

# Farmworker COVID-19 Community Assessments

Sampson County, NC

MAY 2022



# NCFH

National Center for Farmworker Health, Inc.

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## ACKNOWLEDGEMENTS

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# 1. INTRODUCTION

This report provides a profile of farmworkers and their experiences during the COVID-19 pandemic in Sampson County, North Carolina that was conducted as part of the Farmworker COVID-19 Community Assessments (FCCA) for the National Center for Farmworker Health (NCFH). 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, working, and living conditions. The purpose of the FCCA was to develop and implement data collection methodologies that could quickly be activated during a public health emergency, such as the COVID-19 pandemic. The rapid assessment provides CDC and others with actionable findings about farmworkers' experiences and recommendations on how to best meet their needs arising from the COVID-19 pandemic.

This report is one in a series of community assessments conducted with farmworkers in diverse rural communities in different parts of the U.S. Sampson County was selected as part of the national assessment project due to the high number of farmworkers in the region, including H-2A guest workers and domestic farmworkers. H-2A guest workers are foreign nationals who receive a temporary visa to work in agriculture in the U.S, and are do not bring their spouse or children with them to the U.S. (1)



# 2. BACKGROUND ON SAMPSON COUNTY

Sampson County has a population of approximately 59,000 people and has a higher percentage of adult Spanish speakers than the state average.(2,3) Sampson County ranks second in the state for highest overall total sales from agricultural products, with the county being first in the state for crop sales and second for livestock sales.(4) The county is home to 960 farms utilizing 301,280 acres of land, making agriculture a leading industry in Sampson.(4) Soybeans cover the most acreage in the county, but vegetables, melons, potatoes and sweet potatoes bring in the most sales of all crops.(4) Meanwhile hog production leads livestock sales.(4)

Figure 2.1: Sampson County in North Carolina



Table 2.1. Key agricultural data for Sampson County

County Population	Number of Farms	Acres of Farm Land	Average Farm Size	Top Crops (sales)	% of Farms that Hire Labor
59,036	960 farms	301,248 acres	314 acres	Vegetables, Melons, Potatoes and Sweet Potatoes	49%

Sources: U.S. Census of Agriculture 2017, U.S. Census Bureau.

NCFH estimates that there are approximately 7,331 farmworkers in Sampson County. This number underestimates the number of farmworkers in the area. Migration and seasonality in the area likely influence the underestimation of the farmworker labor force. The number of H-2A guest workers has increased by 40% between 2017 (2,009) and 2021 (2,800). In 2021, approximately 2,800 H-2A guest workers were employed in the county, with the number of H-2A guest workers peaking in May and June.(5)

Figure 2.2: Sampson County H-2A Guest Workers Present per Month, 2021

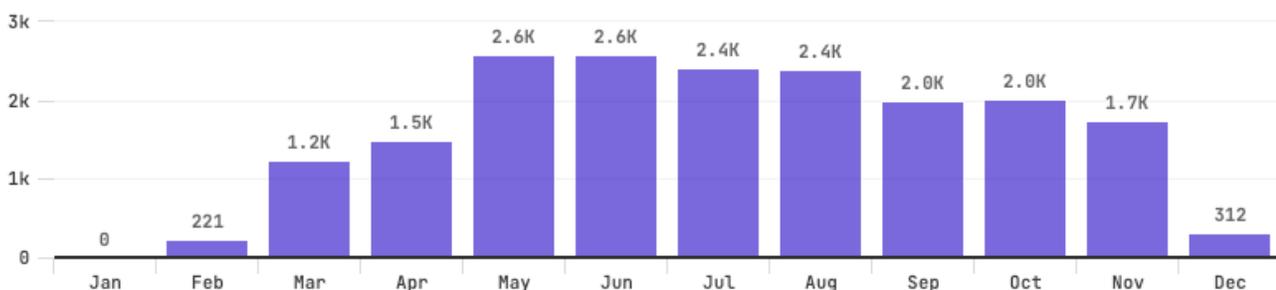


Image: NCFH Farm Labor Data Dashboard

# 3. METHODOLOGY

The FCCA's methodology included both quantitative and qualitative components based on the CDC's rapid community assessment methodology.<sup>(6)</sup> To determine community sites and best practices for recruitment of respondents, NCFH relied on information shared from key stakeholders: Manos Unidas, North Carolina Farmworkers' Project, NC Cooperative Extension, Farmworker Safety Team, and NC Farmworker Health Program. NCFH contracted with North Carolina Farmworkers' Project and Manos Unidas outreach staff to collect farmworker surveys alongside NCFH and CDC staff. This assessment did not need IRB approval as it received a non-research exemption by the CDC. This report summarizes quantitative data from survey respondents and qualitative data from interview participants and community stakeholder meetings.

Quantitative survey respondents were eligible to participate if they were a farmworker, defined as individuals who had been employed in an agricultural industry under NAICS codes 111, 112, 1111, or 1112, which includes both crop and animal production, as well as support and auxiliary support industries. They were eligible to participate if they had worked any of these agricultural sectors one day or more since March 15, 2020. The quantitative data was collected using in-person survey. 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, testing and vaccination.

Respondents were recruited by NCFH staff and contractors at a variety of locations, including randomly selected employment and housing sites, and non-randomly selected community sites such as check cashing stores, grocery stores, laundromats, restaurants, and labor bus stops. Before participating in the survey, all respondents were provided with a verbal informed consent that emphasized that all data collected would be anonymous, no individual data would be shared publicly, that they could stop participating in the survey at any time, and that they did not have to answer all the questions if they did not wish to. The survey took between 15 and 30 minutes to complete, and survey respondents received a \$30 gift card for their participation. The surveys were conducted as an in-person interview primarily in Spanish, with a few conducted in English. Ad-hoc interpretation for Mesoamerican language speakers was used when needed. Descriptive statistics for the survey data are provided in the key findings section below. All survey data are unweighted.

Qualitative interviews were conducted with two different groups: 1) farmworkers and 2) key informants/farmworker experts including farmworker organization representatives, and farmworker advocates. Each interview lasted approximately 30-60 minutes, and participants were paid \$100 each for their participation by check. Interviews were conducted virtually and over the phone in English or Spanish. Farmworkers were recruited from survey participants or word of mouth from local outreach workers. Key Informants were recruited from stakeholders in the region and/or from referral of other key informants. Other FCCAs have included employer interviews, however no employers were interviewed for the Sampson County assessment due to issues in recruitment (additional information found in the limitations section).

