

**Findings from the  
National Agricultural  
Workers Survey (NAWS)  
2021–2022:**

A Demographic and  
Employment Profile of  
United States Crop  
Workers

Research Report No. 17

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Value of solution.*



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September 2023

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## EXECUTIVE SUMMARY

This report is the seventeenth in a series of Department of Labor publications on the demographic and employment characteristics of hired crop workers in the United States. These findings are based on data collected from face-to-face interviews with 2,598 crop workers through the U.S. Department of Labor’s National Agricultural Workers Survey (NAWS) between September 29, 2020, and October 1, 2022. *The NAWS sample does not include crop workers with H-2A visas.*

### ***Birthplace, Ethnicity, and Race***

Almost two-thirds (61%) of crop workers interviewed in fiscal years 2021–2022 were born in Mexico, 32 percent were born in the United States or Puerto Rico, 6 percent were born in Central America, and the remainder originated from various other regions, including South America, the Caribbean, Asia, and the Pacific Islands. Seventy-five percent of all crop workers were Hispanic. Among U.S.-born crop workers, 26 percent were Hispanic. In terms of race, nearly one-third of crop workers self-identified as White (32%), and nearly two-thirds categorized their race as “other” (64%). Nine percent of crop workers self-identified as indigenous.

### ***Work Authorization and Number of Years in the United States***

More than half of all crop workers surveyed in 2021–2022 were authorized to work in the United States (58%); 38 percent were U.S. citizens (by birth or naturalization), 18 percent were lawful permanent residents (green card holders), and 2 percent had work authorization through some other visa program. Among citizens, 83 percent were born in the United States, and 17 percent were naturalized citizens.

On average, foreign-born crop workers interviewed in 2021–2022 first came to the United States 21 years before being interviewed. Most respondents had been in the United States at least 10 years (79%), with 71 percent arriving 15 years or more prior to their NAWS interview. Five percent<sup>1</sup> of foreign-born crop workers were in their first year in the United States. Eighty-five percent of crop workers were settled workers, and 15 percent were migrants.

### ***Demographics and Family Composition***

Males comprised 68 percent of crop workers in 2021–2022. Crop workers had an average age of 39. Forty-two percent of crop workers were under the age of 35 and 18 percent were age 55 or older.

Sixty percent of crop workers were married. At the time they were interviewed, crop worker parents with minor children living with them had an average of two minor children. Among these

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<sup>1</sup> This estimate has a relative standard error (RSE) between 31 and 50 percent. RSE is a measure of an estimate’s precision and is calculated by dividing the standard error of the estimate (mean or percentage) by the estimate itself. Smaller RSEs indicate more precise estimates. Estimates with RSEs between 31 and 50 percent are flagged throughout this report and should be interpreted with caution. Estimates with RSEs greater than 50 percent are considered statistically unreliable and are suppressed.

parents, 69 percent had 1 or 2 minor children in their household, 19 percent had 3 minor children, and 12 percent had 4 or more minor children.

Thirty-four percent of crop workers were living apart from all nuclear family members at the time of their interview (i.e., were unaccompanied). Seventy-nine percent of these unaccompanied crop workers were single without children, 14 percent were parents, and 7 percent had a spouse but no children.

### ***Language and Education***

In 2021–2022, 57 percent of NAWs respondents said that Spanish was the language in which they were most comfortable conversing, 27 percent said English, 8 percent said both Spanish and English, 7 percent said more than one language (excluding Spanish/English bilingual), and 2 percent<sup>2</sup> reported an indigenous language. When asked to rate their English language skills, 27 percent of crop workers reported they could not speak English “at all,” 36 percent said they could speak English “a little” or “somewhat,” and 37 percent said they could speak English “well.” In terms of their ability to read English, 34 percent of crop workers reported they could not read English “at all,” 29 percent said they could read English “a little” or “somewhat,” and 37 percent said they could read English “well.”

The average level of formal education completed by crop workers was ninth grade. Four percent of crop workers reported having no formal schooling, and 30 percent reported completing the sixth or a lower grade. Twenty-three percent of crop workers said they completed grade 7, 8, or 9, and 27 percent said they completed grade 10, 11, or 12. Sixteen percent of crop workers reported completing some education beyond high school.

### ***Housing***

Fifty-six percent of crop workers interviewed in 2021–2022 reported living in housing rented from someone other than their employer (non-employer or non-relative), 30 percent of crop workers said they lived in a home owned by themselves or a family member, and 3 percent said they paid rent for housing provided by the government, a charity, or other organization. Ten percent of crop workers lived in employer-provided housing; 8 percent received it free of charge and 2 percent paid rent either directly or via payroll deduction.

Fifty-nine percent of all crop workers reported living in detached, single-family houses, 17 percent said they lived in mobile homes, 23 percent lived in apartments, and 1 percent<sup>3</sup> lived in various other types of housing including duplexes or triplexes, dormitories or barracks, and motels or hotels. Twenty-two percent of crop workers lived in “crowded” dwellings, defined as housing units in which the number of persons per room was greater than one.

### ***Distance to Work and Transportation***

When asked how far their current farm job was from their current residence, 9 percent of crop workers reported that they lived where they worked, 71 percent lived fewer than 25 miles from their current farm job, and 16 percent lived between 25 and 49 miles from work. Seventy-one

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<sup>2</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>3</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

percent of crop workers drove a car to work, 10 percent rode with others, 8 percent walked or took public transportation, and 8 percent rode with a “raitero.”<sup>4</sup>

### ***Job Characteristics and Employment History***

In 2021–2022, 78 percent of crop workers were employed directly by growers, and 22 percent were employed by farm labor contractors. At the time of interview, 24 percent of crop workers were working in vegetable crops, 40 percent in fruit and nut crops, and 23 percent in horticulture. Another 10 percent were working in field crops, and 1 percent<sup>5</sup> were working in mixed crops. Twenty-seven percent of crop workers were performing pre-harvest tasks, 26 percent were harvesting crops, 16 percent were performing post-harvest activities, and 31 percent were performing technical production tasks.

In the 12 months prior to being interviewed, respondents spent an average of 37 weeks employed in farm work and performed an average of 205 days of farm work. Crop workers worked an average of 5 days per week for their current employer and reported an average of 43 work hours in the previous week. Most crop workers said their basis for pay was an hourly wage (85%), and all crop workers reported earning an average of \$14.53 per hour. Forty-five percent of crop workers said they were covered by Unemployment Insurance (UI) if they were to lose their current job, 72 percent said they would receive workers’ compensation if they were injured at work or became ill because of their work, and 28 percent reported that their employer offered health insurance for injury or illness suffered while not on the job.

Eighty-four percent of crop workers reported having worked for a single farm employer in the previous 12 months, 12 percent had worked for 2 employers, and 4 percent had worked for 3 or more farm employers. At the time of interview, crop workers had been employed by their current farm employer for an average of eight years. Most crop workers interviewed in 2021–2022 expected to continue doing farm work for more than 5 years or as long as possible (77%).

In the year prior to their NAWS 2021–2022 interview, crop workers spent an average of 9 weeks living in the United States but not working and 3 weeks abroad. Seventeen percent of crop workers held at least one non-crop job in the previous 12 months, and those who held a non-crop job worked an average of 27 weeks in non-crop production employment.

### ***Income and Assets***

Crop workers’ mean and median personal income in the previous calendar year was in the range of \$20,000 to \$24,999. Nine percent of crop workers said their total personal income was less than \$10,000, 16 percent said they had personal incomes of \$10,000 to \$19,999, 29 percent had personal incomes of \$20,000 to \$29,999, and 29 percent reported that their total personal income was \$30,000 or more. Nine percent of crop workers reported not having worked at all during the prior calendar year.

Crop workers’ mean and median total family income the previous calendar year was in the range of \$30,000 to \$34,999. Six percent of crop workers reported no family income for the prior year, 15 percent said their total family income in the prior year was less than \$20,000, another 18 percent had a family income of \$20,000 to \$29,999, and 52 percent had a family income of

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<sup>4</sup> A “raitero” is a person who charges a fee for providing a ride to work.

<sup>5</sup> Estimate should be interpreted with caution because it has a n RSE of 31 to 50 percent.

\$30,000 or more.<sup>6</sup> Twenty-one percent of crop workers had family incomes in the previous year below the poverty level.

Eight in 10 crop workers stated that they owned or were buying at least one asset in the United States (80%). The most common assets were a vehicle (reported by 80% of crop workers) or a home (reported by 24% of crop workers).

In 2021–2022, 17 percent of crop workers reported that someone in their household received a benefit from at least one contribution-based program, including disability insurance, UI, and Social Security. Twelve percent of households received payments from UI, 3 percent received payments from disability insurance, and 2 percent received Social Security payments. Sixty-four percent of crop workers reported that they or someone in their household used at least one type of public assistance program in the previous two years. The most common public assistance programs used were Medicaid (37%), public health clinics (26%), other types of assistance (26%), SNAP (12%), and WIC (7%).

