BACKGROUND

This executive summary provides a brief overview of the findings from the first phase of a series of five Farmworker COVID-19 Community Assessments (FCCA) for the National Center for Farmworker Health (NCFH) conducted from August to December 2021. These assessments are part of a national outreach and vaccination project funded by the Centers for Disease Control and Prevention (CDC). Farmworkers are a particularly vulnerable population during a public health emergency due to their travel, and working and living conditions. The purpose of the FCCAs was to develop and implement data collection methodologies that could quickly be activated during a public health emergency, to document actionable findings about farmworkers’ experiences and access to prevention and health services during the COVID-19 pandemic, and to develop recommendations on how to best meet their needs arising from the COVID-19 pandemic.

The FCCAs were conducted in 1) Monterey, Tulare, & Kern counties, California; 2) Hidalgo County, Texas; 3) El Paso County, Texas & Doña Ana County, New Mexico; 4) Calhoun & Coahoma counties, Mississippi; 5) Collier County, Florida. These counties were selected because they have a significant farm labor force employed in the fall and winter, they house a diverse population of farmworkers, and NCFH has partners in these areas that could assist with data collection. NCFH estimates that there are at least 145,256 farmworkers employed in these counties on an annual basis, representing an estimated 7% of all 2.2 million farmworkers employed nationally. (1)

METHODOLOGY

The FCCA methodology includes both a quantitative and a qualitative component and is based on the CDC’s rapid community assessment methodology. (2) This report summarizes findings from the quantitative surveys conducted with farmworkers. An analysis of the qualitative interviews with farmworkers, agricultural employers, and representatives of farmworker-serving organizations is forthcoming. For more information about the methods, see Appendix A.

Figure 1. Map of Phase 1 FCCA locations
FINDINGS

Surveys were conducted with 1,094 farmworkers in the five communities. A total of 52 key informant and in-depth interviews were conducted with farmworkers, agricultural employers, and farmworker experts or representatives of farmworker-serving organizations. Table 1 provides the number of surveys conducted in each community and the primary method that survey data were collected.

Table 1. Number of surveys and data collection methods by community

<table>
<thead>
<tr>
<th>Community</th>
<th>Number of Surveys Completed</th>
<th>Primary Survey Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monterey, Tulare, &amp; Kern counties, California</td>
<td>251</td>
<td>Phone</td>
</tr>
<tr>
<td>Hidalgo County, Texas</td>
<td>190</td>
<td>In-person</td>
</tr>
<tr>
<td>El Paso County, Texas &amp; Doña Ana County, New Mexico</td>
<td>207</td>
<td>Phone</td>
</tr>
<tr>
<td>Calhoun &amp; Coahoma counties, Mississippi</td>
<td>197</td>
<td>Phone &amp; in-person</td>
</tr>
<tr>
<td>Collier County, Florida</td>
<td>249</td>
<td>In-person</td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

Demographic characteristics of respondents varied substantially by community, which may reflect community diversity and the different recruitment and data collection methods used (see Figures 2-7). Communities where surveys were conducted primarily in-person had higher percentages of racially Indigenous respondents and respondents with an H-2A temporary agricultural visa. Most communities had a majority of male respondents and respondents between the ages of 26 and 54, which is similar to national demographic information reported by the National Agricultural Workers Survey (NAWS). The majority of respondents were ethnically Hispanic in all communities, ranging from a low of 65% in Collier County to a high of 100% in Hidalgo County (see Figure 4). In addition to assessing if respondents identified as racially Indigenous, a composite variable was created to measure Indigenous identity using both race and language, a method used in the NAWS. Figure 3 provides the percentage of respondents who were racially or linguistically Indigenous, while Figure 2 provides the information for respondents who identified as racially Indigenous.
Figure 2. Race of respondents by community

- Monterey, Tulare, Kern, CA: 55% Black or African American, 35% Indigenous, 8% White, 1% Other
- Hidalgo, TX: 25% Black or African American, 35% Indigenous, 19% White, 1% Other
- El Paso, TX/Doña Ana, NM: 2% Black or African American, 4% Indigenous, 44% White, 2% Other
- Calhoun, Coahoma, MS: 7% Black or African American, 16% Indigenous, 23% White, 4% Other
- Collier, FL: 19% Black or African American, 17% Indigenous, 26% White, 29% Other

Photo credit: Yvette Salinas
Figure 3. Respondents who identified as racially Indigenous or spoke an Indigenous language by community

- Monterey, Tulare, Kern, CA: 13%
- Hidalgo, TX: 21%
- El Paso, TX / Doña Ana, NM: 5%
- Calhoun, Coahoma, MS: 19%
- Collier, FL: 30%

Figure 4. Respondents who identified as Hispanic/Latinx by community

- Monterey, Tulare, Kern, CA: 99%
- Hidalgo, TX: 100%
- El Paso, TX / Doña Ana, NM: 99%
- Calhoun, Coahoma, MS: 76%
- Collier, FL: 54%

