand cohesion in the CHW field and to contribute to the visibility and greater understanding of the full potential of Community Health Workers (CHWs) to improve health, community development, and access to systems of care (Rosenthal, Menking, & St. John, 2018). The C3 project provides a single set of CHW roles and competencies for reference by those both inside and outside the CHW field as they work to build greater support for and sustainability among CHWs in all settings. Phase 1 of the C3 project included the development of a contemporary list of recommended roles and competencies built via national consensus (the term "competencies" used here includes skills and qualities). Phase 2 of the C3 project explored best practices related to the assessment of CHW skills and to examine the potential impact of CHWs' service setting on CHW roles and skills. Phase 2 also conducted stakeholder outreach to expand understanding and adoption of C3 project recommended CHW roles and competencies. This led to the development of an assessment toolkit designed to share field-driven, evidence-based recommendations, tools, and resources for supporting a comprehensive assessment of CHWs' work. Additionally, findings on the impact of setting on CHW work revealed a preferred reliance on the same core roles and competencies, regardless of work setting, suggesting the importance of endorsing common core roles and competencies for CHW in all settings. Findings of the C3 project also indicated the need for CHWs to identify areas of additional training needed for specific settings. Frameworks developed by CHWs and stakeholders depicted these findings and help communicate the common core roles and competencies of CHWs in all settings. During this later work on assessment and settings in phase 2, the C3 Project team succeeded in expanding the endorsement, support, and utilization of the C3 Project recommendations with affirmations from more than 15 national public health organizations and professional associations, acknowledgment, and use by more than 20 state policy initiatives. Throughout, the C3 Project has sought to build consensus to better support the full scope of CHW practice and CHW capacity to serve individuals and communities.

The C3 team partnered with the Maternal and Child Health Training Program team, based in UTHealth School of Public Health, on this CHW COVID-19 survey to examine any potential differences in CHW roles, skills, and qualities from pre-COVID-19 to after the pandemic began. This section briefly highlights descriptive statistics on the C3 data from the study. Of note, analysis excluded missing data/cases for the purposes of this report.

Roles

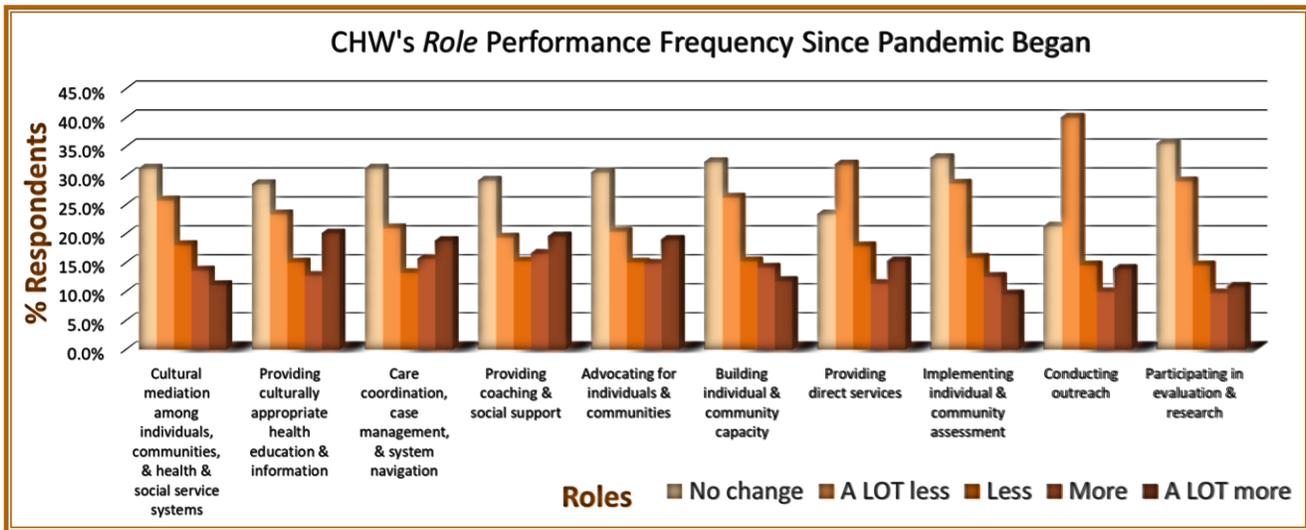
Graph 14 depicts the frequency of each role reported by respondents pre-pandemic. The n-values (number of respondents or participants) for the roles ranged from 548 to 564 for this question and represent CHWs who worked *before* and *after* the pandemic (note: additional data were reported by 128 CHWs who did not work as a CHW after the pandemic began). This graph shows that 35-68% of all respondents reported doing each role “often”; 26-44% of respondents reported doing each role some. For never doing a role, responses ranges from 5% reporting ‘never providing culturally appropriate health education and information’ to 20% not participating in evaluation and research.

