

# Farmworker COVID-19 Community Assessments

Yakima County, WA  
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NCFH

National Center for Farmworker Health, Inc.

# TABLE OF CONTENTS

pg.3

INTRODUCTION

pg.6

KEY FINDINGS

pg.4

BACKGROUND ON  
YAKIMA COUNTY

pg.22

CONCLUSION

pg.5

METHODOLOGY

pg.24

REFERENCES

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# 1. INTRODUCTION

This report provides a profile of farmworkers and their experiences during the COVID-19 pandemic in Yakima County, Washington 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. Yakima County was selected as part of the national assessment project due to the high number of farmworkers in the region, including a high number of domestic and 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) Additionally, it is the first community in the northwestern U.S. to be assessed through this project.



# 2. BACKGROUND ON YAKIMA COUNTY

Yakima County is home to over 250,000 people. (2) Yakima is the top county with the highest overall total sales from agricultural products in Washington, with the county being second in the state for crop sales and first for livestock product sales. (3) The county is home to 2,952 farms utilizing 1,781,463 acres of land, making agriculture a leading industry in Yakima. (3) Apple production cover the most acreage in the county, making fruits, tree nuts and berries bring the most sales of all crops. (3) Cow milk leads livestock product sales. (3)

Figure 2.1: Yakima County



Table 2.1: Key Agricultural Data for Yakima County

Population	Number of Farms	Acres of Farm Land	Ave Farm Size	Top Crops by Sales	% of Farms that Hire labor
256,728	2,952	1,781,463 acres	603 acres	Fruits, tree nuts, berries  Milk	39%

Sources: U.S. Census of Agriculture 2017, U.S. Census Bureau (2,3)

NCFH estimates that there are approximately 64,205 farmworkers in Yakima County. The number of H-2A guest workers has increased by 55% between 2017 and 2021. In 2021, approximately 7,204 H-2A guest workers were employed in the county, with the number of H-2A guest workers peaking in August and September. (4)

Figure 2.2: Guest Workers Present per Month, Yakima County 2021

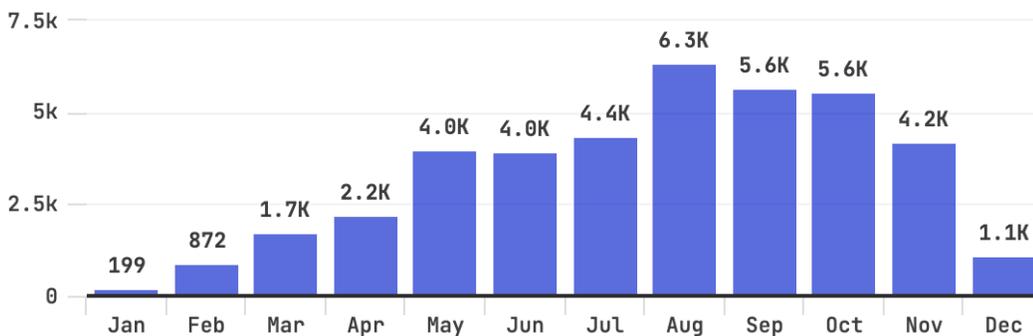


Image: NCFH Farm Labor Data Dashboard (4)

### 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. (5) To determine community sites and best practices for recruitment, NCFH relied on information shared from key stakeholders: Migrant Education of Yakima County, the Yakima Health Department and Yakima Neighborhood Health Services. NCFH contracted with local community members and leaders, including farmworkers and farmworker family members, and with staff and students from Central Washington University High School Equivalency Program to collect farmworker surveys with NCFH staff. This assessment received a non-research exemption by the CDC; therefore, IRB approval was not needed. This report summarizes quantitative data from survey respondents and qualitative data from interview respondents 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 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 community sites. 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 and that they did not have to answer all the questions if they did not want 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 in English, Spanish, and Mixteco, with ad-hoc interpretation for other Mesoamerican language speakers 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 three different groups: 1) farmworkers, 2) key informants/farmworker experts including farmworker organization representatives, and farmworker advocates, and 3) employers. Each interview lasted approximately one hour, and participants were paid \$100 each for their participation. Interviews were conducted over the phone in English, Spanish or with simultaneous interpretation in Spanish and Tzeltal. Farmworkers were recruited from survey participants or referral from interview participants. Key Informants were recruited from stakeholders in the region and/or from referral of other key informants. Employers were recruited through the Washington Fruit Tree Association.

# 4. KEY FINDINGS

A total of 302 surveys were completed in-person in Yakima County, Washington by NCFH staff with help from local community members and leaders, including farmworkers and farmworker family members, and staff and students from Central Washington University High School Equivalency Program. Data collection took place August 24-28, 2022. Nine qualitative interviews were conducted, including four in-depth interviews with farmworkers, two in-depth interviews with employers, and three key informant interviews with local farmworker experts or representatives of local farmworker-serving organizations. All surveys and interviews were conducted in English, Spanish, or Mixteco.

## DEMOGRAPHICS

The majority of the respondents surveyed were male (64%), with a median age of 38 years, and identified as ethnically Hispanic/Latinx (96%). Most respondents were born in Mexico (91%). Only 1% of respondents were born in Central American countries. Approximately one-third of respondents were undocumented (36%), one-fifth had H-2A visas (20%), and nearly one-third were either permanent residents (17%) or U.S. Citizens (12%). One-quarter of the farmworkers surveyed had migrated in the past 12 months for work (see Table 4.1).