# 4. KEY FINDINGS

A total of 336 surveys were completed in-person in Sampson County, NC by NCFH staff with help from local outreach workers from Manos Unidas and North Carolina Farmworkers' Project. Survey data collection took place over April 29 – May 1, 2022. All surveys were conducted in English or Spanish, with two surveys conducted with ad-hoc Mesoamerican Language interpretation. Nine interviews in total were conducted: four key informant interviews with local farmworker experts and representatives of local farmworker-serving organization and five in-depth interviews with farmworkers from Sampson County. All interviews were conducted in English or Spanish.

## DEMOGRAPHICS

The majority of respondents surveyed were male (74%), with a median age of 39 years, and were born in Mexico (85%). A little over half of respondents held an H-2A guest worker visa (53%) and about one-third of respondents were undocumented (37%). Approximately half of all respondents (54%) reported migrating for work in the past 12 months.\* The majority of respondents spoke Spanish currently, with 67% being monolingual speakers. Nine out of ten respondents reported knowing English “a little” (38%) or “not at all” (51%).

Demographics of farmworkers have been changing over the past years according to interview participants. Participants spoke of seeing “increases [in] number of H-2A workers arriving to the area” and noticing “less and less seasonal and migrant farmworkers”. Some noted the ability of H-2A guest workers to come to the area through the North Carolina Growers Association. This employer assists their member farmers to make it easier to have a stable workforce through the H-2A program by doing the recruitment, visa application process, and acting as a joint employer for H-2A guest workers. This has facilitated the employment of many H-2A workers in the state. However, it was also noted that some of the increase in H-2A workers may be due to fewer domestic workers interested in agricultural work.

*“I feel like each year we have less and less seasonal and migrant farm workers. It could be probably because they no longer want to be working in ag or their kids are growing up and kids are not trying to be an ag worker as their parents.”*  
- Key Informant



\*H-2A guest workers are classified as migrating for agricultural work in the last 12 months. The majority of total respondents who migrated for agricultural work in the last 12 months are H-2A guest workers.

## MESOAMERICAN INDIGENOUS WORKERS

While there is no official definition for who are considered Indigenous populations, it is recognized that Indigenous populations continue to practice social and cultural traditions that pre-date colonial societies.<sup>(7)</sup> Latin America's Indigenous populations are diverse in their culture, language, food, and religious & spiritual practices. Historically and currently, Indigenous populations have experienced higher levels of discrimination and violence, facing attacks on their cultural practices including language, lifestyle and food. <sup>(8)</sup> This is evident by the ongoing violence experienced by these populations since the beginning of colonization and the continued marginalization of Indigenous peoples in social and governmental systems.<sup>(9,10)</sup> Starting in the 1960s, the first documented en masse migration of Mesoamerican Indigenous populations to the U.S. happened through the Bracero program. Currently the number of Mesoamerican Indigenous populations in the U.S. keeps growing due to social and economic push-pull factors and due to displacement from violence and environmental reasons, such as climate change.<sup>(9,11)</sup>

The racial and ethnicity categories traditionally used for U.S. census purposes may not fully encapsulate Indigenous identity of Mesoamerican Indigenous individuals or be recognized by this population. Due to the discrimination experienced, they may not want to be identified as being racially Indigenous. In this survey following the National Agricultural Workers Survey (NAWS) convention, NCFH created a composite metric to identify Indigenous respondents, utilizing a combination of responses from language spoken as a child and currently as an adult, or racially identifying as Indigenous.<sup>(12)</sup>

In this sample, 133 respondents were identified under the Indigenous metric, comprising 40% of all respondents. This is about seven times higher than that of the national percentage (6%) of farmworkers that identify as Indigenous based on the NAWS.<sup>(12)</sup> There were 11 Indigenous languages captured in this sample, including Amuzgo, Chol, Mam, Mixtec, Nahuatl, Purépecha, Tepehuán, Totonac, Triqui, Tzeltal, and Tzotzil. The top languages spoken by Indigenous respondents were Mixtec, Tzotzil, and Purépecha. Mixtec is a language family in Mexico with the most variants, with a total of 81. The states with the largest number of speakers are Guerrero, Oaxaca and Puebla.<sup>(13)</sup> Tzotzil is in the Mayan language family and is primarily spoken in the central region of the Mexican state of Chiapas.<sup>(14)</sup> Purépecha is a language isolate primarily spoken in the Mexican state of Michoacan. <sup>(15)</sup>

Even with a large proportion of Indigenous farmworkers in the area, individuals who speak a Mesoamerican language in Sampson County face additional barriers to access health care and support services that non-Mesoamerican language speakers may not experience. It was noted in interviews with key informants that Mesoamerican language speakers were not able to get appropriate COVID-19 information and had restricted access to health care. Outreach to this population was also more difficult due to lack of culturally and linguistically appropriate materials and resources. A key informant voiced these concerns during an interview while pointing out that there has been increased international worker recruitment in areas and countries with a high proportion of Mesoamerican language speakers. This increase may in part be attributed to the cooperative agreement signed between the Guatemalan and U.S. governments in 2020 to increase the recruitment of Guatemalan citizens to the H-2A program.<sup>(16)</sup>

*"I mean, nothing is available in the languages that they speak. There's even just a lot of issues doing basic outreach to those communities. The U.S. government is encouraging employers to recruit from countries like Guatemala for H-2A workers with much higher rates of Indigenous speaking, Indigenous language speaking, farmworkers."*