Graph 14: CHW roles before Covid-19 pandemic



Graph 15 depicts the frequency of each role reported by participants *after* the covid-19 pandemic began. The n-values (number of respondents) for the roles ranged from 361 to 426 for this question. The darkest color bar represents participants who reported no change in how often they did a particular skill; 25-33% of respondents reported no change in various roles. Respondents reported performing the following roles “a lot less:” building capacity, cultural mediation, providing direct services, conducting outreach, and participating in evaluation and research. One might expect this change in roles due to the disease mitigation efforts, such as quarantine and physical distancing. Roles that respondents report performing “a lot more” (over 18%) include providing culturally appropriate health education and information; care coordination, case management, and system navigation; providing coaching and social support; and advocacy.

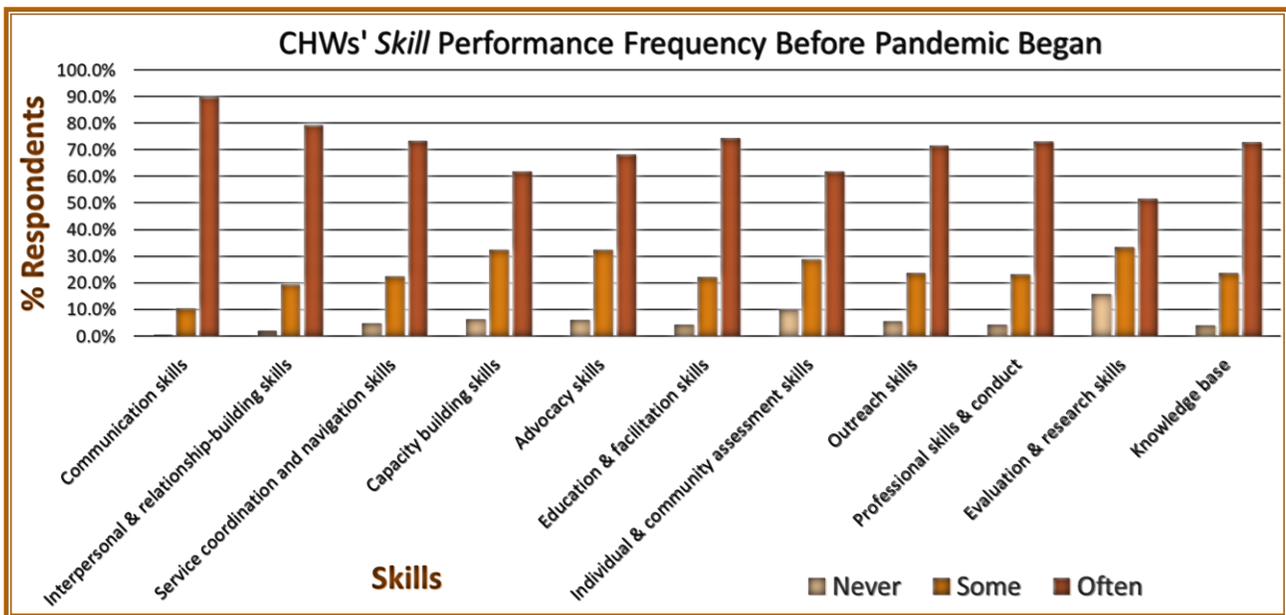
Graph 15: CHW roles since Covid-19 pandemic