While the survey sample mainly included farmworkers from Mexico, key stakeholders also described the recent increase in diversity of the farmworker community to include an increasing number of workers from Central American countries. Almost all respondents spoke Spanish (99%), and a quarter (25%) spoke English.

The diversity of work authorization in this community between H-2A guest workers and non H-2A guest workers has resulted in animosity between some members of the two groups. The large number of H-2A guest workers in Yakima County was brought up in multiple in-depth interviews, and some interviewees noted that because some employers treated H-2A workers and non H-2A workers differently, some tension existed between the two groups of workers. Both key informants and farmworker interviewees noted that this animosity between internationally contracted H-2A workers and domestic non H-2A workers comes from economic/payment differences. These interviewees noted that H-2A guest workers receive a higher pay rate, which creates inequality between H-2A and non H-2A workers. A farmworker interviewee noted that when asking the crew leader of why this difference existed when they do the same work, the response obtained was that it could not be answered, and that the question should not be asked. The rules for the H-2A program state under Adverse Effect Wage Rate that an employer who is employing both H-2A and non H-2A workers in the same roles is required to pay at least as much as the Adverse Effect Wage Rate to both. (7)

*"Al mayordomo, le dije ¿qué hacen ellos que nosotros no podemos hacer? ¿O cuál es la diferencia entre ellos y nosotros? Porque a ellos le están pagando más que a nosotros mismos. Él me dijo "No, no voy a contestar, no me hagas la pregunta".*

*"I asked the crew leader, what do they do that we can't do? Or what's the difference between them and us? Why are they being paid more than us? He told me "No, I will not answer that, don't ask me that".*  
- Farmworker

*"This system is designed to eat itself, right? Any way that you can get closer and closer to that bottom line, you know, they're [employers] gonna do it. And unfortunately, it destroys the way of life of many people. And, you know, but at the same time it's offering an opportunity for folks to come and work part time to where, you know, they wouldn't be able to make that money in Mexico. So it's really, a really difficult situation, you know, to tell folks, you know, not to come because, you know, it's an opportunity, but at the same time, it's like, you know, what happens to all these folks, they have done that. You know, that's all they know how to do that. All they've done. And now they find themselves displaced."*

- Key Informant

## 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. (8) 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. (9) 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. (10,11) 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. (10,12)

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. (6)

In this sample, 27 respondents were identified under the Indigenous metric, comprising 9% of all respondents. This is en par with the national percentage (10%) of farmworkers that identify as Indigenous based on the NAWS. (6) There were five Mesoamerican Indigenous languages captured in this sample: Mixteco, Nahuatl, Totonaco, Tzeltal, and Tsotsil. The most common language spoken by respondents was Tzeltal. Tzeltal is a Mayan language family with four variants that is spoken in the southeast region of Mexico in the states of Chiapas and Tabasco. (13)



Table 4.1: Demographics

Characteristic <sup>1</sup>	Frequency (Percentage) N = 302
<b>Sex</b>	
Female	108 (36%)
Male	192 (64%)
<b>Age Group</b>	
18-25	42 (14%)
26-54	220 (73%)
55+	36 (12%)
<b>Marital Status</b>	
Married	168 (56%)
Single	59 (20%)
Civil Union	48 (16%)
Divorced	19 (6%)
Other	8 (3%)
<b>Country of Birth</b>	
Mexico	275 (91%)
United States	22 (7%)
Other	5 (1%)
<b>Race <sup>2</sup></b>	
Black/African American	3 (1%)
Indigenous	19 (6%)
White	68 (23%)
Other	174 (58%)
<i>Hispanic/Latinx</i>	156 (89%)
<i>Mestizo</i>	2 (1%)
<i>Moreno</i>	10 (7%)
Did not report	38 (13%)
<b>Racially or Linguistically Indigenous <sup>3</sup></b>	27 (9%)
<b>Ethnicity</b>	
Hispanic/Latinx	291 (96%)
Not Hispanic/Latinx	11 (4%)
<b>Immigration Status</b>	
H-2A	61 (20%)
Permanent resident	51 (17%)
U.S. Citizen	37 (12%)
Undocumented	110 (36%)
Other visa	6 (2%)
Did not report	32 (11%)
<b>Migrated to work in agriculture in the last 12 months <sup>4</sup></b>	80 (26%)

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

2. Respondents who selected more than one race were included in the "Other" category

3. 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. (6)

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

## HOUSING, HOUSEHOLD CHARACTERISTICS, AND TRANSPORTATION

Housing and transportation are social determinants of health that influence the risk of COVID-19 among farmworkers. (14) Shared transportation with individuals from different households and overcrowded living conditions are factors that increase infectious disease transmission, such as COVID-19. (14) More than half of the respondents in this sample experience at least one of these risk factors for COVID-19 transmission (See Table 4.2).

Approximately half of the respondents live in houses (47%), and a quarter in apartments (25%). Similarly, one in four respondents live in employer provided housing (25%). Workers living in employer-provided housing frequently experience overcrowding and share housing with non-family members. Four in five (82%) respondents reported living in overcrowded housing conditions.

