

# Farmworker COVID-19 Community Assessments

## Collier County, Florida Community Profile

DECEMBER 2021



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# TABLE OF CONTENTS

pg.3

INTRODUCTION

pg.4

BACKGROUND ON COLLIER COUNTY

pg.5

METHODOLOGY

pg.6

KEY SURVEY FINDINGS

pg.14

SUMMARY OF FINDINGS

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# 1. INTRODUCTION

This report provides a profile of farmworkers and their experiences during the COVID-19 pandemic in Collier County, Florida, that was conducted as part of the 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, 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. Collier County was selected as part of the national assessment project due to the high number of farmworkers in the region, a high number of workers from Central America and the Caribbean, and the high number of H-2A guest workers. H-2A guest workers are foreign nationals who receive a temporary visa to work in agriculture in the U.S., and do not bring their spouse or children with them to the U.S.

(1)



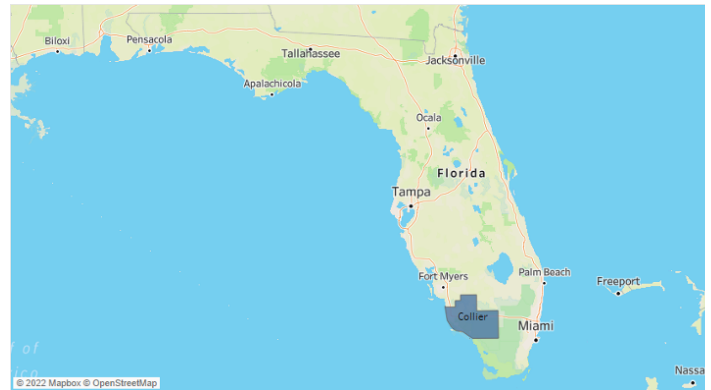
# 2. BACKGROUND ON COLLIER COUNTY

Collier County is home to an extremely diverse population of farmworkers, who primarily work harvesting tomatoes and other vegetables.<sup>(2)</sup> In addition to Mexican and Central American immigrants and H-2A visa holders, the county also has a large Haitian-Creole population that works in agriculture. The city of Immokalee is located in Collier County, which produces one-third of the U.S.'s tomatoes.<sup>(3)</sup> In addition to tomatoes, the 322 farms in Collier County also produce oranges, bell peppers, watermelons and cucumbers. The county's 148,461 acres of farmland produce 3% of Florida's agricultural sales, of which 97% is crops (see Table 2.1).<sup>(2)</sup>

Collier County had a population of 393,793 in 2021.<sup>(4)</sup> NCFH estimates that there are 1,837 farmworkers in Collier County, based on the 2017 Census of Agriculture. However, these estimates underestimate the true number of agricultural workers in the area since 2,324 H-2A guest workers alone were employed in the county during the fiscal year 2020 (see Figure 2.2).<sup>(5)</sup> This is likely due to the high number of workers who migrate to Collier County from other areas, or who migrate out of Collier County to work in other parts of the country.

In 2017-2018, Florida Gulf Coast University reported there were 5,242 employees of the agriculture industry in Collier County, with 2,459 workers in Immokalee. This includes labor contractors and crew leaders employed in crop production and in post-harvest crop activities.<sup>(6)</sup>

Figure 2.1. Collier County in Southern Florida



Because of the limitations of the farm labor estimates for these counties, it is not possible to determine the percentage of the total workforce that is comprised of H-2A guest workers, but it is likely to be a substantial percentage. Key local informants in Collier County described that historically many farmworkers were undocumented immigrants, but a series of immigration raids on farms in the area had led some employers to contract with H-2A guest workers to continue production.

Collier County's peak farm labor season is over the winter and spring. Farm labor picks up in November, peaks in January and starts to decrease significantly after May.<sup>(5)</sup> Languages spoken in Collier County include Spanish, English, Haitian Creole, Mam (a Mayan language originating in Guatemala), and others.<sup>(7)</sup>

Table 2.1. Key agricultural data for Collier County

County	County population	Number of farms	Average farm size	Agricultural sales	Major agricultural commodities
Collier	393,793	322	461 acres	\$190 million	Tomatoes, vegetables, citrus

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

### 3. METHODOLOGY

The FCCA's methodology included both a quantitative and a qualitative component and was based on the CDC's rapid community assessment methodology. (8) To determine community sites and best practices for recruitment, NCFH relied on information shared from two local organizations in Immokalee: the Coalition of Immokalee Workers, and the federally-qualified health center Healthcare Network of Southwest Florida. NCFH also contracted with three local interpreters to help us adequately reach Immokalee's Haitian population. This assessment received a non-research exemption by the CDC; therefore, IRB approval was not needed. This report summarizes quantitative data and key quotes from interview respondents; an in-depth thematic analysis of qualitative data is forthcoming.