*- Key Informant*

Table 4.1: Demographics <sup>1</sup>

Demographic Characteristic	Frequency (Percentage) N = 336
<b>Sex</b>	
Female	86 (26%)
Male	250 (74%)
<b>Age group</b>	
18-25	34 (10%)
26-54	242 (72%)
55+	35 (10%)
No Answer <sup>2</sup>	25 (7%)
<b>Marital status</b>	
Married	202 (60%)
Single	76 (23%)
Civil union	42 (13%)
Divorced/Separated	16 (5%)
<b>Country of birth</b>	
United States	9 (3%)
Mexico	281 (84%)
Guatemala	17 (5%)
Honduras	23 (7%)
Other	6 (2%)
<b>Race<sup>2</sup></b>	
White	56 (17%)
Indigenous	18 (5%)
Other	248 (74%)
<i>Hispanic/Latinx</i>	225 (91%)
<i>Mestizo</i>	11 (4%)
<i>Moreno</i>	11 (4%)
Did not report	14 (4%)
<b>Ethnicity</b>	
Hispanic/Latinx	326 (97%)
Not Hispanic/Latinx	9 (3%)
<b>Racially or Linguistically Indigenous<sup>3</sup></b>	
Yes	133 (40%)
No	203 (60%)
<b>Immigration status</b>	
H-2A work visa	177 (53%)
Undocumented	125 (37%)
Permanent resident	16 (5%)
U.S. Citizen	11 (3%)
Other visa	4 (1%)
<b>Migrated to work in agriculture in the last 12 months<sup>4</sup></b>	
Yes	183 (54%)
No	153 (46%)

1. If Unknown is <5%, responses are not included in the table. Percentages are rounded and may not sum to exactly 100%.

2. Seven percent (7%) of respondents' age was classified as "No Answer" due to missing data..

3. Respondents who selected more than one race were included in the "Other/multiple races" category.

4. Following the National Agricultural Workers Survey (NAWS) convention, NCFH created a composite metric to identify Indigenous respondents, utilizing a combination of responses from language spoken as a child and currently as an adult, or racially identifying as Indigenous. (12)

## HOUSING, HOUSEHOLD CHARACTERISTICS, AND TRANSPORTATION

Of the 336 respondents, over half of workers surveyed lived in mobile homes, trailers, or RVs (57%), and about one in five lived in barracks (19%). The average household size was six people. Approximately half of the respondents (49%) traveled on a labor bus to work. Additionally, 14% of respondents rode to work with a 'raitero', and 6% rode with a co-worker or relative. These three transportation methods increase the risk of COVID-19 transmission due to individuals from different households traveling together.(17)

About half of respondents reported experiencing major risk factors for COVID-19 transmission in their housing and transportation.(17) Approximately two out of five respondents (43%) live in an overcrowded household

and 62% of respondents live in employer-provided housing. Workers living in employer-provided housing frequently experience overcrowding and often share housing with non-family members, a transmission risk factor for infectious diseases such as COVID-19.(17)

Farmworker housing and living conditions were noted as key factors prohibiting proper execution of safety measures. One key informant pointed out that in most cases “there wasn’t like a different place outside of their work where they could go and isolate [from each other]”, and another interviewee identified “congregated housing” as a huge barrier in controlling and containing COVID-19 outbreaks.

**Table 4.2: Housing Type, Transportation, and Risk Factors for Infectious Disease Transmission** <sup>1</sup>

Characteristic	Frequency (Percentage) N = 336
<b>Housing Type</b>	
'Traila'/mobile home/trailer house/RV	190 (57%)
Dormitories/barracks/shelters	64 (19%)
House	76 (23%)
Other	6 (2%)
<b>Transportation to Work</b>	
Drives car	97 (29%)
Labor bus	165 (49%)
Rides with 'raitero'	46 (14%)
Ride in the car of a relative or co-worker	20 (6%)
Other	7 (2%)
<b>Housing and transportation risk factors</b>	
Lives in overcrowded household <sup>2</sup>	144 (43%)
Lives in employer-provided housing	209 (62%)
Travels to work with persons outside the household	166 (49%)

1. Does not include Other and No answer responses (<5% each)

2. The definition of an overcrowded household follows the U.S. Census definition (17) which is a ratio of greater than one for the ratio of persons per room (excluding bathrooms and garages).

*“So I think again, like the congregated housing and tight or like very limited work space is a huge barrier to be able to try to...control or contain a virus.”*

*- Key Informant*

## GENERAL HEALTH CARE ACCESS & SOURCES OF HEALTH INFORMATION

A small proportion of respondents (21%) reported needing health care services in the previous 12 months. Of those that needed health care services, 96% received medical care when they needed it. Among those that sought health care in the U.S., more than half of respondents (57%) sought this care at a clinic.

Survey respondents were asked how much they trusted health information from various sources. Doctors and nurses were the most trusted messenger with 63% of respondents reporting that they “always” and 30% reporting that they “sometimes” trusted the health information given by doctors and nurses. Community health workers were also seen as trusted health information messengers with 57% of respondents reporting they “always” and 30% reporting they “sometimes” trusted the health information provided by community health workers. Social media was the least trusted source of health information – 33% of respondents reported that they did not trust the health information coming from various social media platforms at all.

**Table 4.3: Health care utilization and trusted sources of health information**

Characteristic	Frequency (Percentage) N = 336
<b>Needed health care services in the past 12 months</b>	70 (21%)
Received medical care when needed	67 (96%)
<b>Most common sources of health care services among those who utilized health care in the U.S. (n=67)<sup>1</sup></b>	
Clinic	38 (57%)
Migrant or Community Health Clinic	12 (18%)
Hospital	8 (12%)
Other	2 (3%)
No answer	7 (10%)
<b>Sources or trusted information for health information<sup>2</sup></b>	
Doctor/nurse	211 (63%)
Relatives/friends	90 (27%)
Community health worker	188 (57%)
Social media	42 (13%)
TV news	61 (18%)
U.S. Government	118 (36%)
Employer	131 (40%)

1. Respondents could choose more than one answer. Only most common responses reflected in the table, others included private doctor, pharmacy, work, or abroad.
2. Respondents could choose more than one answer. Frequency and percentages reflect responses for “Always” trust health information from selected source.



## COVID-19 SAFETY TRAINING AND INSTRUCTION

Survey respondents were asked if they had received instructions or training at work about washing their hands, how and when to cover their face, social distancing, and isolation procedures. One in five respondents (22%) had not received a comprehensive training that covered all four COVID-19 safety topics. Approximately one-third of respondents (30%) had not received a comprehensive training in their preferred language. Almost all respondents (99%) reported receiving training or instruction in at least one of the topics.

Respondents were also asked about COVID-19 prevention measures taken at work. Approximately two-thirds of respondents (60%) reported regularly having temperature and symptoms checks before starting work. Face masks (83%) and hand washing stations (81%) were regularly provided at work. Interview participants noted that there were various precautionary measures that their employers implemented at the beginning of the pandemic. One interview participant noted that their employer reduced the number of people operating machinery to reduce exposure. In their interviews, farmworkers mentioned they were given instructions to stay at home if they experienced symptoms or someone in their household was sick. However, interview participants stated language as a barrier to knowing COVID-19 safety precautions; one Spanish-speaking farmworker explained that they were not sure what the isolation protocols may have been “because I don’t understand much English” and this information was only shared with them in English.