Although 61% of respondents travel in a personal or borrowed car to work, about one-third rely on transportation through a labor bus (19%) or a 'raitero' (10%). More than half of the respondents travel to work with farmworkers from different households (54%). Traveling with people outside of the households has been identified as a risk factors for transmission of infectious diseases, including COVID-19. (14)

Housing and living conditions were noted as key factors prohibiting proper execution of safety measures. One key informant pointed out that multiple families were living in the same housing unit, making isolation and quarantine options non-existent. This was also noted by employer interviewees. Aside from overcrowding, the Washington State Temporary Worker Housing Emergency Rule requirements for isolation housing to be within 1 hour of an emergency room with ventilator made employers in the area scramble for hotels and available isolation housing for their workers given the remoteness of their migrant housing. (15) By the same hand, this limited isolation housing availability led other employers to have to isolate workers within a room in a unit with other workers who were not infected.

*"If we couldn't find a hotel or couldn't find extra space somewhere else, it ended up sometimes that we moved people into one room in the house and gave them strict instructions of how they could interact with others and had to go that route just because there was absolutely no space available that we could find."*

*— Employer*

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

Characteristic	Frequency (Percentage) N = 302
<b>Housing Type</b>	
'Trailer'/mobile home/trailer house/RV/manufactured home	44 (15%)
Apartment	76 (25%)
Dormitories/barracks/shelters	4 (1%)
Garage/Outbuilding/Shed	2 (1%)
Hotels	29 (10%)
House	143 (47%)
Other	4 (1%)
<b>Transportation to Work</b>	
Labor bus	57 (19%)
Drive a car (own or borrowed)	184 (61%)
Rides with relative or co-worker	27 (9%)
Walk or ride a bicycle	3 (1%)
Rides with 'raitero'	31 (10%)
<b>Housing and transportation risk factors</b>	
Lives in overcrowded household <sup>1</sup>	242 (82%)
Lives in employer-provided housing	75 (25%)
Travels to work with persons outside of household	163 (54%)

1. The definition of an overcrowded household follows the U.S. Census definition (16) 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 small proportion of respondents (18%) reported needing health care services in the last 12 months (see Table 4.3). Of those that needed health care services, 96% received medical care when they needed it. The majority of respondents sought medical care at a clinic (48%), hospital (26%) or a Migrant or Community Health Center (20%). For those that needed medical care in the last 12 months and did not receive health care when needed, care was delayed due to lack of transportation or health insurance.

Key informant interviewees discussed that health care access was affected in the area due to the closure of one of the major hospitals in the county at the beginning of the pandemic. (17) Clinics in the area provided different venues to assist the community with their healthcare needs including working with the health department to provide clinics to the community, including at work sites. The clinics have been the driving force for providing COVID-19-related care services, including testing and vaccinations. However, farmworkers in Yakima County do not have access to a general physician and the health care system is not able to fully support the needs of the community. A key informant noted *“I’ve had a hard time just trying to get them [families] in with somebody because they’re so backed up”*. Previous research shows that H-2A and undocumented farmworkers in general have more limited access to healthcare services due to a myriad of factors including transportation, timing, health insurance/costs, and fear of immigration consequences. (18) In Yakima County, both key informants and employers noted how the closure of one of the two hospitals resulted in a limited health care system, which further exasperated inequitable access to health care for H-2A guest workers and undocumented workers.

*“There’s not that many of those free community clinics here available in our county for people who are undocumented. I know that there’s only kind of one popular location [omitted for privacy]. So you know, obviously if there should be more.”*

– Key Informant

*“And so I’ve I’ve had a hard time just trying to get them in with somebody because they’re so backed up. There’s a waiting list and there’s not as many providers as there was before we lost one of the bigger hospitals in our community. And so now we didn’t have access to even emergency care. It has gotten harder. We have families having to go to different towns to be able to just be seen in the emergency room.”*

– Key Informant

Survey respondents were asked how much they trusted health information from various sources. Doctors and nurses were the most trusted source, with 52% of respondents reporting that they “always” trusted the health information given by doctors and nurses. Employers were the second highest trusted source, with 45% of respondents reporting that the “always” trusted the health information given by their employer. Community health workers were also seen as trusted sources of health information, with 37% of respondents reporting they “always” trusted the health information provided by community health workers. Social media was the least trusted source of health information – 43% 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 = 302
<b>Needed medical care in past 12 months</b>	54 (18%)
Received medical care when needed	52 (96%)
<b>Most common sources of health care services among those who utilized health care in the U.S. (n=50) <sup>1</sup></b>	
Clinic	24 (48%)
Emergency Room	6 (12%)
Hospital	13 (26%)
Migrant/Community Health Center	10 (20%)
<b>Sources of trusted information for health issues <sup>2</sup></b>	
Doctor/nurse	158 (52%)
Relatives/friends	95 (31%)
Community health worker	111 (37%)
Social Media	46 (15%)
Employer	136 (45%)

1. Respondents could choose more than one answer. Of the 52 respondents who received medical care when they needed, 50 respondents reported receiving that care in the U.S.

2. Respondents could choose more than one answer. Frequency and percentages reflect responses for “Always” trusting the health information from the selected source.

## COVID-19 SAFETY TRAINING AND INSTRUCTION

Survey respondents were asked if they had received instructions or training at work on COVID-19 safety and precautions about washing their hands, how and when to cover their face, social distancing, and isolation procedures. One in four respondents (25%) had not received a comprehensive training that covered all four COVID-19 safety topics (see Table 4.4). Approximately one-fourth of respondents (26%) had not received a comprehensive training in their preferred language. The majority of respondents (92%) 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 three out of five respondents (57%) reported regularly having temperature and symptoms checks before starting work. Face masks (65%) and hand washing stations (89%) were also regularly provided at work.