### ***Health Care***

Fifty-two percent of crop workers interviewed in 2021–2022 reported having health insurance. Among them, 43 percent said the government provided the insurance, 18 percent provided by their employer, 16 percent said they or their spouse paid for insurance themselves, 11 percent in their parent’s or family plan, 10 percent reported having insurance under their spouse’s employer’s plan, and 5 percent reported that some other entity paid for their insurance.<sup>7</sup> Among crop workers with spouses, 62 percent said their spouse had health insurance. Among crop workers with minor children in the United States or Puerto Rico, 93 percent reported that all their children had health insurance, 2 percent reported that some of their children had health insurance.

Sixty percent of crop workers visited a U.S. health care provider in the last 12 months (excluding dental treatment and routine dental cleaning or check-up). Over half (55%) of crop workers visited a provider for preventive services, 19 percent for an illness, 4 percent for an injury, 10 percent for dental treatment, and 30 percent for routine dental care. Most crop workers said they had no need to go or do not get sick as the reason they did not use health care services for preventive care (71%), illness (97%), injury (99%), dental treatment (87%), and routine dental care (60%). Most crop workers were very satisfied with the care they received. Preventive services and routine dental care had the highest rates of satisfaction with 98% reporting being very satisfied.

### ***Digital Access***

Almost all (99%) crop workers reported that they had access to digital information sources (digital access). Almost all of crop workers’ spouse (98%) also had digital access and 89% of their children had digital access. Most crop workers had a phone with text (92%) or a phone with internet (96%). Four in ten (40%) had a computer and about one-fifth (18%) had a tablet. Crop workers reported that they used their digital devices for communication/calls (97%), entertainment or social networks (74%), or the news (57%).\

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<sup>6</sup> Six percent of workers reported that they did not know their family income for the prior year. One percent declined to state their family income.

<sup>7</sup> Percentages sum to more than 100 percent because respondents could select all that apply.

## INTRODUCTION

The U.S. Department of Labor's National Agricultural Workers Survey (NAWS) is an employment-based, random-sample survey of U.S. crop workers that collects demographic, employment, and health data in face-to-face interviews. The survey began in Federal Fiscal Year 1989; since then, more than 73,000 workers have been interviewed. The primary purposes of the NAWS are to monitor the terms and conditions of agricultural employment and assess the conditions of crop workers. The survey also generates information for various Federal agencies that oversee crop worker programs.

The NAWS is a survey of hired workers employed in crop and crop-related work at the time of interview. To be interviewed, workers must be hired by an eligible establishment and working at an eligible task. Eligible establishments are those classified in the North American Industrial Classification System (NAICS) as Crop Production (NAICS code 111) or as Support Activities for Crop Production (NAICS code 1151). NAICS 111 includes establishments such as farms, orchards, groves, greenhouses, and nurseries primarily engaged in growing crops, plants, vines, or trees and their seeds. NAICS 1151 includes establishments primarily engaged in providing support activities for growing crops. Examples of support activities include supplying labor, aerial dusting or spraying, cotton ginning, cultivating services, farm management services, planting crops, and vineyard cultivation services.

Eligible tasks include work in all phases of crop production (pre-harvest, harvest, and post-harvest), as well as supervising workers, operating machinery, and packing crops. Workers who pack crops, however, are interviewed only if the packing facility at which they are employed is on or adjacent to the sampled crop producer, and the facility is owned by and primarily packs crops for that producer.

The NAWS sampling universe does not include:

- Persons employed at eligible establishments who do not perform crop-related work, such as secretaries or mechanics, unless such workers also perform crop-related work; and
- Crop workers with an H-2A visa (a temporary-employment visa for foreign agricultural workers). The Employment and Training Administration (Department of Labor) is currently assessing the feasibility of including H-2A crop workers in future survey waves.

The NAWS is unique for its broad coverage of the characteristics of hired crop workers and their dependents and its nearly year-round interviewing schedule. Data are collected throughout the year, over three cycles, to reflect the seasonality of agricultural production and employment. The NAWS differs from many Federal worker surveys in that it is an establishment survey (workers are sampled at their workplaces), only currently employed persons are sampled, and data are collected through face-to-face interviews with crop workers.

The NAWS sample includes both migrant and seasonal crop workers. The use of an employer-based sample rather than a household-based sample increases the likelihood that migrant workers will be interviewed in the NAWS. Multi-stage sampling is implemented to account for seasonal and regional fluctuations in the level of farm employment. To capture seasonal fluctuations in

the agricultural work force, the sampling year is divided into three interviewing cycles. For each cycle, there are six levels of selection:<sup>8</sup>

- region;
- single counties or groupings of counties called farm labor areas (FLA), which constitute the primary sampling unit;
- county;
- ZIP Code region;
- employer; and
- respondent.

The NAWS has benefited from collaboration with multiple Federal agencies, which continue to share in the design of the questionnaire. Information provided through the NAWS informs the policies and programs of the many Federal government agencies that protect and provide services to migrant and seasonal crop workers and their dependents.

### ***Topics Covered***

This report presents information collected from face-to-face interviews with 2,598 crop workers interviewed between September 29, 2020, and October 1, 2022. It is organized into ten chapters, each beginning with a summary of the chapter's key findings.

Chapters [1](#), [2](#) and [3](#) summarize the demographic characteristics of crop workers, including place of birth, ethnicity and race, work authorization, gender, age, marital status, household size and structure, education, and language ability. [Chapter 4](#) discusses crop workers' housing, including the type of housing, the location of their housing in relation to their jobs, and crowding. [Chapter 5](#) summarizes the characteristics of farm jobs, including crops and tasks, job recruitment, hours and wages, and benefits. [Chapter 6](#) gives an overview of crop workers' participation in U.S. agricultural employment and [Chapter 7](#) discusses workers' participation in non-crop employment, including farm jobs in other types of agriculture and periods of unemployment. [Chapter 8](#) presents information on crop workers' income, assets, and use of assistance programs. [Chapter 9](#) summarizes health insurance coverage for crop workers and their family members, health care utilization in the United States, barriers to health care access, and satisfaction with the health care they received. [Chapter 10](#) present information on digital access.

The report also contains four appendices: [Appendix A](#) describes the procedures used to select the sample, [Appendix B](#) displays a map of the NAWS migrant streams, [Appendix C](#) contains a table of the percentages and means of the principal variables presented in the report, and [Appendix D](#) contains tables of demographics and employment characteristic covering nine periods from 1989 to 2022.

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<sup>8</sup> A full description of the survey's sampling design is available in the [Statistical Methods of the National Agricultural Workers Survey](#).

## CHAPTER 1: Birthplace, Work Authorization, and Migrant Types

### *Summary of Findings*

- About 6 in 10 crop workers surveyed were born in Mexico (61%).
- Seventy-five percent of all crop workers were Hispanic. Among U.S.-born workers, 26 percent were Hispanic.
- Thirty-two percent of crop workers self-identified as White, 3 percent as Black or African American, and 64 percent of respondents did not select a category; instead, they described race with an open-ended “other” response.
- Nine percent of crop workers were identified as indigenous.
- Crop workers in their first year in the United States comprised only 5 percent<sup>9</sup> of the hired crop labor force.
- Over half of all crop workers were authorized to work in the United States (58%).
- Most crop workers were settled workers (85%). Fifteen percent were migrants.

### *Place of Birth*

About 6 in 10 crop workers interviewed in 2021–2022 were born in Mexico (61%), almost one-third were born in the United States or Puerto Rico (32%), 6 percent were born in Central America, and 2 percent<sup>10</sup> in other countries (Figure 1.1).

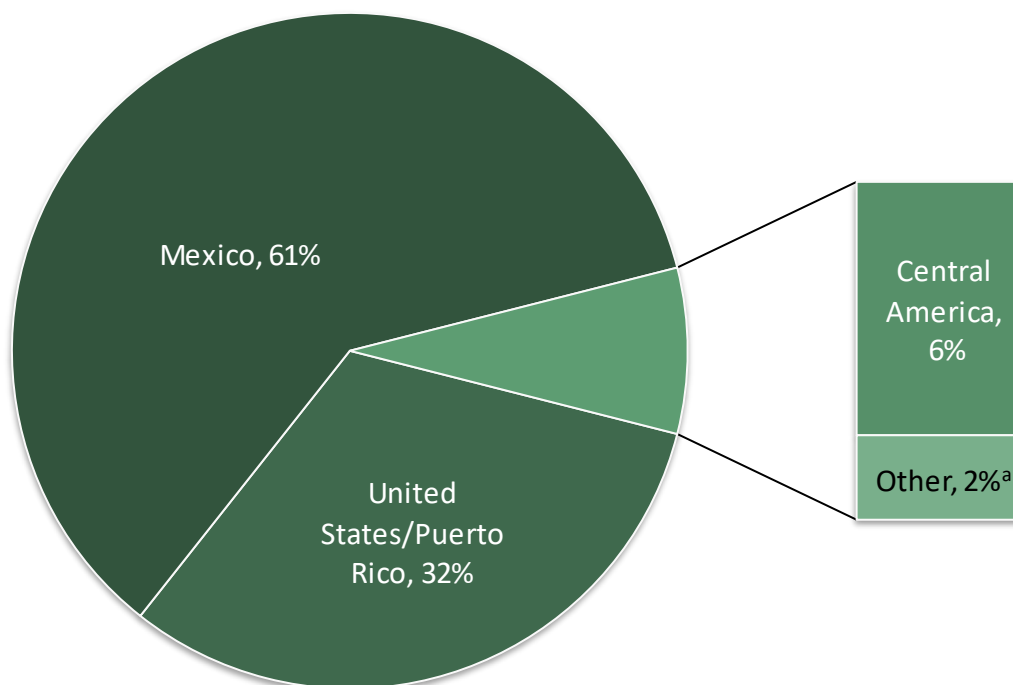
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<sup>9</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>10</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.