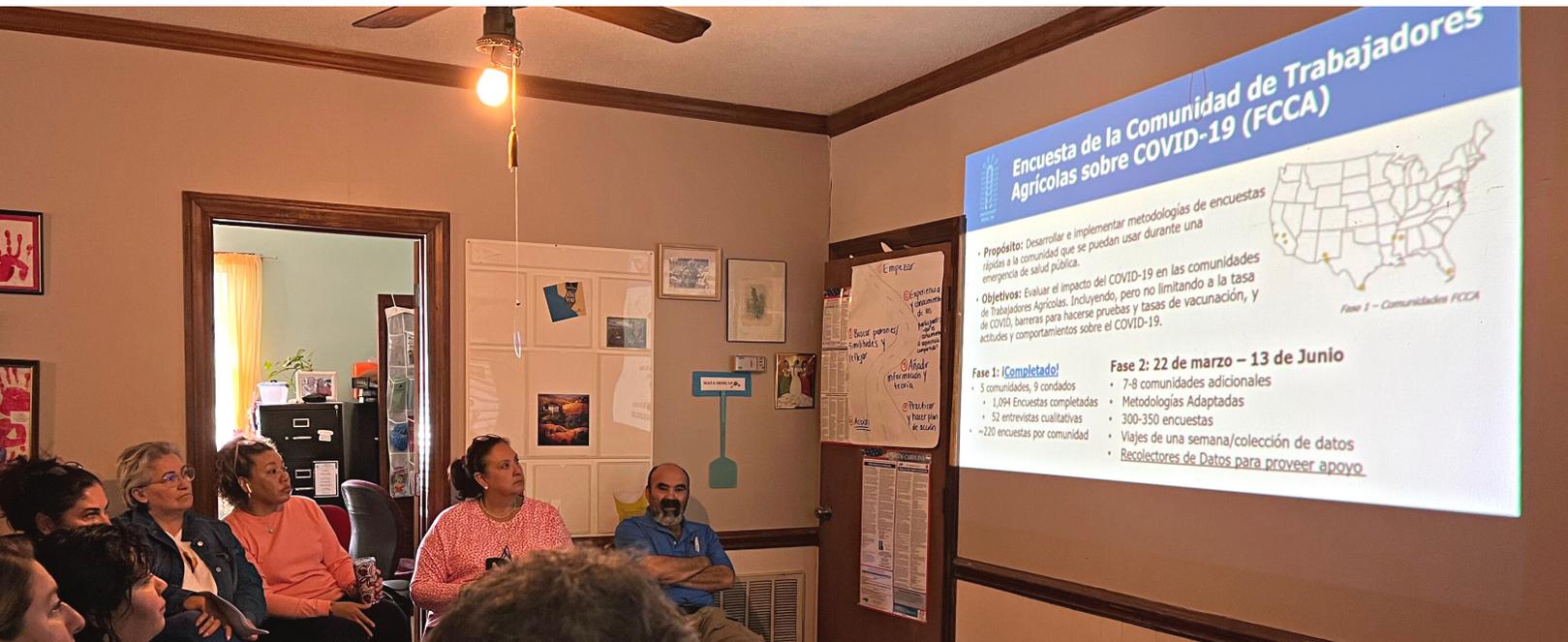
**Table 4.4: COVID-19 Safety Training and Instruction**

Characteristic	Frequency (Percentage) N = 336
<b>Workplace COVID-19 safety training received</b>	
Received training in at least one topic <sup>1</sup>	331 (99%)
Received training in all four topics	263 (78%)
Received all four trainings in preferred language	234 (70%)
<b>COVID-19 prevention measures given at work<sup>2</sup></b>	
Check temperature and ask about COVID-19 symptoms	201 (60%)
Provide face masks	279 (83%)
Provide hand washing station	271 (81%)

1. Topics included 1) hand washing, 2) physical distancing, 3) use of face coverings, and 4) quarantine or isolation procedures.

2. Respondents were able to choose more than one response.





## IMPACT OF OUTREACH WORKERS AND COMMUNITY HEALTH WORKERS

Survey respondents were asked if they had received instructions or training about social or physical distancing, washing their hands, how and when to cover their face, and isolation procedures by outreach workers or community health workers (CHWs). The majority of respondents received trainings in all four subjects from an outreach worker or CHW. Four in five respondents received instructions on social or physical distancing (78%), hand washing (79%), and mask wearing (78%) from outreach workers or CHWs.

Respondents were also asked if they received any personal protective equipment (PPE) from outreach workers or CHWs. The majority of respondents received face masks (78%) and hand sanitizer (78%) from an outreach worker or CHW. Approximately one-third (30%) of respondents had received an at-home COVID-19 test from an outreach or community health worker.

**Table 4.5: COVID-19 Safety Training, Instruction and PPE Distribution by Outreach Workers and Community Health Workers**

Characteristic	Frequency (Percentage) N = 336
<b>Received COVID-19 safety training from outreach worker/CHW</b>	
Social/Physical distancing	261 (78%)
Hand washing	267 (79%)
Mask wearing	261 (78%)
Isolation procedures	225 (70%)
<b>Received PPE from outreach worker/CHW</b>	
Face mask	261 (78%)
Hand sanitizer	263 (78%)
COVID-19 At-Home test kit	101 (30%)

## COVID-19 TESTING AND ILLNESS

More than one-third of respondents (35%) self-reported that they had contracted COVID-19 at some point in the pandemic. Overall, slightly over half (57%) of respondents reported taking a COVID-19 test at least once, of which 35% received a positive test result. Of those that ever received a test, 81% reported having no difficulties or concerns with the COVID-19 test.

Respondents were asked what actions they took once they knew or thought they had contracted COVID-19. Of those who knew or thought they had contracted COVID-19, or who received a positive COVID-19 test, (n=118), 60% reported isolating from family members or roommates, and 86% reported wearing mask or facial coverings, while only 36% sought medical care. Almost one in five (19%) respondents who believed they had COVID-19 or received a positive COVID-19 test result continued working.