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

Characteristic	Frequency (Percentage) N = 302
<b>Workplace COVID-19 safety training received <sup>1</sup></b>	
Received training in at least one topic	279 (92%)
Received training in all four topics	228 (75%)
Received all four trainings in preferred language	224 (74%)
<b>COVID-19 prevention measures given at work <sup>2</sup></b>	
Employer provides face masks	195 (65%)
Employer checks temperature and asks about COVID-19 symptoms	171 (57%)
Employer provides hand washing station	270 (89%)

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.

COVID-19 safety training was dependent on the individual employer. Employer interviewees described the confusion regarding constantly changing guidelines and noted trying to understand and abide by the national and state policies and regulations, but the guidelines being updated at different times was especially challenging. One employer noted that in order to better understand what policies and information to provide to their employees, they created a COVID-19 Response Team that reviewed both national and state policies and regulations to be able to provide adequate protocols and information to their employees. Both employer and farmworker interviewees stated that at the beginning of the pandemic, COVID-19 prevention measures were put in place at work, including temperature and symptoms check and sanitation stations. However, as the pandemic changed, these prevention measures became less widespread.

*"Cuando estaba la pandemia, estaba en la enfermedad de COVID-19. Cada rato chequeaban la temperatura, que si no tienes toz, si no tienes temperatura, si no tienes gripa, y ahorita que ya cambio ya no lo chequean."*

*"When there was the pandemic, when the COVID-19 illness was present. They check very often your temperature, if you didn't have cough, if you didn't have a temperature, is you didn't have the flu, and now that it has changed, they don't check."*

— Farmworker

## COVID-19 TESTING AND ILLNESS

Approximately, two in five respondents (38%) reported contracting COVID-19 at some point during the pandemic (see Table 4.5). Nearly two-thirds of respondents (63%) had taken at least one COVID-19 test. Of the respondents that took at least one COVID-19 test, 45% reported receiving at least one positive result. Respondents that reported having contracted COVID-19 during the pandemic or testing positive for COVID-19 (41%) were also asked if they had experienced COVID-19 related symptoms for four weeks or more. Close to half (46%) of those respondents reported having experienced COVID-19 related symptoms for four weeks or more.

Respondents were asked what actions they took once they knew or thought they had contracted COVID-19. Of those that knew or thought they had contracted COVID-19 and/or received a positive COVID-19 test (n=123), 88% reported wearing a mask or face covering, and 93% did not participate in social gatherings. Forty-one percent reported they sought medical care. A low number of respondents (12%) who believed they had COVID-19 reported that they continued working. Sixty-nine percent of respondents who knew or thought they had contracted COVID-19 and/or received a positive COVID-19 test reported isolating from family members or roommates. Key informant interviewees noted that proper isolation and quarantine practices were challenging for this population. Since many live in congregate house settings, it made adequate quarantine and isolation procedures difficult to maintain.

*“ Obviously, they were the most impacted population in Yakima County in regard to COVID-19 infection. I know right away we saw that there was a disproportionate impact of COVID-19 rates on population, and that was due to because many of them worked in agriculture settings that were considered “essential” and so they didn’t shut down, so they had to keep working. And that led them to having to have a higher risk of infection because they’re not going to take time off work.”*

*— Key Informant*



Table 4.5: COVID-19 Illness and Testing

Characteristic <sup>1</sup>	Frequency (Percentage) N = 302
Self-reported COVID-19 illness	115 (38%)
Taken a COVID-19 test at least once	189 (63%)
Received at least one positive result	85 (45%)
Experienced symptoms that lasted 4 weeks or more (n=123) <sup>2</sup>	56 (46%)
<b>Actions taken among farmworkers who knew or believed they had contracted COVID-19 (n=123) <sup>3</sup></b>	
Isolated from family or roommates	85 (69%)
Wore a mask or face covering	108 (88%)
Participated in social gatherings	9 (7%)
Sought medical care	51 (41%)
Continued working	15 (12%)

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

2. Respondents include those that thought they had contracted COVID-19 and those that received at least one positive COVID-19 test. In some case, respondents replied they did not have COVID-19, however reported they did receive a positive test.

3. Respondents could choose more than one answer. Respondents include those that thought they had contracted COVID-19 and those that received at least one positive COVID-19 test. In some case, respondents replied they did not have COVID-19, however reported they did receive a positive 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 (see Table 4.6). Slightly over a third of all respondents reported being fully vaccinated and receiving at least one booster dose (36%).

There were key strategies identified by interviewees that helped provide vaccination access to the community. Vaccination clinics both at the community level and at worksites helped the community get vaccinated. A farmworker noted that it was easy for them to obtain the vaccine once they decided to get it. They were able to find a community clinic and easily join the line to get vaccinated. One of the employers interviewed shared that they provided incentives for their workers to get vaccinated including a \$100 incentive and a 1 hour paid time off for going to get vaccinated.

According to interviewees, these same efforts have not been made to provide the booster dose in the community. An employer stated that they had not worked with clinics in providing a booster clinic nor provided incentives for their workers to seek boosters on their own. Furthermore, a farmworker noted that one of the reasons they didn't get a booster dose was the lack of information, saying that health care workers don't explain the reason why it's needed, the only thing they are told is that it's needed. The farmworker explained that this is not enough: *"debes de explicar el por que necesitamos, es para que no te de más fuerte//you need to explain why it is necessary, for example so that it (COVID-19) doesn't hit them hard"*.