Figure 1.1: Place of Birth, 2021–2022



<sup>a</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

### ***Ethnicity and Race***

Hispanic origin, as defined in the United States, describes the heritage, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors.<sup>11</sup> Foreign-born workers may more readily identify with a national origin rather than an abstract concept of Hispanic ethnicity. Workers born in the United States or those who have resided in the United States for several years might have a better understanding of how Hispanic ethnicity is defined in the United States.

To capture Hispanic identity, crop workers were asked to indicate which of a variety of categories best described them. Seventy-five percent identified themselves as members of a Hispanic group: 57 percent as Mexican, 9 percent as Mexican American, and the remaining 2 percent<sup>12</sup> as Chicano, Puerto Rican, or other Hispanic. Among U.S.-born workers, 26 percent self-identified as Hispanic—17 percent as Mexican American and 6 percent<sup>13</sup> as Mexican.

Crop worker respondents were also asked to indicate the race with which they identify. Respondents had the opportunity to choose one or more race categories from the standard list

<sup>11</sup> Humes, K. R., Jones, N. A., and Ramirez, R. R. (2011). [Overview of Race and Hispanic Origin: 2010](#). 2010 Census Briefs (p. 2).

<sup>12</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>13</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

required by the U.S. Office of Management and Budget. Thirty-two percent of all respondents in 2021–2022 self-identified as White, 3 percent as Black or African American, and 64 percent of respondents gave an answer not on the standard list.

The categories used in the NAWS questions on ethnicity and race might not be intuitively understood by indigenous individuals who identify themselves as members of a specific community or language group rather than a more generic racial group, such as indigenous. Beginning in 2005, the NAWS began supplementing the question on primary language use with questions that ask about all adult languages spoken as well as childhood language exposure.<sup>14</sup> The NAWS uses a combination of the responses to these questions and the question about race to identify crop workers who are indigenous, and in 2021–2022, 9 percent of NAWS respondents were identified as indigenous.

### ***Foreign-born Workers' First Arrival to the United States***

Data on the month and year a foreign-born crop worker first entered the United States provides some information about migration history and attachment to the farm workforce. Importantly, this is not a measure of continued residence in the U.S. nor is it a measure of the crop worker's tenure in agriculture; a crop worker may have been in the U.S. for some time before joining the farm workforce.

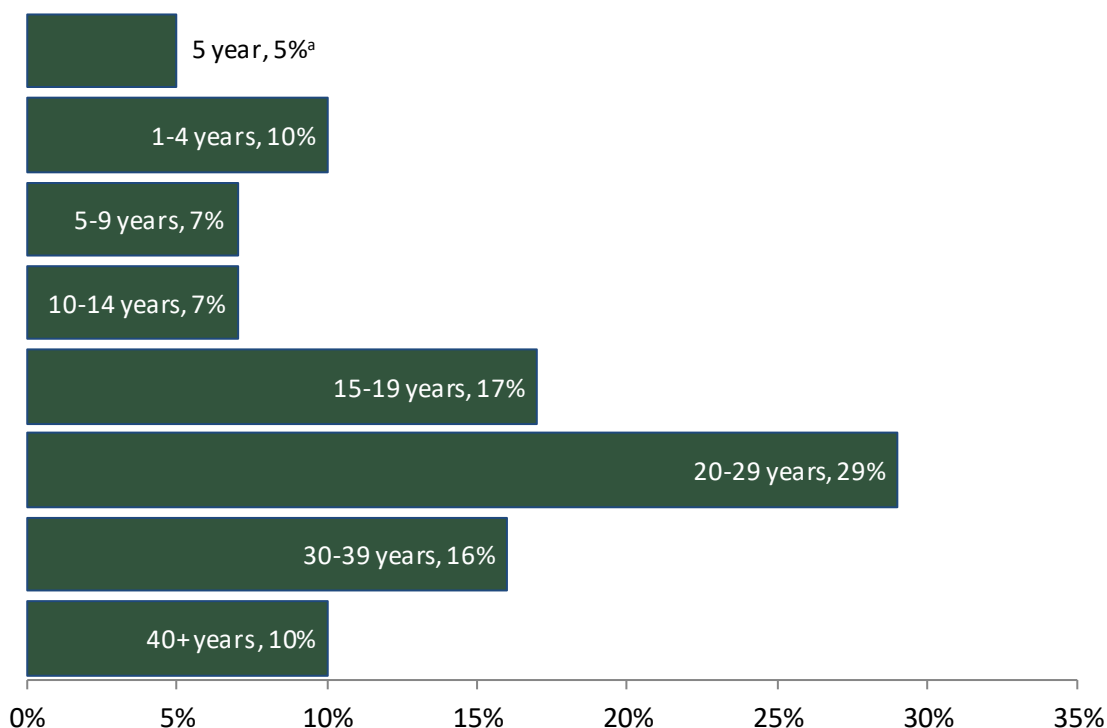
On average, foreign-born crop workers interviewed in 2021–2022 first came to the United States 21 years before being interviewed. Most respondents had been in the United States for at least 10 years (79%), with 71 percent arriving at least 15 years prior to their NAWS interview (Figure 1.2). Five percent<sup>15</sup> of crop workers interviewed first arrived in the United States in the year predating their interview.

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<sup>14</sup> Gabbard, S., Kissam, E., Glasnapp, J., Nakamoto, J., Saltz, R., Carroll, D. J., & Georges, A. (November, 2012). [\*Identifying Indigenous Mexicans and Central Americans in Surveys\*](#). International Conference on Methods for Surveying and Enumerating Hard-to-Reach Populations (November, 2012) New Orleans, LA.

<sup>15</sup> Estimate should be interpreted with caution because it has a RSE of 31 to 50 percent.

Figure 1.2: Years Since First Arrival to the United States, 2021–2022



<sup>a</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

Foreign-born respondents were asked to report where they lived (state/department/province) before coming to the United States. Among Mexico-born workers interviewed in 2021–2022, most came from the states of Michoacán (20%), Guanajuato (17%), Oaxaca (12%), Guerrero (9%), Jalisco (6%), and Baja California (5%). The greatest proportion of Mexico-born crop workers originated from the Western Central region (45%), 29 percent came from Southern Mexico, and another 25 percent came from Northern Mexico.<sup>16</sup>

### **Work Authorization**

A series of questions in the survey provides a picture of whether respondents born abroad have U.S. work authorization. These questions address the citizenship and visa status of those who are not U.S. citizens by birth (naturalized citizen, lawful permanent resident, border crossing-card holder, applicant for residency, temporary visa holder, or not holding a valid visa) and, when applicable, the date and program under which the individual applied for work authorization. In addition, respondents born abroad are asked whether they have authorization to work in the United States. To be classified as work-authorized, a worker must provide consistent answers that conform to visa regulations. For example, a worker who reports work authorization from a

<sup>16</sup> The Western Central region of Mexico includes the states of Colima, Guanajuato, Jalisco, and Michoacán. The Northern region includes the states of Aguascalientes, Baja California, Chihuahua, Coahuila, Mexico City, Durango, Estado de Mexico, Hidalgo, Nayarit, Nuevo Leon, Queretaro, San Luis Potosi, Sinaloa, Sonora, Tamaulipas, and Zacatecas. The Southern region of Mexico includes the states of Campeche, Chiapas, Guerrero, Morelos, Oaxaca, Puebla, Quintana Roo, Tabasco, Tlaxcala, Veracruz, and Yucatan.

visa program that expired before he or she entered the country would be classified as unauthorized.

Fifty-eight percent of crop workers interviewed had work authorization in 2021–2022.<sup>17</sup> Among the 38 percent who were U.S. citizens, 83 percent were born in the United States, and 17 percent were naturalized citizens. The remainder of the work-authorized population consisted mainly of lawful permanent residents (18%) with 2 percent authorized through some other visa program.

### ***Migrant Crop Workers***

The definition of “migrant” has varied across Federal government agencies and programs that provide services to migrant and seasonal crop workers. The NAWS has defined a migrant as a person who reported jobs that were at least 75 miles apart or who reported moving more than 75 miles to obtain a farm job during a 12-month period.<sup>18</sup>

Interpreting migration patterns requires some caution. Since the analysis presented here covers only one year of farm employment data, these definitions describe movement during that particular year. The discussion below assumes that most of the workers making a move during the year were cyclical migrants. However, some portion of these workers might have been making a permanent move.