Quantitative survey respondents were eligible to participate if they were a farmworker, defined as individuals who 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 an 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 at a variety of locations, including randomly selected job and housing sites, and non-randomly selected check cashing houses, ethnic food stores, flea markets, 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, and that they could stop participating in the survey at any time. 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 in English, Spanish, and Haitian-Creole (both directly with Haitian Creole-speaking interviewers and with an interpreter). Descriptive statistics for the survey data are provided in the key findings section below. All survey data are unweighted.

*"Bueno, la verdad solo estamos trabajando en este país. Bien, entonces no sentimos de que estamos muy bien en este país, porque la verdad un momento al otro [nos] pueden agarrar y deportar, entonces la verdad no se siente bien.*

*Así como cuando uno está en su país. / Well, the truth is that we are just working in this country. So, we don't feel like we are good in this country because the truth is one minute to the next they can grab us and deport us, so the truth is it doesn't feel good. Not like when you're in your own country."*

*-Farmworker #2*

# 4. KEY SURVEY FINDINGS

A total of 249 surveys were completed in-person in Immokalee from December 8-12, 2021, by NCFH staff with help from three local members of the Collier County Haitian community, who interpreted or directly administered surveys. Two in-depth interviews were conducted with farmworkers and employers, and two key informant interviews were conducted with local farmworker experts or representatives of local farmworker-serving organizations. All surveys were conducted in English, Spanish, or Haitian Creole, and interviews were conducted in English or Spanish.

## DEMOGRAPHICS

The 249 respondents interviewed in Collier County were mostly male with a median age of 35, and many had legal status in the U.S., mainly H-2A visas (34%), permanent residency (10%) or citizenship (5%). Three main linguistic groups are represented in this sample—Spanish speakers (73%), Indigenous language speakers (13%), and Haitian Creole speakers (27%). Some participants belonged to more than one language group. The sample was highly migratory: nearly two-thirds (59%) of respondents had traveled in the last 12 months for work in agriculture.

## 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. (9) Latin America's Indigenous populations are diverse in their culture, language, food, and religious practices. Historically, Indigenous populations experience higher levels of discrimination due to their cultural practices including language, lifestyle and food, as well as based on physical appearance.(10) This is evident by the ongoing violence experienced by these populations since the beginning of colonization and the on-going socioeconomic disparities, such as the continued social marginalization from the rest of society due to the lack of educational and economic resources, experienced under current governments.(11,12) Starting in the 1960s, the first documented *en masse* migration of Indigenous populations to the US happened through the Bracero program. Currently the number of Indigenous populations in the US keeps growing due to work, and social and economic migration, or due to

displacement from violence and environmental reasons, such as climate change.(13,14)

The racial and ethnicity categories traditionally used for census purposes may not fully encapsulate Indigenous identity of Latin American born 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, as well as racially identifying as Indigenous.(15)

In this sample, 75 respondents were identified under the Indigenous metric, comprising 30% of all respondents. This is about five times higher than that of the national percentage of farmworkers that identify as Indigenous based on the NAWS (15). There were 18 Indigenous languages captured in this sample: Chatino, Chuj, K'iche', Mam, Maya, Mazateco, Mixteco, Nahuatl, Otomí, Poqomchi', Purépecha, Q'anjob'al, Tojolob'al, Totonaco, Triqui, Tzeltal, Tsotsil, Zapoteco. The top languages spoken by respondents were Mam and Maya. Mam is a language spoken in both Guatemala and southern Mexico. In Guatemala it is one of four Indigenous languages spoken. Mam is primarily spoken in the Guatemalan departments of Huehuetenango, San Marcos, Quetzaltenango and Retalhuleu.(16) In Mexico, the majority of Mam speakers are the state of Chiapas.(17) Maya (also called Yucatecan Maya) is spoken in the southern Mexican states of Campeche, Quintana Roo and Yucatan.(18)