Thirteen percent of respondents had not received a vaccine against COVID-19. Among survey respondents that were unvaccinated, 74% did not want to receive the vaccine (10% of the total sample). Only 10% of respondents who were unvaccinated were still undecided about receiving the COVID-19 vaccine (1% of the total sample) whereas 13% did want to receive the vaccine (2% of total sample). The most common reasons unvaccinated respondents were wary of getting the vaccine were fear of side effects (26%), fear of getting infected at the vaccination site (18%), general fear of getting vaccinated (13%), and not trusting the U.S. government (10%). Key informants noted that misinformation was always present and continues to be an "uphill battle" that prevents vaccine acceptance. This has resulted in significant efforts by organizations to help provide accurate information to the community regarding the vaccines.

The most common location where respondents received their first COVID-19 vaccine dose was at a Migrant or Community Health Clinic in the U.S. (34%), followed by vaccination events hosted at their work site (14%). One in ten survey respondents received their first COVID-19 vaccine dose in another country (11%).

*"I think the biggest barrier was misinformation. I know that a lot of the families I came across have maybe seen things on social media or some type of communication that they were distressing about. You then had a lot of hesitancy because of that and questioned the safety of the vaccine."*

*— Key Informant*

*"No confió en las vacunas, porque hay personas que ya han recibido vacunas y ellos se contagian más rápido que los que no se han vacunado."*

*"I don't trust the vaccines, because there are people who have received the vaccine and they get infected faster than those that aren't vaccinated"*

*– Farmworker*

**Table 4.6: COVID-19 Vaccinations**

<b>Characteristic</b>	<b>Frequency (Percentage) N = 302</b>
<b>COVID-19 vaccinations</b>	
Fully Vaccinated <sup>1</sup>	236 (78%)
Partially Vaccinated	14 (5%)
Not vaccinated	39 (13%)
<i>Does not want vaccine</i>	29 (74%)
<i>Undecided about vaccine</i>	4 (10%)
<i>Wants to receive vaccine</i>	5 (13%)
Unknown Vaccination Status <sup>2</sup>	13 (4%)
<b>COVID-19 booster status</b>	
Fully vaccinated and received at least one booster dose	109 (36%)
<b>Location of first dose (n=263)</b>	
Other country	30 (11%)
U.S. at work	38 (14%)
U.S. Community Event	31 (12%)
U.S. Migrant Clinic / Community Health Center	89 (34%)
U.S. Other type of clinic	30 (11%)
U.S. Pharmacy	23 (9%)
U.S. Other	4 (2%)
Don't know	12 (5%)
<b>Most common reasons for vaccine hesitancy among unvaccinated farmworkers (n=39) <sup>3</sup></b>	
Afraid of side effects	10 (26%)
Afraid of getting infected on site	7 (18%)
Fear of getting vaccines	5 (13%)
Distrust of U.S. government	4 (10%)

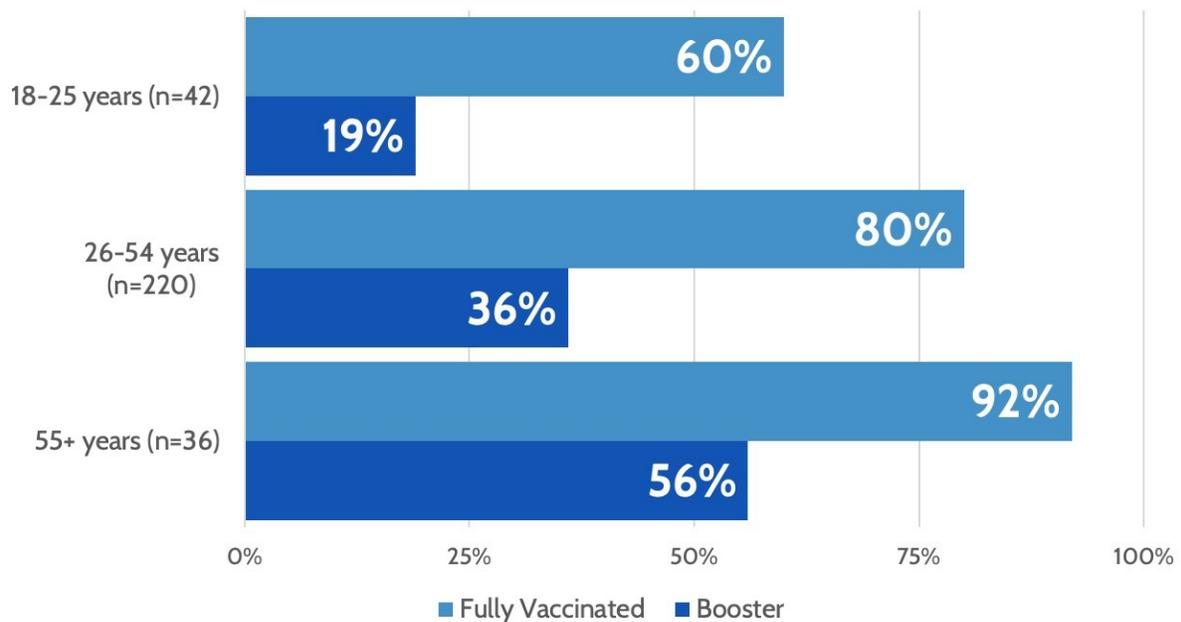
1. Fully vaccinated includes respondents who received one dose of the Janssen/Johnson and Johnson vaccine or two doses of any COVID-19 vaccine approved by the U.S. Food and Drug Administration or the World Health Organization.