Skills

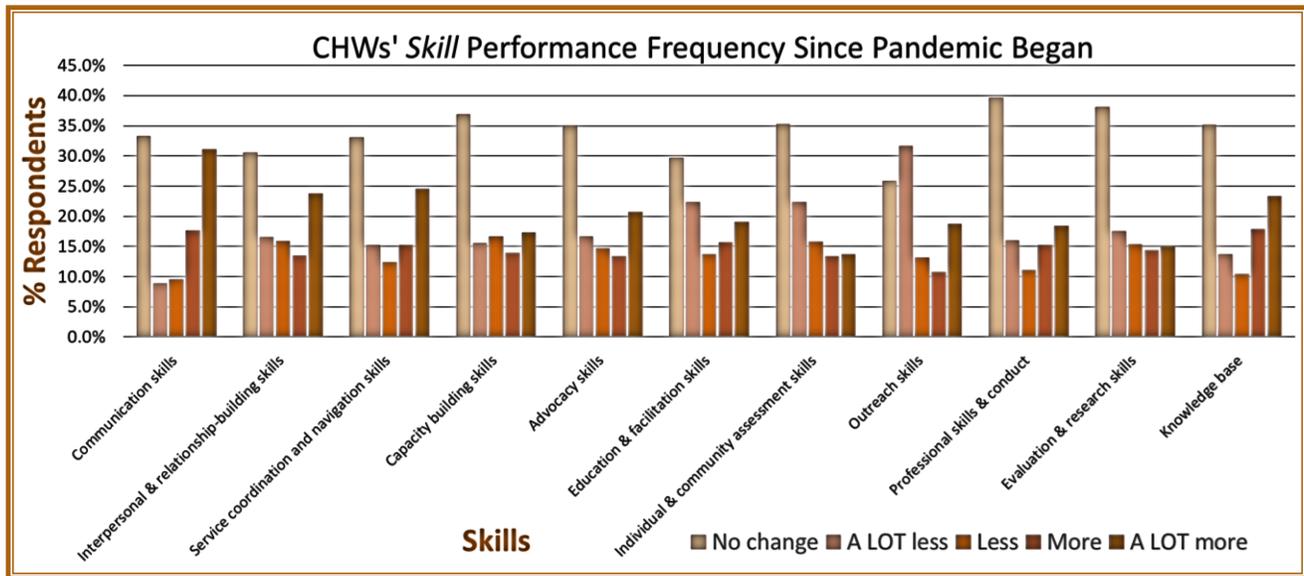
Graphs 16 and 17 show changes in CHW frequency in skills pre-pandemic and since the COVID-19 pandemic began. Graph 16 depicts the frequency of each skill reported by participants pre-pandemic. The n-values (number of respondents) for the skills ranged from 545 to 556 for this question and represent CHWs who worked *before* and *after* the pandemic (note: additional data are reported by 128 CHWs who did not work as a CHW after the pandemic began). This graph shows that 51-90% of all respondents reported performing each skill “often”; 10-32% of respondents reported performing each skill “some.” For “never” doing a skill, responses ranges from 0.1% reporting never using communication skills to 16% not using evaluation and research skills.

Graph 16: CHW skills before Covid-19 pandemic



Graph 17 depicts the frequency of each skill reported by participants *after* the COVID-19 pandemic began. The n-values (number of respondents) for the skills ranged from 534-546 for this question. The darkest color bar represents participants who reported “no change” in how often they did a particular skill; 26-40% of participants reported no change in various skills. From the graph, one sees that a few skills had respondents reporting doing “a lot less,” including education/facilitation; assessment; and outreach—consistent with quarantine and physical distancing. A few skills that respondents reported doing “a lot more” (over 20%) included: communication; interpersonal and relationship-building skills; service coordination and navigation skills; advocacy; and knowledge-based skills.