Table 4.1: Demographics

Demographic Characteristic	Frequency	Percentage of participants
<b>Sex</b>		
Male	198	80%
Female	51	20%
<b>Age groups</b>		
18-25 years	36	14%
26-54 years	177	71%
55 years or more	36	14%
<b>Marital status</b>		
Single	107	43%
Married	109	44%
Other (i.e., domestic partnership, widowed, divorced)	32	13%
<b>Primary language(s) spoken as child</b>		
English	1	<1%
Spanish	142	57%
Haitian Creole	68	27%
Latin American Indigenous language	50	20%
<b>Primary language(s) spoken as adult</b>		
English	21	8%
Spanish	181	73%
Haitian Creole	67	27%
Latin American Indigenous language	32	13%
<b>Country of birth</b>		
U.S. or Puerto Rico	3	1%
Mexico	147	59%
Haiti	67	27%
Guatemala	27	11%
Other/did not report	5	2%
<b>Race</b>		
Black/African-American	69	28%
Indigenous	49	20%
White	44	18%
Other/multiple races <sup>a,b</sup>	67	27%
Latinx/Hispanic	29	26%
Mestizo	21	8%
Moreno	10	4%
Did not report	26	10%
<b>Ethnicity<sup>c</sup></b>		
Hispanic/Latino	172	69%
Not Hispanic/Latino	55	22%
Other	3	1%
Don't Know/Did not report	19	8%
<b>Immigration status</b>		
H-2A work visa	85	34%
Permanent resident	24	10%
Undocumented	83	33%
U.S. citizen	13	5%
Other	17	7%
Unknown	27	11%
<b>Migrated to work in agriculture in past 12 months<sup>d</sup></b>		
Yes	146	59%
No	103	41%

a. Race was a select all that apply category. The race categories under "Other/multiple races" will not add to the total for "Other/multiple races". Those categories were selected and identified by more individuals than just those who selected "Other/multiple races".

b. Other races include Asian, Hawaiian/Pacific Islander, and mixed/multiple races

c. Following U.S. Census convention of reporting respondents' self-reported ethnicity (19), 46 individuals who self identified as "Other ethnicity - Haitian" were considered Non-Hispanic/Latino.

d. Migration was defined as staying in a place different than the interview location for one week or more to work in agriculture. All H-2A guest workers were automatically classified as migratory.

## HOUSING, HOUSEHOLD CHARACTERISTICS, AND TRANSPORTATION

The most common living situation for the workers surveyed was a mobile home, trailer or RV (57%). The remaining respondents were split between apartments (19%) and houses (21%). The average household size was five, including family and non-family living in the home. Most respondents traveled on a labor bus (73%) to get to work, which increases risk of COVID-19 transmission due to large numbers of individuals from different households traveling together.

A large proportion of respondents reported experiencing major risk factors for COVID-19 transmission in their housing and transportation.<sup>(20)</sup> Most respondents (86%) traveled to work with people outside of their household, a risk factor for COVID-19 due to the higher possibility of transmission in a vehicle. Slightly over half of the sample (56%) lived in an overcrowded household and nearly half of respondents (48%) lived in employer-provided housing, a risk factor because workers in employer-provided housing frequently share housing with non-family members. <sup>(21)</sup>

*"And housing, that's one of the biggest things too... in Immokalee when you say people are in quarantine, they are living in a trailer with six children, sometimes. It's one bedroom trailer so that's one of the things we wish we can do better... housing and transportation for the community."  
-Organizational Representative #2*

**Table 4.2: Housing Type, Transportation, and Risk Factors for Infectious Disease Transmission**

Characteristic	Frequency	Percentage of participants
<b>Type of housing</b>		
Apartment	47	19%
House	52	21%
Mobile home/trailer/RV	143	57%
Other/Don't Know	7	3%
<b>Type of transportation used to get to work</b>		
Drives own car	20	8%
Labor bus	182	73%
Rides with relative or co-worker	18	7%
Walk/rides bicycle	16	6%
Rides with 'raitero'	12	5%
Other/Don't Know	1	<1%
<b>Housing and transportation risk factors</b>		
Lives in an overcrowded household*	139	56%
Lives in employer-provided housing	120	48%
Travels to work with persons outside the household	213	86%

\*The definition of an overcrowded household follows the U.S. Census definition <sup>(21)</sup> which is a ratio of greater than one for the ratio of persons per room (excluding bathrooms and garages).