2. 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.

3. 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.

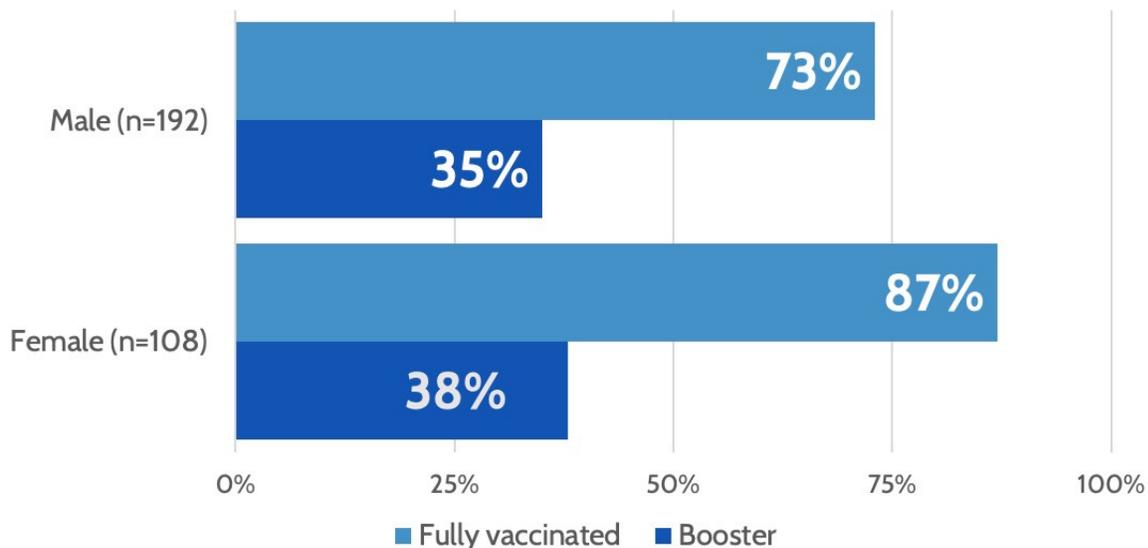
Vaccination status varied by key demographic characteristics. Across all demographic groups, booster dose uptake was lower than uptake of the primary series. In general, primary series and booster uptake were greater as the age of respondents increased. A larger proportion of respondents aged 55 years and older were fully vaccinated (92%) and had received at least one booster dose (56%) compared to the other age groups. Respondents between the ages of 18 and 25 years had the lowest proportion of being fully vaccinated (60%) and the lowest proportion of having received at least one booster dose (19%). (See Figure 4.1)

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

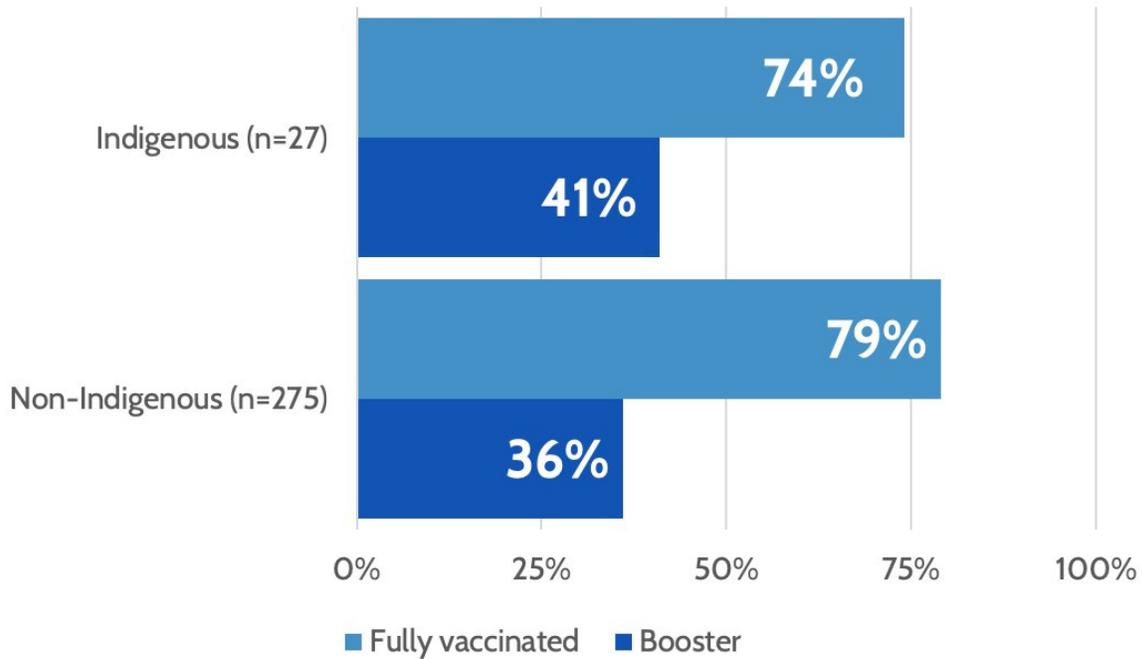


Vaccine uptake was higher among female respondents than male respondents. Almost nine out of ten female respondents were fully vaccinated (87%), while about three out of four male respondents were fully vaccinated (73%). This trend was also observed across sex for booster uptake. Approximately one-third of female (38%) and male (35%) respondents had received at least one booster dose. (See Figure 4.2)