*“I know personally, like some smaller camps that have like one or two barracks that they specifically designated for quarantine. But other than that, there wasn’t like a different place outside of their work where they could go and isolate.”*  
 - Key Informant

These responses indicate that farmworkers took preventative actions to minimize infecting others, once they knew or thought they had COVID-19. Many farmworkers faced issues with quarantining or isolating as there was a lack of separated spaces to do so. A key informant stated that very few labor camps had quarantine options, and those were mostly located in smaller camps. Workers in larger camps or non-employer provided housing had limited access to private spaces.

*“Los trabajadores de hecho, aun sintiéndose enfermos ellos querían seguir trabajando porque obviamente no querían, este, perder de ganar su dinero para mandar a sus familias, este, para tener para que comer.”*

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*“The workers in fact, even when feeling sick wanted to continue working because obviously they didn’t want to stop making money to be able to send back to their families, to be able to eat.”*  
 - Community Meeting Stakeholder

**Table 4.6: COVID-19 Illness and Testing**

Characteristic	Frequency (Percentage) N = 336
<b>COVID-19 illness</b> Self-reported COVID-19 illness	118 (35%)
<b>COVID-19 testing</b> Had taken COVID-19 test at least once <i>Received a positive result</i>	191 (57%) 66 (35%)
<b>Actions taken among farmworkers who knew or believed they had contracted COVID-19<sup>1</sup> (n=118)</b>	
Isolated from family or roommates	71 (60%)
Wore a mask or facial covering	102 (86%)
Participated in social gatherings	4 (3%)
Sought medical care	43 (36%)
Continued working	23 (19%)

1. Respondents could choose more than one answer. Respondents include those that thought they had contracted COVID-19 and those that received a positive COVID-19 test.

## COVID-19 VACCINATIONS

Close to four out of five (78%) survey respondents were fully vaccinated against COVID-19 with a completed series of an FDA or WHO approved vaccine. Less than a third of all respondents reported being fully vaccinated and receiving at least one booster dose (29%).

Seventeen percent (17%) of respondents had not received a vaccine for COVID-19. Among survey respondents that were unvaccinated, 60% did not want to receive the vaccine (10% of the total sample). Almost one-third of respondents who were unvaccinated (32%) were still undecided about receiving the COVID-19 vaccine (5% of the total sample) and 7% did want to receive the vaccine (1% of total sample). The most common reasons unvaccinated respondents were wary of getting the vaccine were fear of getting vaccinated (21%), not trusting the government (17%), and fear of the side effects (15%).

Interview participants noted that many farmworkers received the primary series of a COVID-19 vaccine, with some challenges. A major challenge was misinformation that led farmworkers to fear the side effects and the harms these would cause. An interview participant noted that based on side effects of the vaccine, “it appeared they were giving us COVID”. Another challenge brought up was the misconception among some farmworkers that they needed proof of identification or health insurance to receive the vaccine. Farmworker interview participants noted both intrinsic and extrinsic motivators to receive the primary vaccine series, even if some experienced initial hesitation about getting vaccinated. Some noted the U.S. vaccination requirement for international guest workers to be

*“No, aun no, no, no, en México quise ir [para la dosis de refuerzo] pero ya no me dio tiempo de ir.” - Farmworker*

*“No, not yet, no, no, in Mexico I wanted to [get the booster] but I didn’t have time to go.” - Farmworker*

allowed entry into the country, while others noted not wanting to have to experience being sick from COVID-19 and keeping their family safe.

The most common location where respondents received their first COVID-19 vaccine dose was at a community event in the U.S. (32%), followed by a Migrant Health Center or Community Health Center in the U.S. (28%). Only 5% of survey respondents received their first COVID-19 vaccine dose in another country. A key informant interview participant reinforced the findings that a large proportion of vaccinations occurred at community events stating that because the government prioritized vaccinations to farmworkers, they were able to provide vaccinations during outreach.

A smaller proportion of respondents received at least one booster dose (29%) after completing the primary COVID-19 vaccine series. The low uptake of boosters was also observed by key informants, one noting “they [farmworkers] don’t want to get the booster”. In their interview, a farmworker brought up timing related to their visa process and “not having time to go [get the booster dose] before having to come here [U.S.]”, as well as timing of doses and peak seasons making it difficult to obtain a booster dose. Another farmworker explained they were afraid of side effects from the booster, which might cause them to lose work during the busy season.

*“Procure de hacérmela [dosis de refuerzo] que terminara la plantación, porque no quería hacérmelo como ahorita estamos plantando y estamos completito. No quería faltar a mi trabajo.” - Farmworker*

*“I tried to do it [get booster dose] when planting ends, because I didn’t want to get it now that we are planting and we are all busy. I didn’t want to miss work.” - Farmworker*

**Table 4.7: COVID-19 Vaccinations 1**

Characteristic	Frequency (Percentage) N = 336
<b>COVID-19 vaccinations</b>	
Fully vaccinated <sup>2</sup>	263 (78%)
Partially vaccinated	9 (3%)
Not vaccinated	57 (17%)
<i>Wants to receive vaccine</i>	4 (7%)
<i>Undecided about vaccine</i>	18 (32%)
<i>Does not want vaccine</i>	34 (60%)
Unknown vaccination status <sup>3</sup>	7 (2%)
<b>COVID-19 booster status</b>	
Fully vaccinated and received at least one booster dose	97 (29%)
<b>Vaccination Location for first dose (n=279)</b>	
At work in the U.S.	64 (23%)
Community Event in the U.S.	89 (32%)
U.S. Migrant clinic/community health center	76 (28%)
U.S. Pharmacy	9 (3%)
Other country	15 (5%)
Other	25 (9%)
<b>Most common reasons for vaccine hesitancy among unvaccinated farmworkers (n=53)<sup>4</sup></b>	
Afraid of getting the vaccine	11 (21%)
Distrust of the government	9 (17%)
Afraid of side effects	8 (15%)
Afraid of getting infected at vaccine site	6 (11%)

1. If Unknown is <5%, responses are not included in the table.

2. 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.

3. Respondents that had received at least one dose of COVID-19 vaccine but did not know which vaccine they received were classified as an unknown vaccination status.

4. Respondents could choose more than one answer. Includes most common responses from respondents who reported they were unvaccinated and replied no, perhaps, don't know, or no answer to wanting to receive the vaccine.