## GENERAL HEALTH CARE ACCESS & SOURCES OF HEALTH INFORMATION

A relatively small proportion of respondents (14%) reported utilizing health care services in the U.S. during the pandemic (see Table 4.3). Among those who utilized health care services in the U.S., a clinic was the most common source of services (56%). Respondents were asked about where they would go for information about a serious health problem, either in the U.S. or in their country of origin. A doctor or nurse (41%) or social media (40%) were the most common trusted sources of information followed by a relative (27%). Community health workers (15%) and church/school (10%) were also commonly trusted sources of health information.

*"So we do testing a lot, where we can find more people at because... sometimes they have problem with transportation, so that's the reason we do testing on the site and in the community mostly, to help those in need."*

*-Organizational Representative #2*

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

Characteristic	Frequency	Percentage of participants
Used health care services in the U.S. during the pandemic	34	14%
<b>Sources of health care services among those who utilized health care in the U.S.</b>		
Clinic	19	56%
Hospital/emergency room	6	18%
Private doctor	2	6%
Other (pharmacy, Community/Migrant Health Center)	7	21%
<b>Sources of trusted information for serious health issues</b>		
Doctor/nurse	102	41%
Social media	99	40%
Relative	66	27%
Employer	9	4%
Church/school	24	10%
Community health worker	38	15%
Other	17	7%

*Forty percent of surveyed farmworkers had lost a family member, friend, or co-worker to COVID-19 during the pandemic.*

## COVID-19 SAFETY INFORMATION, ILLNESS, TESTING, AND VACCINATION

Among respondents, 21% reported that they had not received a comprehensive COVID-19 safety training at work in their preferred language. Respondents were asked if they had received a safety training covering proper hand washing, physical distancing, the use of face coverings, and isolation procedures, and if that training was in their preferred language. Almost all respondents (95%) received training in at least one of those topics and 84% percent indicated that they had received training on all of those topics. Seventy-nine percent reported receiving a training on all four topics in their preferred language at work (see Table 4.4). The most common form of training reported in workplaces was a verbal training (69%). Respondents were also asked where else they had received training or instruction on preventing COVID-19, either in the U.S. or in their home country. Social media was the most common source of training or instruction (50%), followed by health care providers (45%) and radio and television (both with 41%).

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

Characteristic	Frequency	Percentage of participants
<b>Workplace COVID safety training received</b>		
Received training in at least one topic	237	95%
Received training in all four topics	210	84%
Received training in all four topics in preferred language	196	79%
<b>Other sources of COVID safety instruction/training</b>		
Radio	101	41%
Social media	125	50%
Television	103	41%
Health care providers	111	45%
Consulate office	9	4%
Other sources	23	9%

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



One in ten respondents (10%) self-reported that they had had COVID-19 at some point in the pandemic (see Table 4.5). Almost two-thirds of all respondents (61%) had been tested for COVID-19, and 35% reported that their current or most recent agricultural employer asked for workers to receive a COVID test. Access to COVID-19 testing was not a widespread issue for respondents at the time surveys were conducted, as 86% of those who reported taking a COVID-19 test had no trouble in obtaining it. The top difficulties or concerns in getting a COVID-19 test reported by respondents were being scared of being infected at the testing site (n = 6), no open sites (n = 4), being far from a testing site (n = 4), or some other reason (n = 13). Four in five of the respondents that had not taken a test said that they had never needed to take one. Two in five of respondents (40%) reported that they knew a family member, friend, or co-worker who had died from COVID-19 – 16% in the U.S. and 29% abroad.

Over half (56%) of respondents were fully vaccinated against COVID-19 with an FDA- or WHO-approved vaccine (see Table 4.5) and 68% were either fully or partially vaccinated in December 2021. Almost one third were not vaccinated (32%). Within those, an equal portion of respondents (38%) indicated that they did want to receive a COVID-19 vaccination and did not want to receive a COVID-19 vaccination (12% of the total sample). The most common places that respondents reported receiving the vaccine were at a U.S. community event (34%) or outside of the U.S. (35%). The most common reasons for not getting vaccinated were that respondent did not believe in the vaccine (21%), was hesitant due to potential side effects (18%), or believed that the vaccine was “dangerous” (18%).