For this report, migrant crop workers were categorized according to their migrant travel patterns. Migration consisted of moving from a “home base,” the location where the migrant spent the greatest amount of time during the year preceding his/her NAWS interview, to one or more destinations where work was available. Shuttle migrants were workers who did not work on a U.S. farm at their home base, but who traveled 75 miles or more to do farm work in a single U.S. location and worked only within a 75-mile radius of that location. Follow-the-crop migrants were workers who traveled to multiple U.S. farm locations for work. Follow-the-crop migrants might or might not have done U.S. farm work at their home base. This report further classifies migrants into domestic migrants (those who traveled solely within the United States in the 12 months preceding their interview to do farm work) or international migrants (those who crossed the U.S. border to do farm work).

Most crop workers interviewed reported being settled. Just 15 percent of crop workers interviewed in 2021–2022 were migrants. Among them, 32 percent were domestic, 43 percent were international migrants (41% international shuttle migrants), and 25 percent were newcomers who had been in the U.S. less than a year (see Figures 1.3 and 1.4).

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<sup>17</sup> The sample does not include crop workers with H-2A visas.

<sup>18</sup> Migrant programs often use a 24-month look-back period in their definitions of migrant. The NAWS collects data about travel to another city to do farm work during the 12 months preceding the NAWS interview and the 12 months prior to that.

Figure 1.3 Distribution of Migrant Types (As Percent of Migrants), 2021-2022

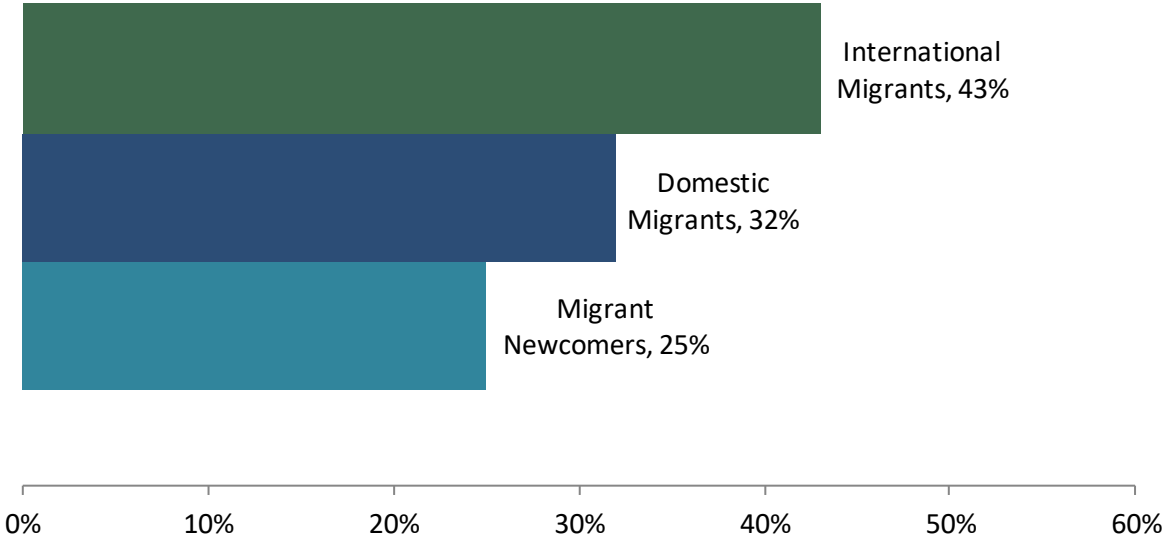
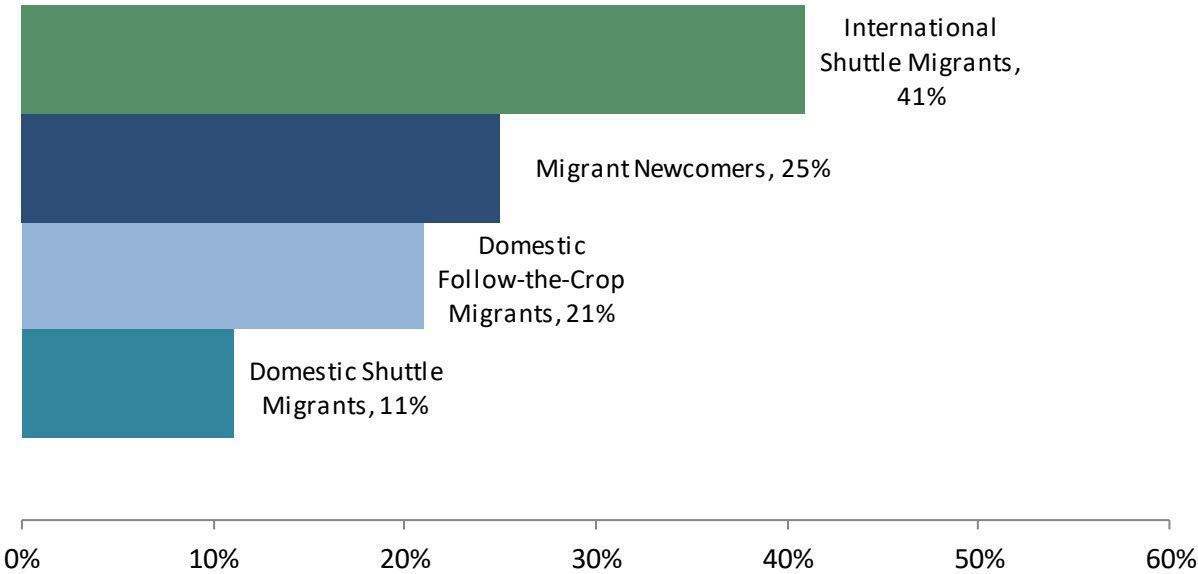


Figure 1.4: Distribution of Migrant Types According to Their Migrant Travel Patterns (As Percent of Migrants), 2021–2022



Note: The estimate for international follow-the-crop migrants is suppressed because it has an RSE greater than 50 percent.

## CHAPTER 2: Demographics, Family Size, Children, and Household Structure

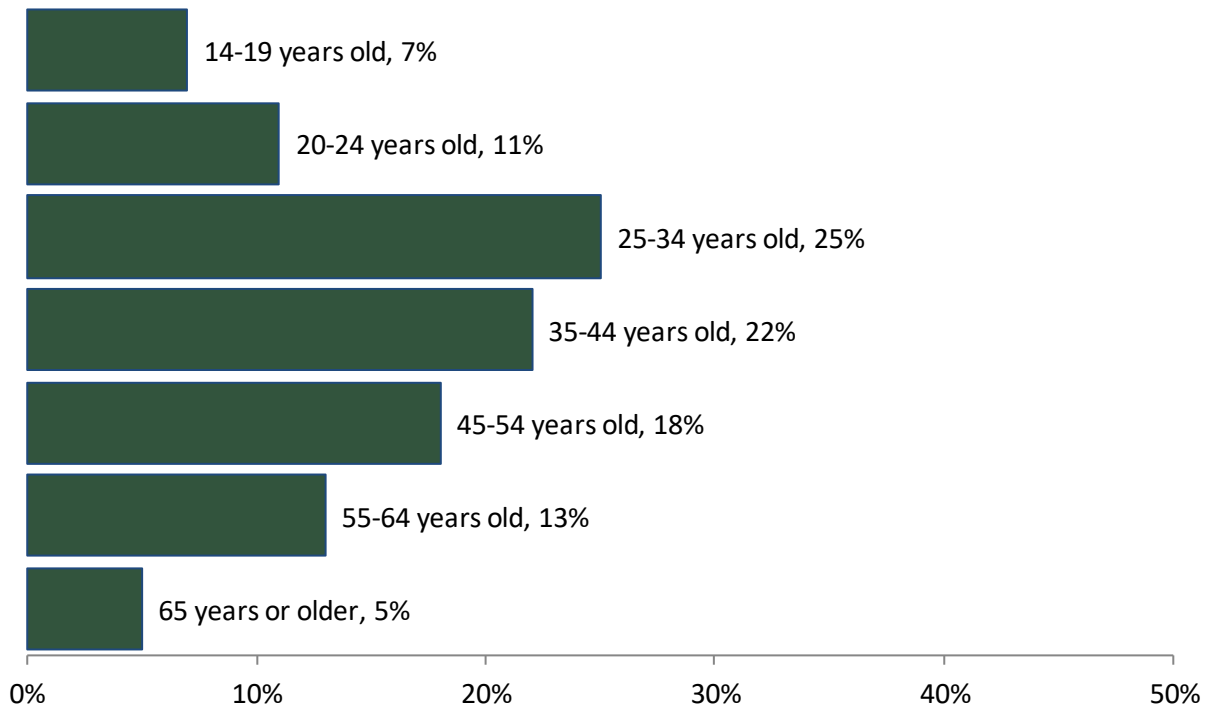
### Summary of Findings

- Sixty-eight percent of interviewed crop workers were men.
- Crop workers' average age was 39, and median age was 38.
- Sixty percent of all crop workers were married.
- Forty-nine percent of all crop workers had children.
- Thirty-four percent of crop workers were living apart from all nuclear family members at the time of their interview. Seventy-nine percent of unaccompanied crop workers were single workers without children, 14 percent were parents, and 7 percent had a spouse but no children.