Graph 17: CHW skills since Covid-19 pandemic



Qualities

In regards to CHW qualities, the survey asked participants to rank qualities (personality traits) in order of importance, with one (1) being the most important and ten (10) being least important, *before* the COVID-19 pandemic began and *since* the pandemic began. Table 3 depicts the results of the ranking of qualities pre and since the pandemic.

Community Concerns

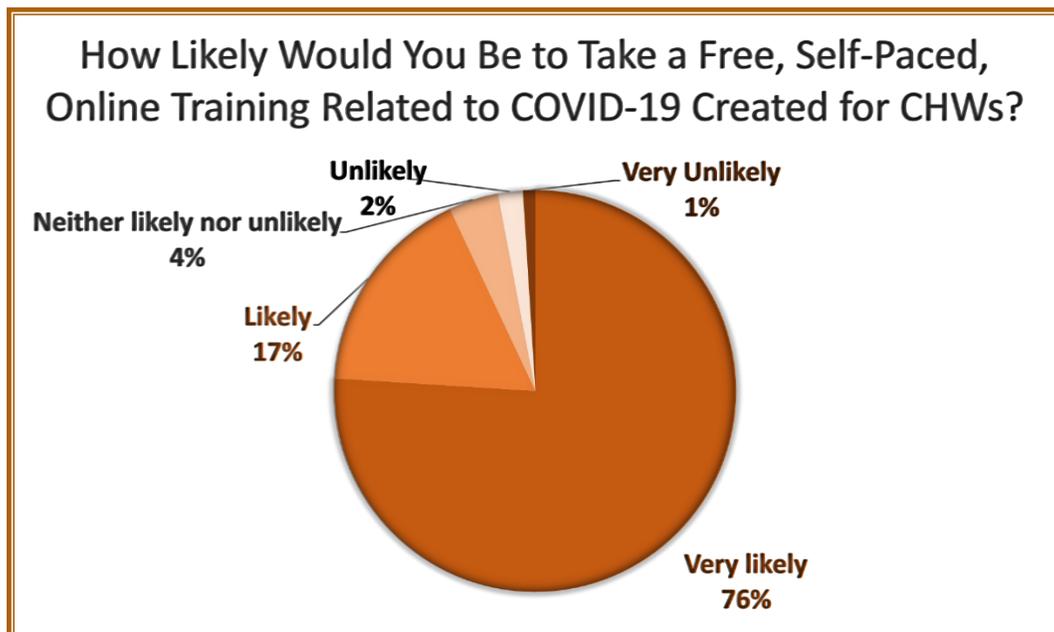
This section describes the part of the study that asked CHW respondents the following questions: 1) “Since the pandemic began, what are the most concerning issues faced by the community members that you serve?” and 2) “In response to the pandemic, what resources, other than money, would be most helpful to the community members that you serve?” These questions reflect CHWs’ unique and important insights on the issues facing the community in addition to their insights on potential solutions. A recurring theme for both questions was concern about and/or improving food access. Another important theme was access to COVID-19 testing sites, PPE (personal protective equipment), and information about COVID-19. CHWs were concerned about contracting SARS-CoV-2 (severe acute respiratory syndrome coronavirus) and becoming sick with COVID-19 illness. Other notable topics included loneliness, depression, and poor or no internet access. In terms of identified needs of their communities, CHWs listed some of the following responses:

- Food pantries, food drives
- “Education and information on preventive measures at home and in the event of a shortage of disinfectant and sanitizing products, provide the tools to prepare them at home.”
- “We need more African-American and Native American Medical Professionals to meet the needs of our communities and more quality resources.”
- National mandate of wearing masks
- “We need more social workers. We need more shelters and food banks.”

Training Resources

This section focuses on CHW’s interest in training resources and the training topics they need most. When asked how likely CHWs were to take a free, self-paced, online training related to COVID-19 created for CHWs, over 90% of respondents indicated they would be “likely” or “very likely” to take such a training—indicative of a real need for these trainings (Graph 18).