*"There was a lot of H-2A workers actually, were the worst that were getting sick. They weren't, I guess, they weren't being trained or they were scared of saying something to them, you know, for the boss not to fire them, you know? But we had a lot of H-2A workers that were sick."  
-Organizational Representative #1*

**Table 4.5. COVID-19 Illness, Testing, and Vaccinations**

Characteristic	Frequency	Percentage of participants
<b>COVID-19 illness</b>		
Self-reported COVID-19 illness	26	10%
<b>COVID-19 testing</b>		
Had taken COVID-19 test at least once	153	61%
Employer asked workers to be tested	87	35%
Employer facilitated or paid for testing	54	22%
<b>COVID-19 vaccinations</b>		
Fully vaccinated*	139	56%
Partially vaccinated	29	12%
Not vaccinated	80	32%
Wants to receive vaccine	30	12%
Undecided about vaccine	16	6%
Does not want vaccine	30	12%

\*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.

Vaccination status varied by key demographic characteristics, including by race and by immigration status. Under half of the undocumented immigrant respondents were fully vaccinated (39%, see Figure 4.1) and only about one in four respondents born in Central America were fully vaccinated (21%, see Figure 4.2). White and Black respondents had similar reported full vaccination coverage, with 66% and 64% vaccination rate respectively and Indigenous respondents had the lowest rate at 45% (see Figure 4.3).