Vaccination status varied by key demographic characteristics. Across all demographic groups, booster dose uptake was lower than the uptake of the primary series. In general, primary series and booster uptake were greater as age of respondents increased. A larger proportion of respondents aged 55 years and older were fully vaccinated (94%) and had received at least one booster dose (49%) compared to the other age groups. Respondents between the ages of 18 and 25 years had the lowest proportion of fully vaccinated (65%) and the lowest proportion of having received at least one booster dose (18%).

Over four out of five male respondents were fully vaccinated (84%), while only six out of ten female respondents were fully vaccinated (60%). This trend was also observed across sex for booster uptake. Over one-third of

*“ Para el cambio de opinión, para ponérmela, me llevó a que yo estoy haciendo un bien para mí y un bien para mis hijos. Porque si no me la pongo que ejemplo, le voy a dar a mis hijos, tampoco se las van a querer poner. Porque van a decirse tomo te la pones porque nos matas a nosotros y ni modo de decirle por sus bien de ustedes.” - Farmworker*

*“What changed my opinion, to get it [the vaccine], was because I am doing a benefit for myself and my children. Because if I don't get it what example am I giving my children, they will also don't want to get it. Because they will tell me how come you don't get it, why are you sending us to get it, I wouldn't be able to tell them it is for their wellness.” - Farmworker*

male respondents had received at least one booster dose (35%), while only one-tenth of female respondents had received at least one booster dose (12%). Other factors, such as immigrant status or being racially or linguistically Indigenous, may be confounding the relationship between vaccination status and sex.

Vaccination disparities were also observed when considering immigration status of respondents. Almost all H-2A guest workers were fully vaccinated (97%). Stakeholders and interview participants identified the vaccination clinics hosted at the main reception hub in the state for incoming H-2A guest workers as a key effort to vaccinate H-2A guest workers. While slightly over a third of U.S. citizens were fully vaccinated (36%), making them the group with the lowest proportion of fully vaccinated respondents, they also were the smallest group. Individuals without work authorization had the second lowest proportion of being fully vaccinated (58%) and had the second lowest booster uptake, with only 10% of having received a booster dose.

Figure 4.1: Percentage of Respondents Fully Vaccinated and Boosted by Age

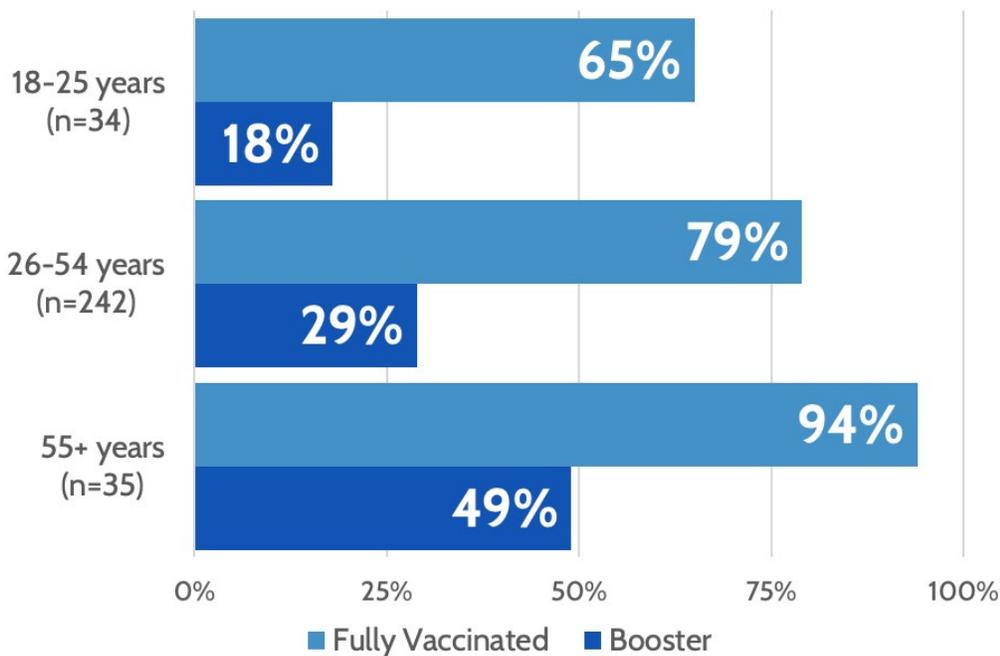


Figure 4.2. Percentage of Respondents Fully Vaccinated and Boosted by Sex

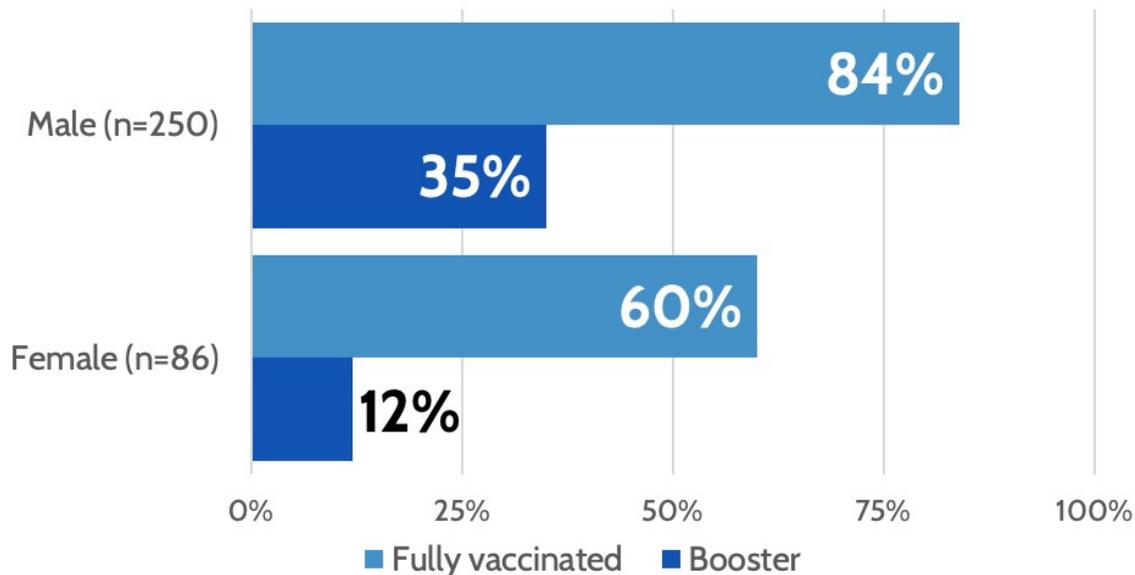


Figure 4.3: Percentage of Respondents Fully Vaccinated and Boosted by Immigration Status