Graph 18: CHWs’ Likelihood to take a CHW Covid-19 training



When asked what topics related to COVID-19 would be the most helpful, the most frequently requested topics included: 1) prevention; 2) testing; 3) treatment; 4) symptoms; and 5) mental health. For example, for COVID-19 prevention, CHWs requested training on how to protect the community from contracting COVID-19, as seen in these quotes from respondents, *“How the community can **protect themselves** from COVID-19”* and *“Show how easy it is to catch it. And how to persuade people to **protect themselves** from contagion, apart from continually washing their hands, keeping their distance, wearing a mask, and staying home.”* In relation to COVID-19 testing, respondents wanted to know how to get tested, where to get tested, and what a positive test means. For instance, respondents stated, *“Most helpful [training] would be to provide information effectively about COVID-19. Many people do not understand about the different [tests], like **diagnostic and anti-body testing**”* and *“**Testing sites and prices**, other community resources according to each family in need.”* For COVID-19 treatment and symptoms, respondents reported their need to know how to give patients with COVID-19 supportive care to help relieve symptoms as seen in these two statements: *“Care of COVID-19 person at home. **Treating the symptoms**”* and *“**Current treatments/studies** available, where to get **low cost care/treatment** for positive patients.”* Lastly, for mental health, CHW respondents requested assistance in addressing mental health effects of COVID-19 and isolation for both patients and CHWs. Respondents stated need for training related to the *“**mental health** of both positive individuals and those who directly or indirectly provide care”* and *“**mental health**, coping with COVID-19 and the death of a loved one during COVID-19 [pandemic].”* Some less frequently mentioned topics included: contact tracing; kids; and masks/PPE (personal protective equipment).

Conclusions

This study examined the perceptions and experiences of CHWs in Texas during the COVID-19 pandemic in order to understand changes in the CHW workforce, identify training opportunities including preparation of CHWs for future public health emergencies, and to describe priority needs of CHWs and their communities. The Maternal and Child Health (MCH) Training Program at UTHealth School of Public Health and the Community Health Worker Core Consensus Project (C3 Project) at Texas Tech are committed to reporting the survey findings to our survey respondents, those that helped with distribution, and other CHW stakeholders in the state of Texas.

Highlights of our findings are summarized into a few key themes below:

Documenting CHWs’ work during the pandemic:

This report summarizes the changes in CHWs’ work during this pandemic. CHWs have mostly remained employed with the same organizations and serve the same groups of people, but the way they help has changed. Respondents reported increases in their roles of providing culturally appropriate health education and information; care coordination, case management, and system navigation; providing coaching and social support; and advocacy. CHWs now mostly work remotely instead of out in the community and rely more on communication skills and technology skills than ever before. The lack of reliable internet both for CHWs and for the families they serve represents a substantial hurdle.

Informing future training opportunities and preparing CHWs for future public health emergencies:

The data shows CHW are very likely to participate in COVID-19 training courses, specifically ones related to prevention including masks, COVID-19 testing, treatment, symptoms and mental health overall. A focus in these areas will help CHWS as they continue to move through this pandemic and to be ready

for future health emergencies. At the time of this report, COVID-19 vaccines will be released soon. We anticipate this area will also be one where education and training for CHWs will benefit the distribution process.

CHW perspectives on priority issues in the communities they serve:

From our survey respondents' perspectives, the most common issue in the communities they see is food insecurity. They suggest the need for more and better food pantries and food drives to address this issue. They also indicated that mental health challenges are evident as vulnerable individuals remain isolated as they work to stay safe. Greater availability of culturally competent healthcare providers including mental health care specialists are part of the solution that CHWs propose to address this concern. As noted above, internet connectivity and access for those they serve and for the CHWs themselves, to ensure optimal continuity of services, was also a common theme.