Figure 5. Gender of respondents by community

- Monterey, Tulare, Kern, CA: Male 39%, Female 61%
- Hidalgo, TX: Male 28%, Female 72%
- El Paso, TX / Doña Ana, NM: Male 28%, Female 72%
- Calhoun, Coahoma, MS: Male 7%, Female 93%
- Collier, FL: Male 20%, Female 80%
**Figure 6. Age of respondents by community**

- **18-25 years**
  - Monterey, Tulare, Kern, CA: 12%
  - Hidalgo, TX: 6%
  - El Paso, TX/Doña Ana, NM: 20%
  - Calhoun, Coahoma, MS: 16%
  - Collier, FL: 11%
- **26-54 years**
  - Monterey, Tulare, Kern, CA: 78%
  - Hidalgo, TX: 66%
  - El Paso, TX/Doña Ana, NM: 41%
  - Calhoun, Coahoma, MS: 16%
  - Collier, FL: 14%
- **55+ years**
  - Monterey, Tulare, Kern, CA: 10%
  - Hidalgo, TX: 20%
  - El Paso, TX/Doña Ana, NM: 13%
  - Calhoun, Coahoma, MS: 15%
  - Collier, FL: 14%

**Figure 7. Immigration status of respondents by community**

- **H-2A Guest Worker**
  - Monterey, Tulare, Kern, CA: 80%
  - Hidalgo, TX: 80%
  - El Paso, TX/Doña Ana, NM: 80%
  - Calhoun, Coahoma, MS: 72%
  - Collier, FL: 66%
- **U.S. Citizen/LPR**
  - Monterey, Tulare, Kern, CA: 4%
  - Hidalgo, TX: 14%
  - El Paso, TX/Doña Ana, NM: 2%
  - Calhoun, Coahoma, MS: 4%
  - Collier, FL: 3%
- **Undocumented**
  - Monterey, Tulare, Kern, CA: 3%
  - Hidalgo, TX: 1%
  - El Paso, TX/Doña Ana, NM: 0%
  - Calhoun, Coahoma, MS: 15%
  - Collier, FL: 11%
- **Other/Unknown**
  - Monterey, Tulare, Kern, CA: 39%
  - Hidalgo, TX: 1%
  - El Paso, TX/Doña Ana, NM: 0%
  - Calhoun, Coahoma, MS: 34%
  - Collier, FL: 33%

*LPR = Legal permanent resident.*
RISK FACTORS FOR COVID-19 TRANSMISSION AND ACCESS TO COVID-19 TRAINING

A substantial percentage of respondents in all communities reported experiencing systemic risk factors for COVID-19 transmission. The percentage of respondents who resided in overcrowded housing (defined as having more than one person per room in the home) ranged from 26% in El Paso and Doña Ana counties to a high of 69% in Calhoun and Coahoma counties (see Figure 8). Many respondents also reported sharing transportation to work with persons outside of their household, ranging from 23% in Calhoun and Coahoma counties to 85% in Collier County (30% in Monterey, Tulare, & Kern; 47% in Hidalgo; 58% in El Paso & Doña Ana). A substantial percentage of respondents did not receive a training in the workplace on COVID-19 safety that included information on hand washing, mask usage, physical distancing, and isolation and quarantine in their preferred language (18% in Monterey, Tulare, & Kern; 40% in Hidalgo; 26% in El Paso & Doña Ana; 31% in Calhoun & Coahoma; 21% in Collier).

Figure 8. Percent of respondents who reside in overcrowded housing.*

* The definition of an overcrowded household follows the U.S. Census definition, which is a ratio of greater than one person per room (excluding bathrooms and garages).
COVID-19 TESTING, PREVALENCE, AND VACCINATION

Respondents were asked if they knew or believed they had COVID-19 at some point during the pandemic, and if they had ever been tested for COVID-19. Both the self-reported prevalence of COVID-19 and the percentage of respondents who had been tested at least once for COVID-19 varied substantially in each community. The self-reported prevalence of COVID-19 was highest in Monterey, Tulare, & Kern counties (26%), and lowest in Calhoun, Coahoma, and Collier counties (10%). Calhoun and Coahoma counties had the lowest percentage of respondents who had been tested for COVID-19 (23%), and was highest in Monterey, Tulare, Kern, and Collier counties (61%) (see Figure 9).

Figure 9. Self-reported prevalence of COVID-19 and percentage of respondents tested for COVID-19 by community

COVID-19 vaccination coverage also varied greatly by community. Full vaccination coverage* with a U.S. Food and Drug Administration (FDA)- or World Health Organization (WHO)- approved vaccine was lowest in Calhoun and Coahoma counties (40%) and highest in El Paso and Doña Ana counties (71%). The percentage of respondents who had not been vaccinated at all was highest in Hidalgo and Collier counties (32%) (see Figure 10).