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



**Figure 4.3: Percentage of Non-Indigenous vs Indigenous Respondents who are Fully Vaccinated and Boosted\***

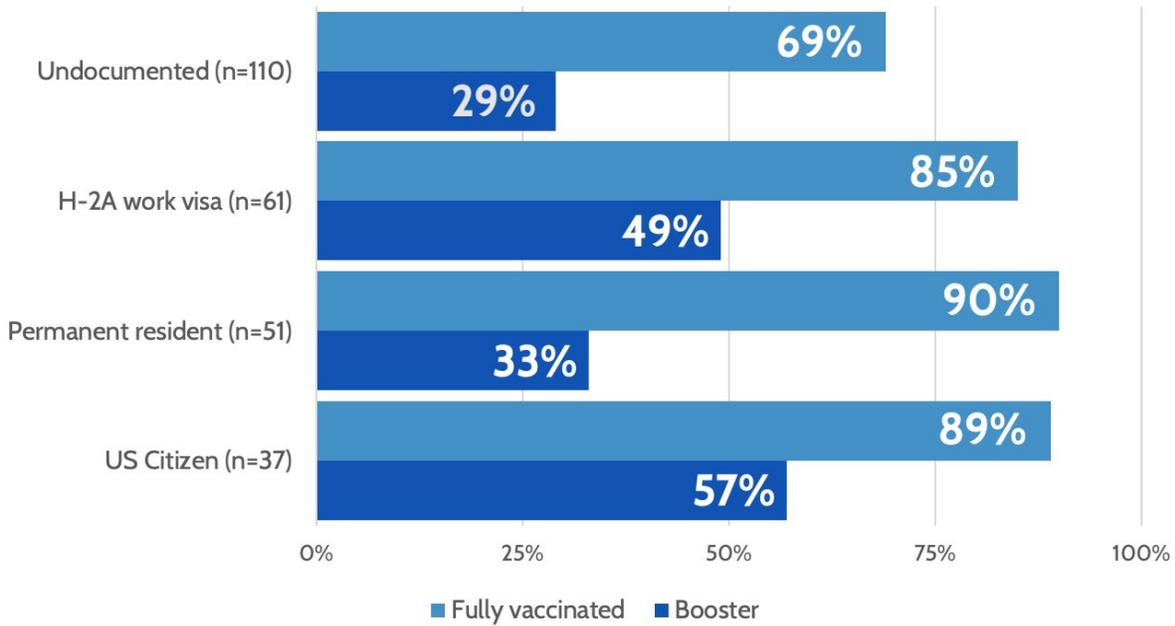


*\*Following the National Agricultural Workers Survey (NAWS) convention, NCFH created a composite metric to identify Indigenous respondents, utilizing a combination of responses from language spoken as a child and currently as an adult, or racially identifying as Indigenous. (13)*

Indigenous and non-Indigenous farmworkers had similar fully vaccinated and booster vaccine uptake. A slightly smaller proportion of Indigenous respondents were fully vaccinated (74%) compared to non-Indigenous respondents (79%). This difference was contrasted with the proportion of having received at least one booster dose. Indigenous farmworkers had a larger proportion of having received at least one booster (41%), compared to non-Indigenous workers (36%). (See Figure 4.3)

Vaccination disparities were observed when considering immigration status of respondents. More than four out of five H-2A guest workers were fully vaccinated (85%). A higher proportion of U.S. citizens (89%) and permanent residents (90%) in this sample were fully vaccinated compared to H-2A guest workers. This is in contrast to the vaccination status of workers without work authorization, with only two-thirds of respondents being fully vaccinated (69%). Workers without work authorization had the lowest proportion of having received a booster dose (29%), while permanent residents had the second lowest proportion of having received a booster dose (33%). (See Figure 4.4)

Figure 4.4: Percentage of Respondents Fully Vaccinated and Boosted by Immigration Status



### IMPACT OF COVID-19

Despite being designated “essential workers”, the pandemic had substantial economic and social impacts on farmworkers. Almost one in two respondents reported experiencing reduced work hours or income during the pandemic (48%), with 22% reporting losing their job (see Table 4.7). Two in five respondents experienced difficulties paying for basic needs, like food, shelter and utilities (41%). Farmworkers also reported an emotional impact from the pandemic, with 49% of respondents reporting an increase of stress during the pandemic.

Over half of respondents (54%) received U.S. governmental assistance. The assistance received came mostly in the form of the economic stimulus check, with 91% of respondents who received government assistance receiving a stimulus check. Food and rental assistance were only received by 22% and 6%, respectively, of respondents who received U.S. government assistance.

Key informants noted the financial toll that COVID-19 had on farmworker families. Farmworkers had to take time off work without pay due to contracting COVID-19, meaning that other family members needed to “step-up” to make ends meet. This in turn created an emotional toll on all family members. In addition to financial difficulties, general illness and family loss contributed to mental health decline. Additionally, the COVID-19 pandemic disrupted farmworkers’ daily lives. One farmworker noted the difficulty in adjusting to daily activities such as going to the grocery store and having to plan in advance and having to go individually instead of as a family, and having to explain to their children why they could not join. Another farmworker explained how alienating the pandemic was with restrictions at work that prevented them from interacting with fellow workers, as well as general regulations that prevented them from participating in communal activities that helped them feel connected.