Figure 4.1. Vaccination status by immigration status

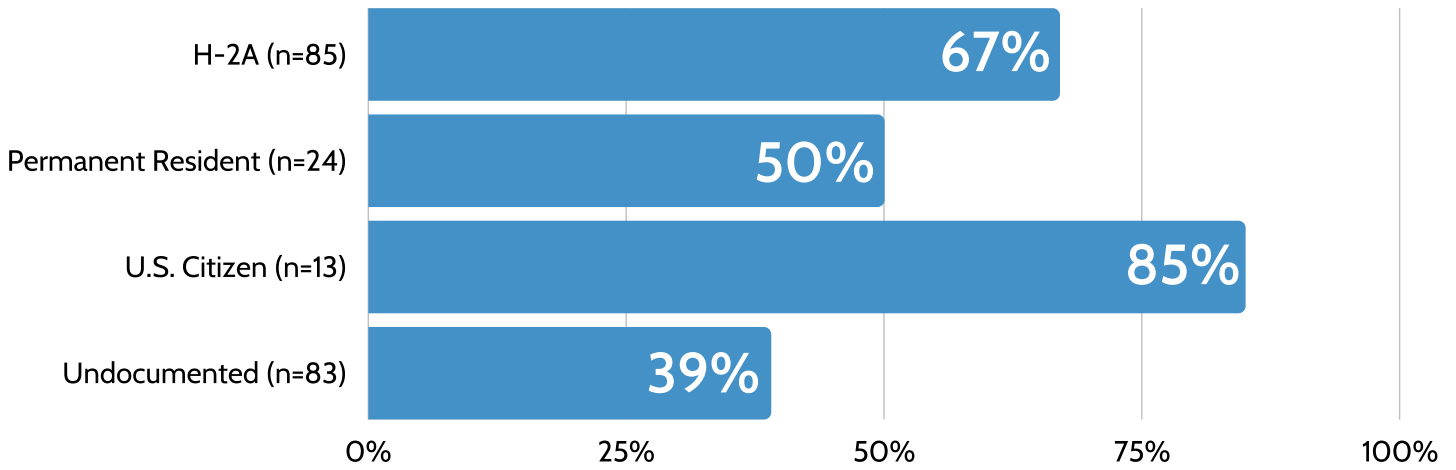
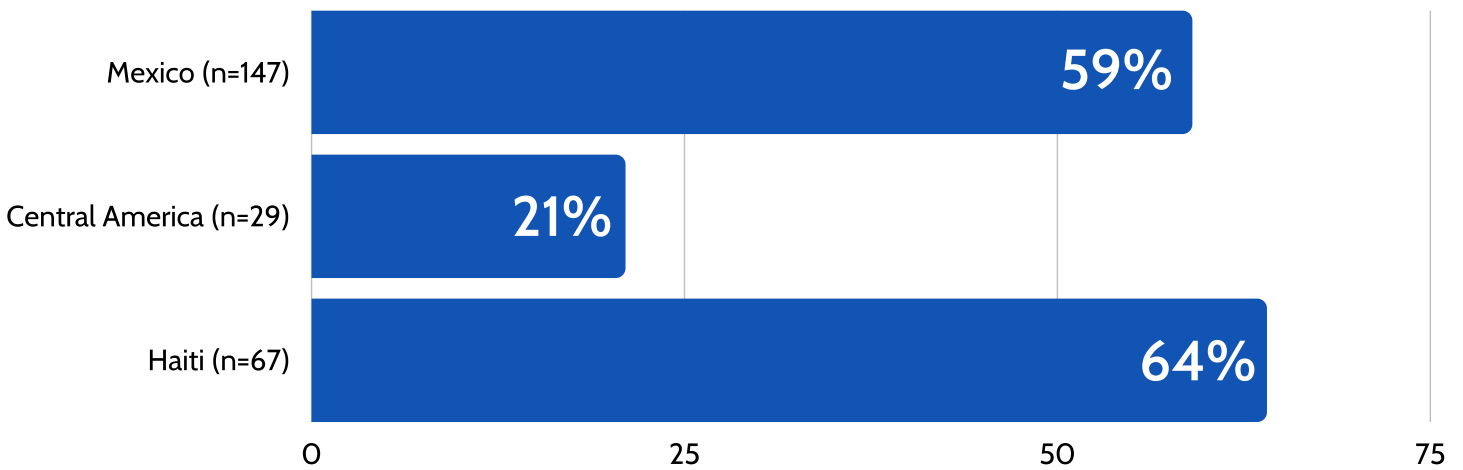
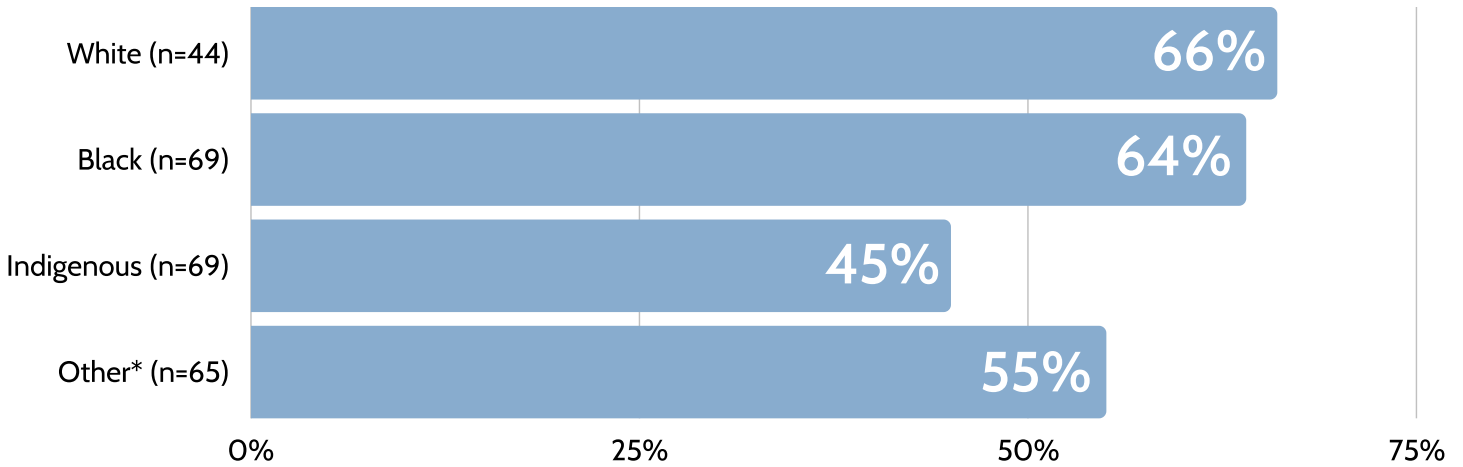


Figure 4.2. Vaccination status by birth place



U.S./Puerto Rico was not included in this graph because there were less than 10 respondents in that category (n=3)

Figure 4.3. Vaccination status by self-reported race



\*Top entries for "other" included Latinx/Hispanic (n=29), Mestizo (n=21) and Moreno (n=10); Asian and Native Hawaiian/Pacific Islander were not included in this graph because there were less than 10 respondents in those categories (n=1 for both)

## IMPACT OF COVID-19 ON EMPLOYMENT AND INCOME

The pandemic has had a significant impact on the employment of respondents: 47% lost work during the pandemic during their time in the U.S. Over half of respondents (61%) received no U.S. governmental assistance of any kind during the pandemic (see Table 4.6; 16% of participants did not know if they had received assistance). The most common type of assistance received was a stimulus payment (17%) followed by food assistance (11%). Only two respondents had received unemployment assistance.