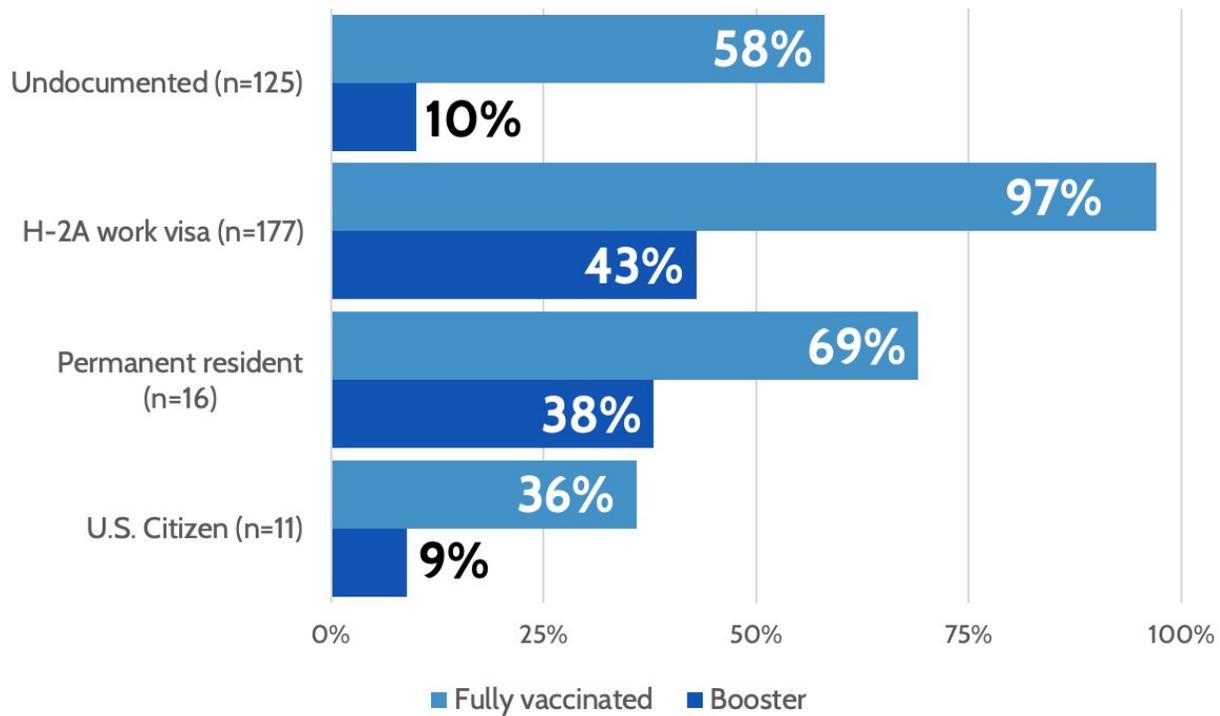
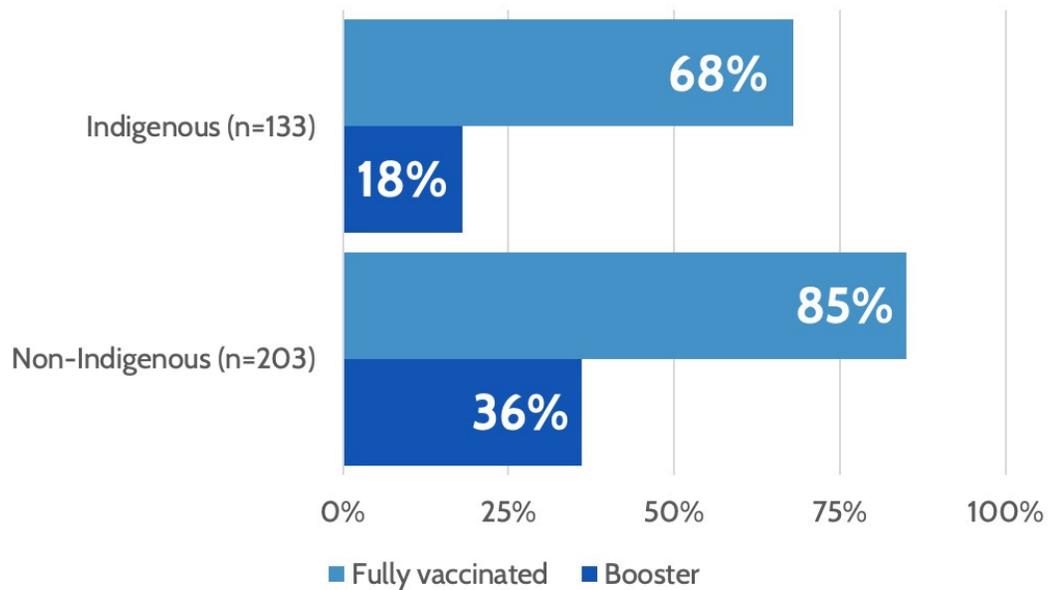


Figure 4.4: Percentage of Non-Indigenous vs Indigenous Respondents who are Fully Vaccinated and Boosted\*



\*Following the National Agricultural Workers Survey (NAWS) convention, NCFH created a composite metric to identify Indigenous respondents, utilizing a combination of responses from language spoken as a child and currently as an adult, or racially identifying as Indigenous. (12)

Additionally, vaccination disparities were also observed among Indigenous farmworkers. A smaller proportion of Indigenous respondents were fully vaccinated (68%), compared to non-Indigenous respondents (85%). This disparity was also observed with one booster dose uptake. Only one-fifth (18%) of Indigenous respondents had received at least one booster dose, compared to one-third (36%) of non-Indigenous respondents.

## IMPACT OF COVID-19 ON EMPLOYMENT AND INCOME

Even though they are considered “essential workers”, farmworkers experienced a loss of income and employment during the pandemic. Approximately one-third of respondents experienced a reduction of hours or income during the pandemic (31%), while 8% lost their job. Survey respondents also reported experiencing difficulty paying for basic needs such as food and utility bills (16%). Despite the challenges and difficulties faced by respondents, only a few received some form of assistance from the U.S. government (37%). Almost one-third of survey respondents received an economic stimulus check (32%). However, only 6% of respondent received food assistance and none received rent assistance.