Figure 10. COVID-19 vaccination status* by community

*Fully vaccinated includes respondents who received one dose of the Janssen/Johnson and Johnson vaccine or two doses of any COVID-19 vaccine approved by the U.S. Food and Drug Administration or the World Health Organization. Partially vaccinated respondents include those who received one dose of a two-dose FDA- or WHO-approved vaccine, and those who received an unapproved vaccine. Not vaccinated respondents did not receive any COVID-19 vaccine.
Overall, the percentage of respondents who were unvaccinated and did not want to be vaccinated against COVID-19 was low, ranging from a low of 2% in El Paso and Doña Ana counties to a high of 12% in Hidalgo and Collier counties (see Figure 11). Respondent opinions about wanting the vaccine, not wanting the vaccine, or being undecided were similar among unvaccinated respondents in all five communities. Almost identical percentages of unvaccinated respondents indicated that they wanted to receive a COVID-19 vaccine in all communities (11-12%).

Figure 11. Desire to receive COVID-19 vaccination among unvaccinated respondents by community
LIMITATIONS AND RECOMMENDATIONS

These community assessments have several limitations. All data are self-reported, and selection of respondents was not randomized. Survey respondents should not necessarily be viewed as a representative sample of all farmworkers in the communities, but rather as a diverse non-random sample to capture information from the different populations of farmworkers in these counties. Data collection took place over an extended period in some communities, stemming from challenges with COVID-19 case surges and a hurricane occurring in Mississippi, so vaccination rates and self-reported COVID-19 prevalence likely changed over the period of data collection in Monterey, Tulare, Kern, Calhoun, Coahoma, El Paso, and Doña Ana counties. Data were collected within a three-day period in Hidalgo and Collier counties. Despite these limitations, these assessments were highly successful in reaching populations of farmworkers who are often very difficult to reach in other surveys, including Indigenous persons, persons with H-2A visas, and undocumented persons.

Because each community differed significantly, recommendations specific to each community can be found in each community’s assessment report (link). Overall, vaccination efforts for farmworkers in these communities have been moderately successful, but efforts need to continue to ensure that farmworkers have access to COVID-19 testing and FDA- or WHO-approved vaccines. Farmworkers in all communities also reported a high prevalence of risk factors for COVID-19 transmission, including residing in overcrowded housing and riding to work with persons outside of their household. Local farmworker support organizations, public health departments, and agricultural employers could all collaborate to better support their farmworker communities with increased access to COVID-19 vaccination and testing, and provide resources for high-quality housing, safe transportation, and linguistically and culturally sensitive education and interpretation resources.
ACKNOWLEDGEMENTS

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Cover photo credit: Erin Birney

REFERENCES


This summary focuses on results from the quantitative results, and results from qualitative data are forthcoming. Data were collected from August 1, 2021, through December 31, 2021. Respondents were classified as a farmworker if they had been employed in an industry under NAICS codes 111, 112, 1111, or 1112, which includes both crop and animal production and support activities for those industries. They were eligible to participate if they had worked in agriculture one day or more since March 15, 2020. The quantitative data was collected using a phone or in-person survey in English, Spanish, and Haitian Creole. The survey examined farmworkers' knowledge, attitudes, and practices related to the COVID-19 emergency with a focus on vaccination coverage, as well as structural factors that CDC and other federal, state, and local agencies and organizations could address, such as barriers to safety, healthcare access, and COVID-19 testing and vaccination. Participant recruitment was conducted using two different methods to adapt to fluctuations in COVID-19 case numbers during the data collection process. Surveys conducted over the phone relied on local organizations to recruit and screen respondents. Local organizations were encouraged to identify diverse groups of farmworkers for the survey and could recruit them during outreach events or from existing client databases. Surveys conducted in-person were done by trained NCFH staff in partnership with local organizations. NCFH staff developed lists of H-2A housing and work sites, community sites frequented by farmworkers, and non-H-2A farm addresses and visited a random selection of these sites at to recruit respondents. Respondents were paid $30 for their time, and the surveys generally lasted between 15-30 minutes, but could last up to an hour if an interpreter was required.

The qualitative component consisted of in-depth interviews with farmworkers and agricultural employers and key informant interviews with agricultural experts or representatives of farmworker-serving organizations and delved more deeply into areas raised during the survey. An analysis of the qualitative interviews is forthcoming. Farmworkers were identified by local organizations or during survey data collection. Employers were generally cold-called or identified by local organizations. Farmworker experts and representatives of farmworker-serving organizations were identified through NCFH’s database of farmworker-serving organizations and through snowball techniques. Interview respondents received $100 for their time, and generally lasted between 30-90 minutes. The project received a non-research determination from the CDC and was exempt from institutional review board review.

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