### Gender and Age

In 2021–2022, the U.S. crop labor force was predominantly male (68%) and had an average age of 39 and median age of 38. More than two-fifths of crop workers were under the age of 35 (42%), and 18 percent were age 55 or older (Figure 2.1).

**Figure 2.1: Age Distribution of Crop Workers, 2021–2022**



In 2021–2022, unauthorized workers were about the same as authorized workers (an average of 39 and 40 years of age, respectively) and newcomers to U.S. farm work (i.e., those arriving in the United States within the year prior to interview) were younger than experienced workers (an

average of 24 and 40 years of age respectively). The average age of males and females was nearly the same – 41 and 37 years, respectively.

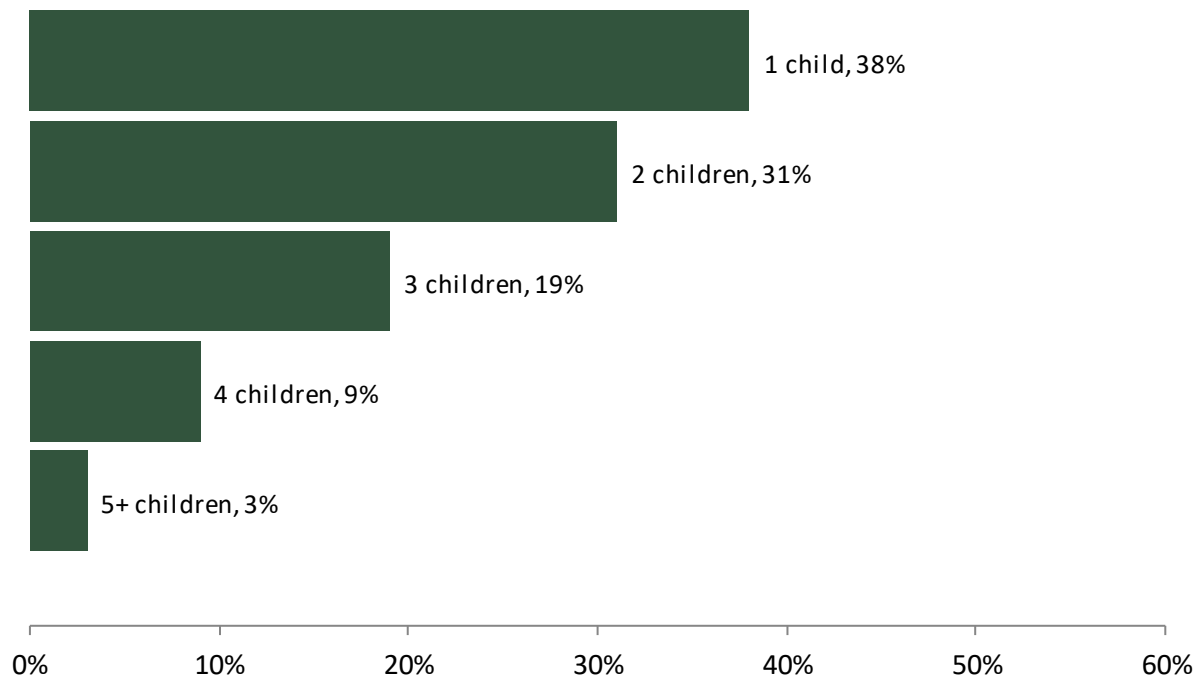
**Marital Status and Family Type**

More than half of crop workers interviewed in 2021–2022 were married (60%), and half of all crop workers were parents (49%). Among parents, 86 percent were married or living together, 7 percent were single, and 7 percent were separated, divorced, or widowed.

**Children and Household Structure**

In 2021–2022, crop worker parents with minor children living in their household had an average of 2 minor children living with them at the time they were interviewed. Sixty-nine percent of these parents had 1 or 2 minor children living with them (38% and 31% respectively), 19 percent had 3 minor children, 9 percent had 4 minor children, and 3 percent had 5 or more minor children (Figure 2.2).

**Figure 2.2: Number of Minor Children in the Household of Crop Workers, 2021–2022**

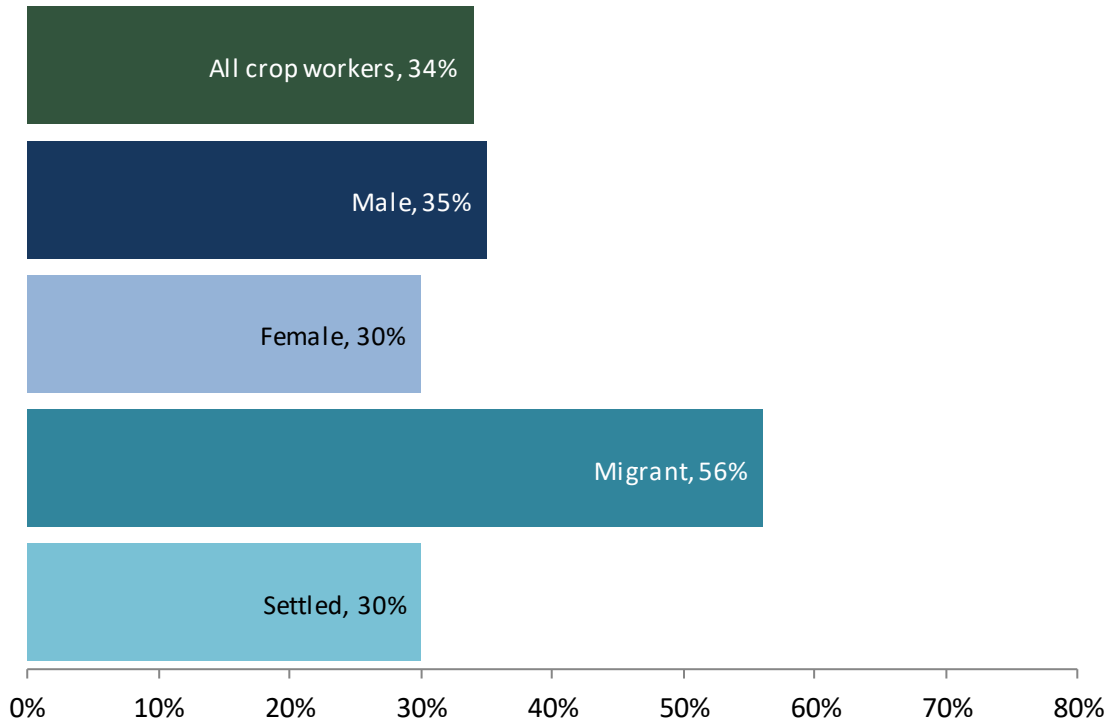


Of parents with children under the age of 18, 38 percent had children younger than age 6, 71 percent had children ages 6–13, and 44 percent had children ages 14–17. One percent of parents lived away from some of their minor children, and 12 percent lived away from all their minor children. Migrant parents were nearly four times more likely than settled parents to be living away from all their minor children (37% and 8% respectively).

“Unaccompanied” crop workers, defined as those who were living apart from all nuclear family members (parents, siblings, spouse, and children) at the time of their interview, comprised 34 percent of the U.S. crop labor force in 2021–2022. Migrant workers were much more likely than

settled workers to be unaccompanied (56% and 30% respectively) as were men when compared to women (35% and 30% respectively). See Figure 2.3. Most of the unaccompanied were single workers without children (79%), 14 percent were parents, and 7 percent had a spouse but no children.

**Figure 2.3: Percent of Crop Workers Unaccompanied by Nuclear Family, 2021–2022**



Among crop worker parents in 2021–2022, nearly all mothers (99%) and almost 9 of 10 fathers (86%) were accompanied by at least some nuclear family members. Similarly, among married workers without children, 96 percent of women and 82 percent of the men were accompanied at the time of the interview.



## CHAPTER 3: Language, Education, and English Skills

### **Summary of Findings**

- Approximately six in ten surveyed crop workers reported that Spanish is their primary language (57%).
- Thirty-seven percent of workers reported that they could speak English “well,” and 27 percent said, “not at all.” Thirty-seven percent reported that they could read English “well” while 34 percent said, “not at all.”
- The average level of formal education completed by crop workers was 9<sup>th</sup> grade.

### **Primary Language**

In 2021–2022, almost two-thirds of crop workers said that Spanish was the language in which they were most comfortable conversing (57%), 27 percent said English was, 8 percent said both Spanish and English (bilingual), 7 percent said more than one language (excludes Spanish/English bilingual), and 2 percent reported an indigenous language.<sup>19</sup> Among workers born in Mexico or Central America, nearly all reported that Spanish was their primary language (83%). Of the remainder, fewer than 1 percent<sup>20</sup> said that English was their primary language, 6 percent said both Spanish and English (bilingual), 7 percent said more than one language, 2 percent<sup>21</sup> said indigenous.