Based on our findings as set forth in this report, we offer the following recommendations for various stakeholder groups:

Recommendations for Next Steps

For CHWs (CHW survey takers and other Texas CHWs):

- As has often been suggested, it is clear that CHWs have a critical role to play in times of public health emergency. Your work on the frontlines of this pandemic is a testament to the talent and readiness of CHWs to inform and protect your communities.
- We urge you to continue to be a voice for your communities in helping to propose safe behavior. You can articulate the needs that you see to those outside of your community, so they can better address the challenges you perceive and build in the resources you identify as assets.
- Your courage in these times is to be noted. Make sure to practice self-care behaviors and be certain not to put yourself at risk. When your service is not remote, be sure you have access to the protective equipment you require to successfully do your job.
- Consider outreach to our research team, if you would like to be a part of future research efforts.
- Do not try to do it alone; access resources from other colleagues and organizations. See a few listed below for your reference:
 - How to cope with stress during COVID-19 per the CDC: https://www.cdc.gov/coronavirus/2019-ncov/hcp/mental-health-healthcare.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcommunity%2Fmental-health-healthcare.html
 - Mental Health and Coping during COVID-19 per the Department of Health and Human Services: https://www.cdc.gov/coronavirus/2019-ncov/hcp/mental-health-healthcare.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcommunity%2Fmental-health-healthcare.html

For CHW Trainers/Educators and CHW Service Administrators:

- Continue to develop trainings to inform CHWs about the pandemic. Training topics identified in this report are meant to serve as a guide, with the recommendation of collaborating directly with community partners and the trainee audience to ensure relevant topics and content are delivered.

- While a vaccine had not yet been approved at the time of this survey, vaccine information is now a training topic that should also be addressed.
- Create support systems to sustain CHWs as they face the challenges posed by COVID-19 in their own families and the communities where they serve as CHWs. Support systems can include synchronous and asynchronous networking and learning resources.
- Encourage and support CHWs to develop their leadership skills at this time, so that they can play a role in offering their knowledge and support to other CHWs.

For Planners and Policy Makers:

- Many challenges and opportunities to advance public health practices have emerged from the COVID-19 pandemic experience. Clearly, CHWs have been a part of the solution in terms of outreach to marginalized communities. Continuing to build alliances with this workforce in preparation for future public health challenges would seem well advised.
- Texas has a new CHW network—the Texas Association of Promotores/CHWs (TAPCHW) that serves all CHWs in our state. Allying with this network, in addition to regional and local networks, for future training and resource distribution can help develop needed infrastructure in the CHW field.
- Food insecurity, mental health challenges, and the development of a culturally competent workforce are suggested as priority topic areas for future resource development.
- Addressing the digital divide is a challenge for the nation and our state and is one the public health community cannot afford to ignore.

For CHW Workforce Analysts and Researchers:

- In addition to the Texas survey, the study engaged collaborators in Arizona and New Mexico to carry out surveys. Separate reports will highlight those findings. Additional states, Oklahoma and several others have been in touch and are in the planning phases of implementing this survey instrument or segments of the survey. We provide our survey instrument, including notes on lessons learned for use in other states.
- Please reach out to us using the email address provided in this report if you are interested in undertaking all or some elements of this survey in your state.

Implications for Community Health

- In their on-going role of educating and advocating individuals, families, and communities, CHWs have a valuable perspective on the strengths and challenges in these communities. Not only did CHWs resoundingly respond that hunger and food security was a priority issue for communities but they also expressed community member interest in gaining a better understanding of the realities of caring for those with COVID-19, safe practices for physical distancing, mask mandates, and safety.
- Community health issues in the pandemic will soon turn to needs for community understanding of and access to vaccines. CHWs can, and no doubt will, play an invaluable role in building community confidence in COVID-19 vaccines, in addition to facilitating community member access to vaccines.

Acknowledgments

The MCH Training Program was funded by the Health Resources & Services Administration (HRSA) & is operated by University of Texas Health Science Center at Houston School of Public Health. The original C3Project received funding from Amgen Foundation & Sanofi U.S. between the years 2014-2018. The study was funded in part by Michael and Susan Dell Center for Healthy Living and the Department of Health Promotion and Behavioral Sciences at the University of Texas Health Science Center at Houston School of Public Health.