*Being home and then having the bills kick in and not working as much as you need to make to pay your bills? We have to work... like they say, we have an option, whether we go to work or not. It's not a full time job, but we make it because we have our bills and they're not going to help us. You know how they don't help migrant workers that much."*  
 - Farmworker #1

**Table 4.6: Impact of COVID-19 on Employment and Income**

Characteristic	Frequency	Percentage of participants
Lost work during pandemic	118	47%
Top three reasons for losing work*		
Due to decline in demand	73	29%
Due to COVID-19 outbreaks	19	8%
Getting sick	10	4%
Received U.S. government assistance during pandemic**	59	24%
Economic stimulus payment	44	17%
Food assistance	28	11%
Rent assistance	8	3%
Unemployment assistance	2	<1%

\*Includes the most frequently cited reasons for losing work during the pandemic. Participants could indicate more than one reason for losing work.  
 \*\*Participants could report receiving more than one type of assistance.



# 6. SUMMARY OF FINDINGS

## LIMITATIONS

This assessment had limitations. Survey respondents were not randomly sampled, and data collection took place over only four days during a several-month growing period. 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 Collier County. Some of the surveys of Haitian Creole community members were conducted through an in-person interpreter, which took significantly more time for the respondent compared to surveys conducted directly in Haitian Creole. It is unknown if this led to a potential decline in data quality, especially towards the end of the survey. However, all surveys that were interpreted were conducted by the same interpreter, limiting the variance in how the survey was conducted.

Additionally, data collection occurred before the Department of Homeland Security's policy that all foreign nationals would need to be fully vaccinated against COVID-19 went into effect, which likely caused vaccination coverage of H-2A guest workers to shift from the time of data collection in mid-December 2021 to the time this report was written in early February 2022. (22)

## DISCUSSION

The results of this survey in Collier County indicate that a significant amount of support and resources are needed to increase access to health care and boost confidence in the COVID-19 vaccines across diverse subpopulations. Collier County is home to multiple community-based organizations that support the wellbeing of farmworkers and are trusted by farmworkers in their community. These organizations could benefit from increased resources and support to continue to meet the needs of their community.

Transportation was a common risk factor for COVID-19 transmission. More than four out of five farmworkers (86%) traveled to work with people outside of their household, increasing the risk of disease transmission. Housing was also an important risk factor for transmission, with over half of respondents (56%) living in overcrowded households and nearly half (48%) in employer provided housing. Concerns about housing also came up in the qualitative interviews. Support for quarantine/isolation housing for farmworkers could help to contain COVID-19 outbreaks when they do occur and prevent spread across families and households.



## DISCUSSION CONTINUED

Overall, 56% of respondents were fully vaccinated against COVID-19, substantially lower than the Florida average (70%) for that week among residents ages five and up and county average (77%) for those ages 18 and up. (23,24) Only 18% of H-2A workers had not been fully vaccinated, likely due to the Department of Homeland Security's policy announcement in October 2021 that all foreign nationals would be required to be fully vaccinated against COVID-19 to enter the U.S..(22)

Nearly one in five respondents (18%) disclosed that they were unsure or did not want to receive the vaccine, suggesting there is still work to be done around vaccine hesitancy in the area. This was especially evident in the disproportionately low vaccination rates for respondents born in Central America, of whom only 21% were fully vaccinated. Additionally, undocumented workers had a low full vaccination rate compared to other immigration statuses at 38%. Qualitative interviews confirmed structural barriers to vaccine access for workers, including documentation/ID requirements and difficulty accessing vaccination sites due to work hours or childcare needs.

Targeted linguistically and culturally appropriate vaccine education, continued community trust building, and increased access to vaccines on farms and at housing and community sites could effectively increase farmworker vaccination rates in Collier County. Local organizations that support farmworkers are already doing critical work and could benefit from increased resources and public health support to the area.

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