### **English Language Skills**

Crop workers were asked two questions about their English fluency: “How well do you speak English?” and “How well do you read English?” In 2021–2022, 27 percent of workers responded that they could not speak English “at all,” 23 percent said they could speak English “a little,” 13 percent said they could speak English “somewhat,” and 37 percent said they could speak English “well.” Regarding their ability to read English, 34 percent of crop workers reported they could not read English “at all,” 19 percent said they could read English “a little,” 10 percent said they could read English “somewhat,” and 37 percent said they could read English “well” (Figure 3.1).<sup>22</sup>

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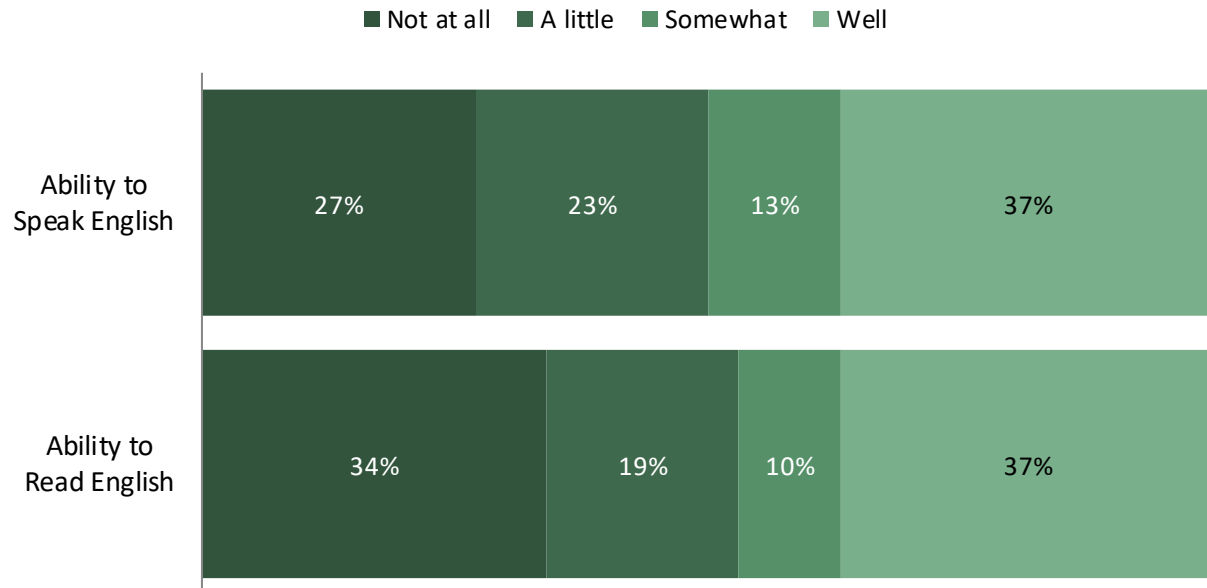
<sup>19</sup> Estimates should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>20</sup> Estimates should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>21</sup> Estimates should be interpreted with caution because it has an RSE of 31 to 50 percent.

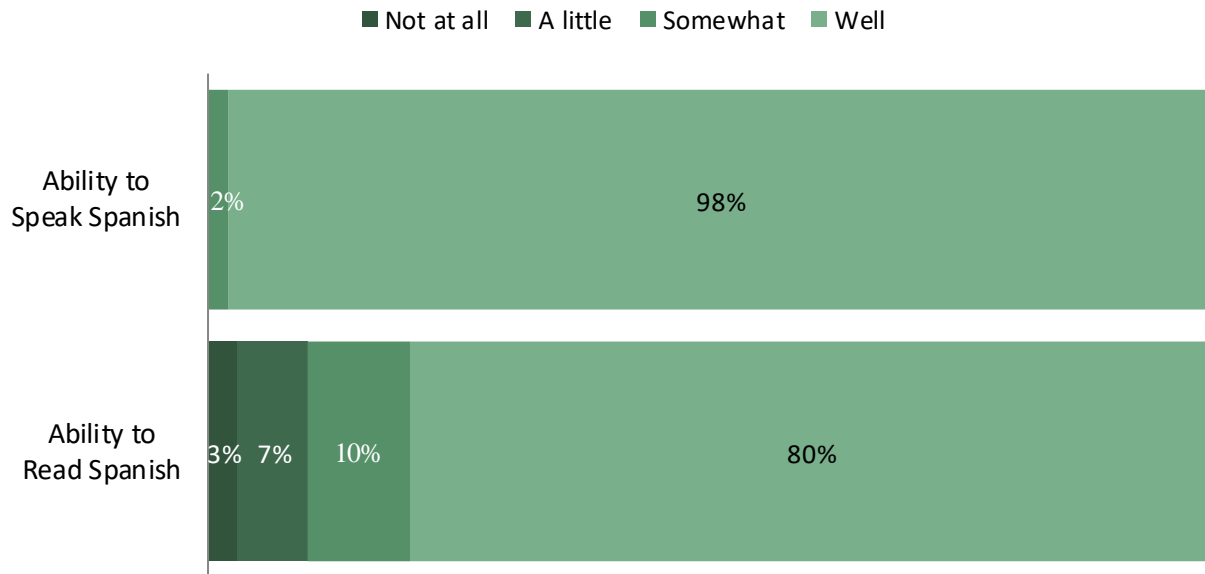
<sup>22</sup> Respondents’ self-reports of language proficiency might be higher or lower than their actual proficiency.

**Figure 3.1: Crop Workers' Self-Reported English Speaking and Reading Ability, 2021–2022**



Crop workers who reported having a primary language other than English were asked to indicate how well they could speak and read in that language. Among workers whose primary language was Spanish, nearly all reported they could speak Spanish “well” (98%). In describing their Spanish reading ability, 80 percent responded “well,” 10 percent replied “somewhat,” 7 percent replied “a little,” and 3 percent replied “not at all” (Figure 3.2).

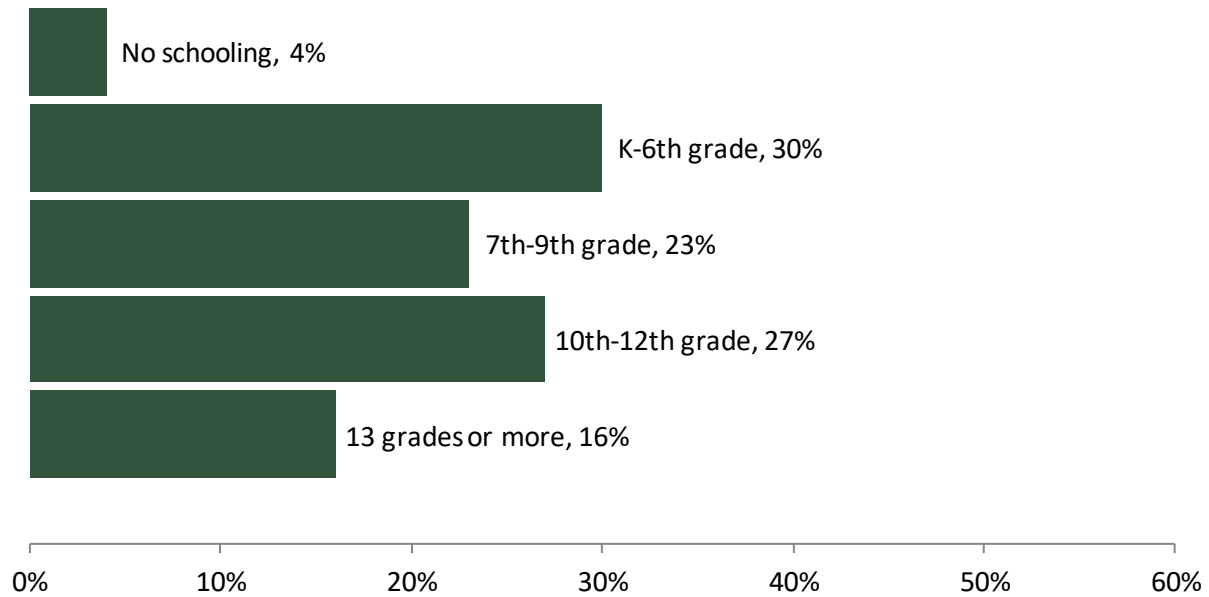
**Figure 3.2: Among Crop Workers Whose Primary Language Is Spanish, Self-Reported Spanish Speaking and Reading Ability, 2021–2022**



**Education**

In 2021–2022, crop workers’ average educational attainment was 9<sup>th</sup> grade. Four percent of workers reported that they had no formal schooling, and 30 percent reported that they completed the 6<sup>th</sup> grade or lower. Twenty-three percent of workers said they completed grade 7, 8, or 9, and 27 percent said they completed grade 10, 11, or 12. Sixteen percent of crop workers reported completing some education beyond high school (Figure 3.3).