Collaborators

- Arizona Community Health Workers Association (AzCHOW)
- CHW Core Consensus (C3) Project
- DFW-CHW Association
- Health Promotores Network Paso del Norte Region
- MCH Training Program at UT Health School of Public Health
- Michael and Susan Dell Center for Healthy Living
- New Mexico CHW Association
- Northeast Texas CHW Coalition (Tyler area)
- Presbyterian Health Systems
- Promotores/Community Health Workers of Travis County Organization (Austin area)
- Red de Promotores de Salud Región Paso del Norte (El Paso area)
- Texas Association of Promotores and Community Health Workers
- Texas Department of Health Services, Community Health Workers or Promotor(a) Training and Certification Program
- Texas Gulf Coast CHW/Promotores Association (Houston & East TX)
- UNM CHW Initiatives Office
- West Texas Community Health Worker/Promotores Association (Lubbock/WTX)

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- C3 Project, <https://www.c3project.org/>



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Appendix A

Survey Methodology for Replication

Purpose: Created by the original survey team to provide origin context and information to support replication and/or adaptation of survey instrument

- I. Background of survey
 - i. Original survey team: An inter-professional team, including CHWs, CHW instructors, and researchers, developed an online survey to understand the perspectives and experiences of CHWs in Texas during the COVID-19 pandemic
 1. Julie St. John, DrPH (TTUHSC, C3 Project), *PI*
 2. Courtney Byrd-Williams, PhD (UTHealth, MCH Training Program), *PI*
 3. E. Lee Rosenthal, PhD, MS, MPH (TTUHSC El Paso, C3 Project), *PI*
 4. Paige Menking, MPA (Project ECHO, University of New Mexico, C3 Project), *Co-I*
 5. Floribella Redondo (President, Arizona Community Health Workers Association, C3 Project), *Co-I*
- II. Distribution:
 - i. Target population: Certified and non-certified CHWs working in Texas, New Mexico, and Arizona during the COVID-19 pandemic
 - ii. Data collection: July 13 – August 3, 2020
 - iii. Implementation: Survey link distributed via email by collaborating state and local-level CHW organizations and associations
 1. Distribution email was written in both English and Spanish
 2. Incentive offered: 5 survey respondents randomly selected to win \$100 Wal-mart gift cards
 - a. Email template for distributing the survey was provided to organization and association contacts for convenience
 - b. Survey team reached out to collaborating organizations and associations prior to survey implementation to request their assistance and begin planning for survey distribution
- III. Survey objectives
 - i. Describe survey respondent demographics & professional setting
 - ii. Describe changes experienced by CHW workforce during COVID-19 pandemic
 - iii. Describe how CHWs are addressing COVID-19 pandemic
 - iv. Describe quality of life impact of CHW employment during COVID-19 pandemic
 - v. Describe professional support experienced by CHWS from their employers & CHW coordinators
 - vi. Describe CHW perceptions of community assets & challenges during COVID-19 pandemic

IV. Survey details:

- i. 37-item survey created & distributed in Qualtrics
- ii. ~20 minutes to complete
- iii. Qualitative & quantitative data
- iv. Each question is aligned with an objective, an intended construct, & a source
- v. Survey mechanics
 1. Respondent has option to view survey entirely in Spanish or switch back and forth between English and Spanish
 - a. Spanish version translated via Google Translate followed by review by Spanish speaking CHWs, healthcare professionals, & survey team members

V. Recommendations for survey instrument replication

- i. 48- hour time limit initiated after survey opened – respondent’s data automatically recorded and respondent is unable to re-open survey
 1. Include statement about time limit in instructions
- ii. Restrict answer format to desired format (e.g. text-only answer for questions seeking answers in text format
 1. Use a drop-down menu for questions seeking answer in numerical format (e.g. age) instead of open text format
- iii. Adjust display logic of screening questions to your target population (e.g allow respondent to progress with survey if they work in the state where you are collecting data)
- iv. Forced answer function for screening questions only to increase likelihood of survey completion, but be aware that this will result in a different sample size for each question
- v. Each IP address can open survey link once to prevent the same respondent from completing the survey multiple times (called “prevent ballot box stuffing” in Qualtrics)
- vi. Duplicate survey in Qualtrics prior distribution to separate pilot/beta survey responses from actual data collection survey responses
- vii. Separate large content questions onto separate pages in Qualtrics (lots of respondents quit survey on large content pages, may have been overwhelming)