*"Han complicado porque no es como antes, que entra a una iglesia y que no puede estar con varias personas al lado de ellos porque el se contagia, y si se ve un poquito complicado."*

*"It got complicated because it's not like before, you enter church and can't be close to others because you can get infected, so yes it got a little complicated."*

— Farmworker

Table 4.7: Impact of COVID-19

Characteristic	Frequency (Percentage) N = 302
<b>Experiences during the pandemic <sup>1</sup></b>	
Lost job	65 (22%)
Reduction of hours or income	144 (48%)
Increased stress	149 (49%)
Divorced or separated	8 (3%)
Difficulty obtaining childcare or increased childcare expenses	32 (11%)
Difficulty paying basic needs	125 (41%)
Treated unfairly due to country of birth, race or ethnicity	19 (6%)
<b>Received U.S. government assistance <sup>2</sup></b>	163 (54%)
Economic stimulus check	148 (91%)
Food assistance	36 (22%)
Rental assistance	10 (6%)

1. Respondents could choose more than one answer.

2. Respondents could choose more than one answer.



# 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 Yakima County. All survey data are self-reported. The data in this assessment are cross-sectional and only represent a brief snapshot in time. While data collection occurred during the peak season of agriculture work in the county, not every agricultural crop has the same timelines, and workers in those sectors may have been missed, as well as a limited number of those working in the animal sector. The survey is only available in English, Spanish and Mixteco. There was ad-hoc interpretation from Spanish to Tzeltal for one respondent which may have caused barriers in adequately capturing the responses of the respondent.

## DISCUSSION

The findings of both surveys and interviews outline the impact that COVID-19 has had on the farmworker community of Yakima County, Washington. The results of this assessment demonstrate the need for on-going resources and support for farmworkers, including improving housing and working conditions, and support for health care access to reduce the risk for infectious diseases and improve health outcomes. Although survey respondents indicate accessibility to health care, with 96% of respondents that needed care receiving it when needed, interviews tell a different story. It is clear that the closing of one of the major hospitals in the area has created health care access issues. Undocumented and H-2A workers already experience inequalities in access to care due to transportation to centers, lack of time off, cost and lack of health insurance as well as fear of immigration repercussions. (18) The closure of one of the major health care facilities further augments the inequalities faced by workers without documentation and H-2A

guest workers, by further restricting the number of physicians in the area to cover the community. There are community clinics and organizations that have stepped up to help this population receive needed care, but they need additional support to be able to fully serve the farmworker community in the area.

At the time of data collection, Yakima County had a 78.5% fully vaccinated rate among the 18 years and older population. (19) Similarly, 78% of farmworkers in this sample were fully vaccinated by an FDA- or WHO-approved vaccine based on survey results. This is a significant feat accomplished by the Community Health Centers and other vaccine providers and support organizations in the area given the additional barrier farmworkers may face to access vaccination compared to the general public. There were multiple strategies employed by farmworker-serving organizations and clinics in partnership with employers that made this possible. Having vaccination clinics at work and at community sites were successful. Additionally, the incentives and encouragement provided by some employers to their workers helped increase vaccine uptake. However, survey results suggest there are vaccination disparities among farmworkers based on key demographic characteristics. There was a lower proportion of 18-25 year old respondents (60%) that were fully vaccinated compared to older age groups. Respondents with no documentation had the lowest proportion of being fully vaccinated (69%) compared to other immigration status groups. In contrast to other farmworker communities that have been assessed as part of the FCCA project, there appears to be no major disparities in the proportion of fully vaccinated respondents between males and females, or by Indigenous identity. These results provide insights into vaccine outreach effort and strategies employed by this community that can help better serve inequities within farmworker subpopulations.

## DISCUSSION CONTINUED

The promotion and facilitation of booster vaccinations is an area of improvement for this community. The strategies employed by the community in promoting the initial series should be considered to increase booster vaccination uptake. This also includes the on-going partnerships and promotion of the booster doses with employers. However, to make these successful, on-going informational campaigns need to be done to properly inform the community of why booster doses are needed. We recommend providing this information in the preferred language of the worker, and through multiple mediums, including printed materials, social media campaigns, through Whatsapp or messaging apps, and audiovisual materials.

Survey results and interviews highlight the emerging issue of mental health experiences in the farmworker community of the area. Interviews with farmworkers, key informants, and employers stated and highlighted the rise in mental health concerns such as anxiety, depression, and substance use. One of the main reasons highlighted was the economic stress the pandemic had on farmworker families, with some losing their jobs or a reduction of hours, resulting in difficulties to pay for basic needs. Additionally, restrictions and regulations placed during the pandemic created a sense of alienation among a population that is already separated from their families due to migration.

While there have been significant strides to support the farmworker community in response to the pandemic, there is still a need for partners in the area to keep supporting this population. The pandemic exemplified the already existing risk the farmworker population has in contracting infectious diseases, such as COVID-19, due to their working and housing conditions. Efforts in the area need to be made to help address these issues to safeguard farmworkers from infectious diseases. Additionally, there needs to be an increase in health care service providers, or additional support to the clinics present to be able to adequately provide care to the large farmworker population in the area. This is especially important as close to half of the respondents that contracted COVID-19 may be experiencing long COVID symptoms. Health care providers and services also need to address the mental health issues exacerbated by the pandemic in this population. When creating resources, language access and access for all regardless of immigration status need to be considered to help address the inequities and disparities faced by subpopulations of farmworkers. It is important to highlight that the organizations in the area that support and provide resources to this community have been able to serve this population, but it is critical that they receive additional support, resources, and funding to help them better serve the farmworker community in Yakima County, Washington.



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