Figure 3.3: Distribution of Highest Grade Completed by Crop Workers, 2021–2022



The highest grade completed varied by place of birth. On average, the highest grade completed by workers born in the United States, Mexico, and other countries was 12<sup>th</sup>, 7<sup>th</sup>, 6<sup>th</sup> grade, respectively. Most U.S.-born crop workers completed the 12<sup>th</sup> grade or higher (78%) as did 13 percent of Mexico-born workers, and 24 percent of crop workers born in other countries.

## CHAPTER 4: Housing Characteristics and Distance to Work

### *Summary of Findings*

- Ten percent of crop workers lived in a dwelling owned or administered by their current employer—8 percent on the farm of the grower for whom they were working and 2 percent off the farm.
- Fifty-nine percent of workers lived in detached, single-family houses.
- About two in ten crop workers lived in a dwelling defined as crowded (22%).
- Seven in 10 workers lived fewer than 25 miles from their current farm job (71%), and 16 percent lived between 25 and 49 miles from work. Nine percent of workers lived where they worked.
- Seventy-one percent of workers drove a car to work, 8 percent rode with a “raitero,”<sup>23</sup> and 2 percent<sup>24</sup> took a labor bus, truck, or van.

### *Location of Housing and Payment Arrangement*

Surveyed crop workers provided information about their housing situation (arrangement, location, type, and occupancy) while working at their current farm job. Ten percent of crop workers lived in employer-provided housing (i.e., property owned or administered by their current employer), including 8 percent on the farm of the grower for whom they were working and 2 percent off the farm. The remaining 90 percent of workers lived in a property not owned or administered by their current employer.

The proportion of workers living in employer-provided housing (either on or off the employer’s farm) varied across the Eastern, Midwest, and Western migrant streams,<sup>25</sup> with 18 percent of workers in the Eastern stream interviewed in 2021–2022 reporting that they lived in employer-provided housing, 31 percent of workers in the Midwest migrant stream, and 10 percent in the Western migrant stream (Figure 4.1).

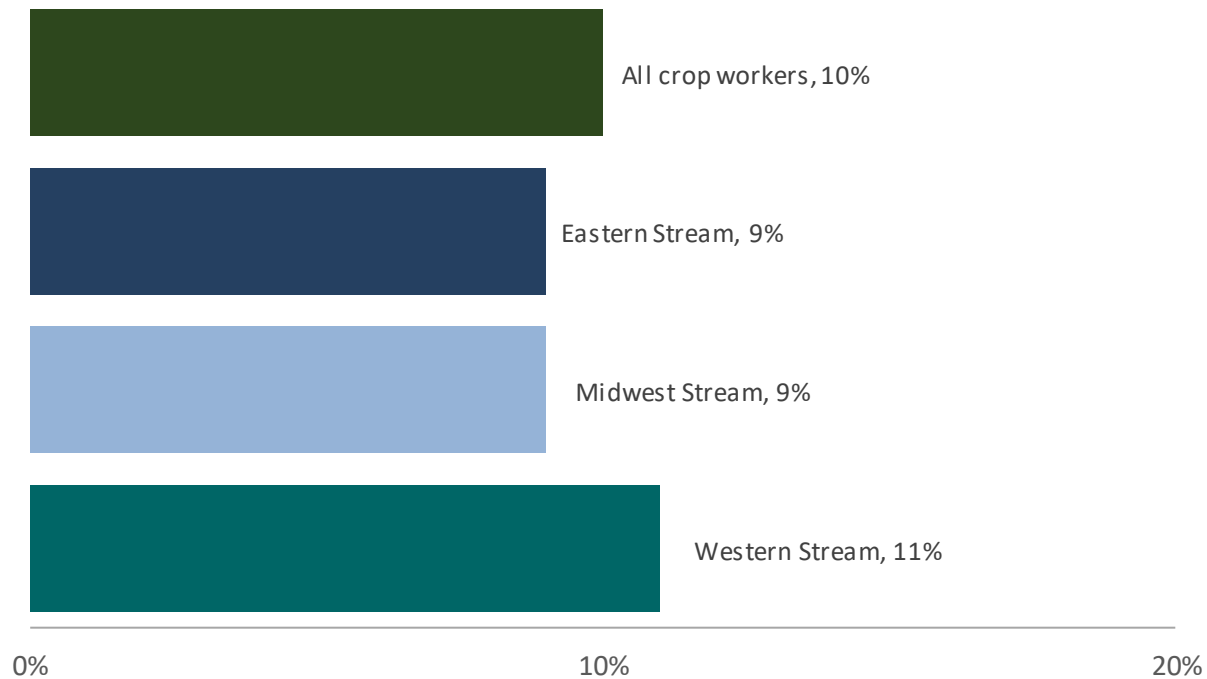
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<sup>23</sup> A “raitero” is a person who charges a fee for providing a ride to work.

<sup>24</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>25</sup> Migrant streams are one way of showing usual patterns of migration and the linkages between downstream and upstream states that many migrants travel in search of farm work. While these patterns are typical, some migrants may cross streams in their search for work. See: **APPENDIX B: Map of the NAWS Migrant Streams.**

**Figure 4.1: Percent of Crop Workers Who Lived in Employer-Provided Housing, 2021–2022**

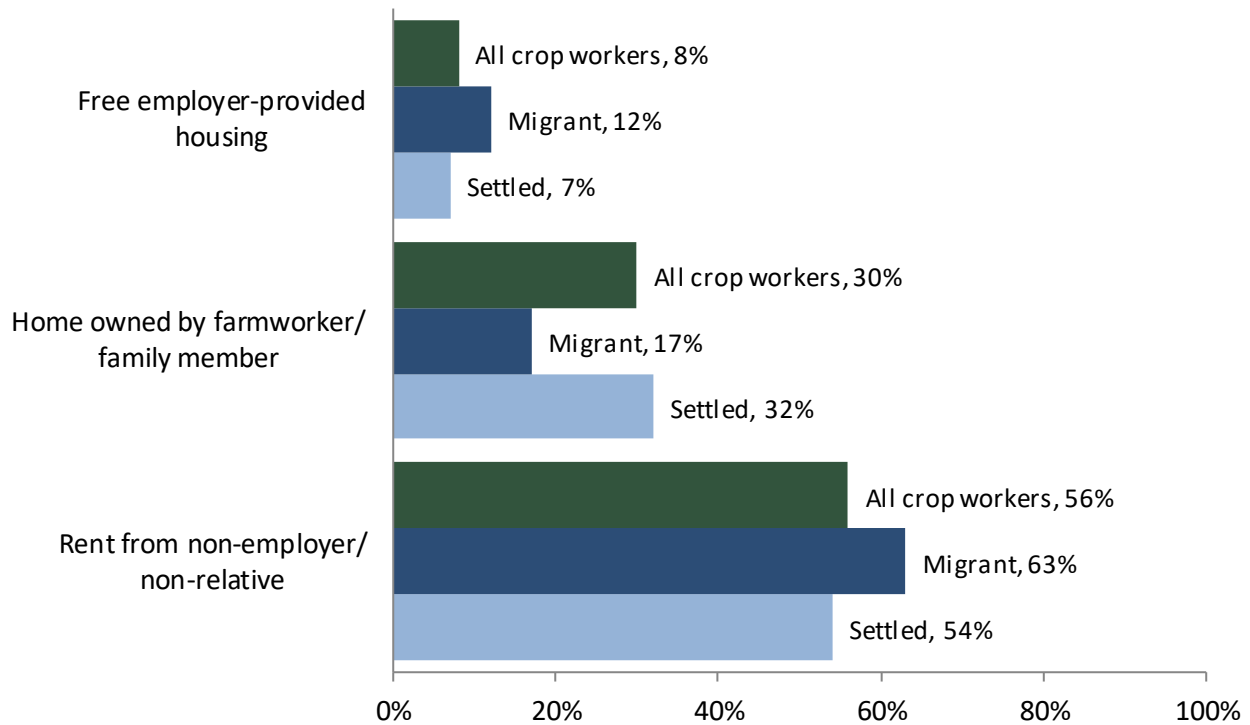


In addition to information about the location of their housing, crop workers provided information about the payment arrangements for their housing. In 2021–2022, more than half of all crop workers reported living in housing rented from someone other than their employer (56%); 30 percent of workers said they lived in a home owned by themselves or a family member; 3 percent said they paid rent for housing provided by the government, a charity, or other organization; and 10 percent of workers lived in employer-provided housing. Among those living in employer-provided housing, 8 percent received housing free of charge, 2 percent paid rent either directly or via payroll deduction, and 1 percent<sup>26</sup> had other arrangements with their employers.

Migrant workers were more likely than settled workers to live in employer-provided housing free of charge (12% and 7% respectively), and less likely than settled workers to live in a home they or a family member owned (17% and 32% respectively). See Figure 4.2.

<sup>26</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

**Figure 4.2: Housing Arrangement, 2021–2022**



Crop workers who reported paying for their housing were asked how much they paid at their current residence, including for their family if their family lived with them. Four percent reported paying less than \$200 per month, 15 percent said they paid \$200–399, 21 percent paid \$400–599 per month, and 61 percent paid \$600 more per month.