Appendix B

Survey Content Table

Section: Screening		
Question #	Objective	Construct
1.	I. Describe survey respondent demographics & professional setting	Professional title of Community Health Worker
2.	II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Change in work status related to COVID-19
3.	I. Describe survey respondent demographics & professional setting	State of employment
Section: Demographics		
Question #	Objective	Construct
4.	I. Describe survey respondent demographics & professional setting	Age
5.	I. Describe survey respondent demographics & professional setting	Sex
6.	I. Describe survey respondent demographics & professional setting	Ethnicity
7.	I. Describe survey respondent demographics & professional setting	Race
8.	I. Describe survey respondent demographics & professional setting	Residential setting
9.	I. Describe survey respondent demographics & professional setting	Childcare
Section: Professional setting		
Question #	Objective	Construct
10.	I. Describe survey respondent demographics & professional setting	CHW type
11.	I. Describe survey respondent demographics	CHW certification
12.	I. Describe survey respondent demographics & professional setting	Years of professional experience
13.	I. Describe survey respondent demographics & professional setting	Population served
14.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Population served / Change in population served
15.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Well-being of population served
16.	III. Describe how CHWs are addressing COVID-19 pandemic	Personal risk of COVID-19
17.	IV. Describe quality of life impact of CHW employment during COVID-19 pandemic	Personal risk for COVID-19
18.	IV. Describe quality of life impact of CHW employment during COVID-19 pandemic	Risk for COVID-19 of population working with

19.	III. Describe how CHWs are addressing COVID-19 pandemic	Personal risk for COVID-19
20.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Source of CHW employment / volunteer work / Change in source of CHW employment / volunteer work
21.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Work setting / Change in work
22.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Work setting
23.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Hours worked per week & Hours of work focused on COVID-19 related tasks
24.	I. Describe survey respondent demographics & professional setting	Current insurance coverage
25	I. Describe survey respondent demographics & professional setting IV. Describe quality of life impact of CHW employment during COVID-19 pandemic	Training interest
Section: Quality of life		
Question #	Objective	Construct
26.	IV. Describe quality of life impact of CHW employment during COVID-19 pandemic	Professional quality of life
27.	IV. Describe quality of life impact of CHW employment during COVID-19 pandemic	Threat felt related to COVID-19
Section: Professional changes related to COVID-19		
Question #	Objective	Construct
28.	II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Changes to job role due to COVID-19 state/local restrictions
29.	V. Describe professional support experienced by CHWS from their employers & CHW coordinators	Employer preparedness for COVID-19 & support of employees during COVID-19
30.	III. Describe how CHWs are addressing COVID-19 pandemic	CHW role changes due to COVID-19
30-1.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	New roles performed in response to COVID-19
31.	III. Describe how CHWs are addressing COVID-19 pandemic	New roles performed in response to COVID-19
31-1	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	New skills performed in response to COVID-19
32.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Personality traits/qualities applied to work setting before COVID-19

32-1.	I. Describe survey respondent demographics & professional setting II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Additional qualities important to the work of CHWS during the COVID-19 pandemic response
33.	II. Describe changes experienced by CHW workforce during COVID-19 pandemic V. Describe professional support experienced by CHWS from their employers & CHW coordinators	Changes in job assessment / evaluation related to COVID-19
34.	VI. Describe CHW perceptions of community assets & challenges during COVID-19 pandemic	Community issues related to COVID-19
35.	VI. Describe CHW perceptions of community assets & challenges during COVID-19 pandemic	Community issues related to COVID-19
Section: Political affiliation		
Question #	Objective	Construct
36.	I. Describe survey respondent demographics & professional setting	Political affiliation
Section: Opportunity to share anything related to COVID-19		
Question #	Objective	Construct
37.	II. Describe changes experienced by CHW workforce during COVID-19 pandemic	Thoughts on working as a CHW during COVID-19 pandemic response
n/a	Enter raffle for gift card / receive survey results	Email address