Fear and anxiety among farmworkers during the pandemic were common themes brought up in interviews and at the community stakeholder meeting. Farmworkers discussed fear of catching the virus and other effects related to being infected, including economic anxiety, wanting to return home, or the isolation experienced from social distancing. Interview participants also brought up severe economic stress due to the pandemic. Key informant interview participants explained that they knew of some farmworkers who were forced to find other ways to supplement their income to get their needs met including selling homemade goods or farming for themselves.

*“Mi trabajo, bajo el trabajo, bajo el salario, bajo todo, faltaron cosas en la casa y porque no había más recursos para hacerlo, pero si cosas que tenía yo que hacer. No las hice por lo mismo de que no había recursos, Y entonces si se sintió feo. A veces no había días para la comida teníamos que sobrevivir a veces como fuera” - Farmworker*

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*“My job, I had less hours, less pay, less everything. There were things that were needed at home, there were no resources to do it, there were things I needed to do. I didn’t do them because there were no resources. It felt awful. There were days we didn’t have food, but we had to survive.” - Farmworker*

**Table 4.8: Impact of COVID-19 on Employment and Income**

Characteristic	Frequency (Percentage) N = 336
<b>Experiences the following during the pandemic<sup>1</sup></b>	
Difficulty obtaining childcare	11 (3%)
Lost job	26 (8%)
Divorced or separated	3 (1%)
Difficulty paying rent or mortgage	27 (8%)
Reduction of hours or income	105 (31%)
Difficulty paying basic needs	55 (16%)
Treated unfairly due to birth country or race/ethnicity	6 (1%)
None of these difficulties reported	161 (48%)
<b>Received U.S. government assistance<sup>2</sup></b>	<b>124 (37%)</b>
Economic stimulus check	108 (32%)
Food assistance	19 (6%)

1. Respondents could choose more than one answer.

2. Respondents could choose more than one answer. Includes most common responses.

# 6. CONCLUSION

## LIMITATIONS

This assessment had limitations. Survey respondents were not randomly sampled. Survey respondents should not necessarily be viewed as a representative sample of all farmworkers in the county, but rather as a diverse non-random sample that captures information from the very different populations of farmworkers in Sampson County. All survey data are self-reported. The data in this assessment is cross-sectional and only represents a brief snapshot in time. While data collection occurred at the beginning the peak agricultural season of Sampson County, workers in some agricultural sectors may have been missed due to having an earlier or later in the year peak season. Although the survey was conducted individually, there were instances in which bystanders were listening to the respondent's answers. This may have led to social desirability bias. The survey is only available in English and Spanish, this may have caused barriers in adequately capturing the responses of Mesoamerican Indigenous language speakers. Although ad-hoc in-person interpretation was used for two surveys, it is unknown if this led to a potential decline in data quality. This report is missing a key demographics experience to inform and provide context on the findings from surveys. Qualitative interviews with employers were not conducted in this community due to recruitment issues with non-response and loss to follow-up.

## DISCUSSION

The findings of both surveys and interviews outline the impact that COVID-19 has had on the farmworker community of Sampson County. The results showcase the amount of support and resources that are needed to increase access to health care, and better support farmworkers as they navigate their work and living spheres. Sampson County is home to multiple community-based organizations that support the well-being of farmworkers and have helped alleviate the impact of the pandemic. These organizations could benefit from increased resources and support to continue to work towards meeting the needs of their community and implement new programming to better serve the farmworker community.

The multiple strategies employed by farmworker-serving organizations in partnerships with pharmacies, employers, the state health department, and key partners have been successful at vaccinating farmworkers in the community, evident by the large proportion of survey respondents who were fully vaccinated (78%). This is a significant accomplishment, considering at the time of data collection only 52% of the population in Sampson County was fully vaccinated. (19) Nonetheless, survey results suggest there are major vaccination disparities among farmworkers based on demographic characteristics such as age, sex, and immigration status. There was lower vaccination uptake among respondents who were 18-25 years old (65%) compared to older age groups.



## DISCUSSION CONTINUED

Female respondents had a lower vaccination uptake (60%) compared to male respondents (84%). However, immigrant status or being racially or linguistically Indigenous, may be confounding the relationship between vaccination status and sex. Respondents with no documentation had the second lowest proportion of being fully vaccinated (58%) compared to the other immigration status groups.

The disparities are starker when it comes to booster dose uptake, with female respondents having a lower uptake of a booster dose (12%) compared to male respondents, and respondents without documentation having the second lowest booster uptake at 10% compared to other immigration groups. These disparities suggest that there are additional barriers by subpopulations of farmworkers. Strategies and programming for general booster uptake need to be developed and implemented, with emphasis of increasing the proportion of females and individuals without documentation. When developing these plans, it is important to keep in mind that individuals without documentation face additional barriers than those experienced by other farmworker populations, including but not limited to fear of deportation, fear of drawing attention to themselves, and mistrust in institutions.

Even through strong vaccination strategies have been implemented, there is much work that needs to be done to improve the well-being of farmworkers in Sampson County and help decrease the general risk of transmission of infectious disease among farmworkers. There are structural and systematic barriers that need to be addressed to continue to prevent the spread of COVID-19 and other infectious diseases, even among those that are vaccinated. For example, 43% of the respondents live in overcrowded conditions leading to increased risk of COVID-19 infection as well as other infectious diseases, a deep contrast to the national average of residents in overcrowded housing (3%).(17, 20)

This assessment also provided insight on the need for additional support to address the disparities experienced by Indigenous communities in Sampson. Indigenous respondents had both a lower proportion of being fully vaccinated (68%) and a lower uptake of booster dose (18%) compared to the non-Indigenous community in the county – 85% and 36%, respectively. Targeted efforts to provide more access for vaccinations and other health resources in this community are needed. Culturally and linguistically appropriate educational materials are needed to help this group stay informed and to be better assisted by outreach partners in the county.

While there have been significant strides to support the farmworker community in Sampson County as seen by the number of trainings and PPE distributed by outreach or community health workers, the work has not ended. As the county's and region's farm labor force changes, it is critical that local community-based organization receive additional support, resources, and funding to help them achieve their goal to ensure the well-being of farmworkers.



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