***Type of Housing***

In 2021–2022, more than half of crop workers reported living in detached, single-family houses (59%), 17 percent said they lived in mobile homes, and another 23 percent lived in apartments. The remaining 1 percent<sup>27</sup> lived in other types of housing.<sup>28</sup>

Migrant workers were less likely as settled workers to report living in detached, single-family homes (54% and 61% respectively), about the same proportions living in mobile homes (18% and 17% respectively), and more likely living in apartments (28% and 22% respectively). Unauthorized workers were less likely than authorized workers to reside in single-family homes (48% and 68% respectively) and more likely to live in mobile homes (20% and 15% respectively) and apartments (32% and 16% respectively). See Figure 4.3.

<sup>27</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>28</sup> Other types of housing in which crop workers reported living included a duplex or triplex; dormitory or barracks; motel or hotel; or “other.”

**Figure 4.3: Type of Housing, 2021–2022**

Type of Housing	All Crop Workers	Migrant	Settled	Authorized	Unauthorized
<b>Single family home</b>	59%	54%	61%	68%	48%
<b>Mobile home</b>	17%	18%	17%	15%	20%
<b>Apartment</b>	23%	28%	22%	16%	32%
<b>Other</b>	1% <sup>a</sup>	b	b	b	1% <sup>a</sup>

<sup>a</sup> Estimate should be interpreted with caution because it has an RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has an RSE greater than 50 percent.

Among immigrant crop workers, the proportion living in single-family homes increased with the number of years living in the United States. Among immigrants who first arrived in the United States fewer than 10 years ago, 43 percent lived in single-family homes compared to 45 percent of those that had been in the United States between 10 and 19 years and 57 percent of those who had been in the United States at least 20 years (see Figure 4.4).

**Figure 4.4: Type of Housing by Length of Time in the United States, 2021–2022**

Type of Housing	In United States Less than 10 Years	In United States 10-19 Years	In United States 20 Years or More
<b>Single family home</b>	46%	50%	58%
<b>Mobile home</b>	12%	19%	19%
<b>Apartment</b>	39%	30%	23%
<b>Other</b>	b	b	<1%

<sup>a</sup> Estimate should be interpreted with caution because it has an RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has an RSE greater than 50 percent.

In 2021–2022, crop workers reported having an average of six rooms in the dwellings they lived in, including an average of three bedrooms, one or two bathrooms, one kitchen, and one “other” room. Nearly all workers said there was at least one bathroom in their living unit (>99%) and at least one kitchen (>99%).

### **Household Crowding**

The measure of crowding used for this report is based on the one-person-per-room definition of the U.S. Census Bureau, Census of Housing.<sup>29</sup> Persons-per-room was calculated by summing the number of rooms (excluding bathrooms, but including kitchens) that respondents said they had in their current living quarters, then dividing the number of persons that respondents said slept in those rooms by the total number of rooms. Dwellings were considered crowded when the number of persons 4per room was greater than one.

<sup>29</sup> U.S. Census Bureau, Housing and Household Economic Statistics Division. (2011, October 31). *Crowding* (<http://www.census.gov/hhes/www/housing/census/historic/crowding.html>).



In 2021–2022, 22 percent of crop workers lived in crowded dwellings. Migrant workers lived in crowded dwellings with greater frequency than settled workers (29% compared to 21%), and unauthorized workers were nearly three times as likely as authorized workers to live in crowded dwellings (35% and 12% respectively).

### ***Distance to Work and Transportation***

When asked how far their current farm job was from their current residence, 9 percent of crop workers in 2021–2022 reported living where they worked, 32 percent said they lived within 9 miles of their job location, 39 percent between 10 and 24 miles from work, 16 percent between 25 and 49 miles from work, and 4 percent 50 or more miles from work.

Crop workers used various modes of transportation to get to work. In 2021–2022, 71 percent of workers reported that they drove a car to work (even though 80% of workers said they owned a car or truck, as discussed in chapter 8), and 8 percent said they walked or took public transit. Twenty percent of workers did not provide their own transportation but commuted via rides with others (10%); rides with a “raitero” (8%); or rides on a labor bus, truck, or van (2%<sup>30</sup>).

Among workers who did not provide their own transportation, 2 percent<sup>31</sup> reported that it was mandatory or obligatory for them to use their current mode of transportation. Thirty-one percent of workers who did not provide their own transportation reported having to pay a fee for these rides to work, and 43 percent said they paid, but only for gas. Thirty percent said they paid no fee for their rides with the “raitero,” on the labor bus, or with others.

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<sup>30</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>31</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

## CHAPTER 5: Employment Patterns and Farm Job Characteristics

### *Summary of Findings*

- Nearly 8 in 10 surveyed crop workers were employed directly by growers (78%), and 22 percent were employed by farm labor contractors.
- At the time of interview, 40 percent of crop workers were working in fruit and nut crops, 24 percent in vegetable crops, and 23 percent in horticulture. Ten percent were working in field crops, and 1 percent<sup>32</sup> were working in mixed crops.
- At the time of interview, 27 percent of crop workers were performing pre-harvest tasks, 26 percent were harvesting crops, 16 percent were performing post-harvest activities, and 31 percent were performing technical production tasks.
- Most crop workers reported that their basis for pay was an hourly wage (85%). Workers reported earning an average of \$14.53 per hour at their current farm job.
- Forty-five percent of crop workers reported that they were covered by Unemployment Insurance (UI) if they were to lose their current job, 72 percent said they would receive workers' compensation if they were injured at work or became ill as a result of their work, and 28 percent said their employer offered health insurance for injury or illness suffered while not on the job.

### *Type of Employer and Job Recruitment*

Most crop workers in 2021–2022 were employed directly by growers<sup>33</sup> (78%); farm labor contractors employed the remaining 22 percent. About 6 in 10 workers reported that they found their current job via references from friends or relatives (61%), and almost one-third secured their job after applying for it on their own (30%). Seven percent of workers were recruited by a grower, foreman, or labor contractor, and the remaining 3 percent<sup>34</sup> were referred to their job by an employment service or welfare office, were hired under union-employer agreements, or found their job via some “other” means.

### *Primary Crops and Farm Job Tasks*

At the time they were interviewed in 2021–2022, 88 percent of crop workers reported working in fruits, nuts, vegetables, and horticultural crops (40% in fruits and nuts, 24% in vegetables, and 23% in horticulture). Ten percent held jobs in field crops, and 1 percent<sup>35</sup> worked in mixed crops or other crops. Workers employed by farm labor contractors were more likely than those employed directly by growers to work in vegetable crops (40% compared to 20%) and more likely than directly hired workers to work in fruit and nut crops (57% compared to 35%). Migrant crop workers worked in vegetable crops with a higher frequency than settled workers (35% and 23% respectively) but were less likely than settled workers to have jobs in horticultural crops (16% and 25% respectively; Figure 5.1).

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<sup>32</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>33</sup> Growers include owners of establishments (i.e., farms, orchards, greenhouses, and nurseries) that engage primarily in growing crops, plants, or trees, but can also include other types of crop producers, such as packers, shippers, or distributors.

<sup>34</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>35</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

**Figure 5.1: Primary Crop at Time of Interview, 2021–2022**

Crop at Time of Interview	All Crop Workers	Employed by Grower	Employed by Farm Labor Contractor	Migrant Crop Workers	Settled Crop Workers
<b>Fruits and Nuts</b>	40%	35%	57%	43%	40%
<b>Horticulture</b>	23%	30%	<sup>b</sup>	16%	25%
<b>Vegetables</b>	24%	20%	40%	35%	23%
<b>Field Crops</b>	10%	13%	<sup>b</sup>	<sup>b</sup>	12%
<b>Miscellaneous/ Multiple</b>	1% <sup>a</sup>	2%	<sup>b</sup>	<sup>b</sup>	1%

<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a n RSE greater than 50 percent.

Over the course of a year and even in a single day, crop workers potentially perform a wide variety of tasks. In the NAWS, interviewers record the task the respondent was performing just prior to the interview. Among all crop workers interviewed in 2021–2022, 28 percent performed pre-harvest tasks such as hoeing, thinning, and transplanting; 20 percent harvested crops; 21 percent performed post-harvest activities such as field packing, sorting, and grading; and 31 percent of workers performed technical production tasks such as pruning, irrigating, and operating machinery.

Workers employed by farm labor contractors were more likely than directly hired workers to perform harvest tasks (28% compared to 19%), while similar proportions of migrant and settled crop workers performed harvest tasks (19% and 20%). Migrant crop workers were more likely than settled crop workers to perform post-harvest tasks (31% compared to 19%). Workers employed by farm labor contractors were more likely than directly hired workers to perform technical production tasks (38% compared to 31%), while settled workers were more likely than migrant workers to perform technical production tasks (33% compared to 24%; Figure 5.2).

**Figure 5.2: Primary Task at Time of Interview, 2021–2022**

Primary Task at Time of Interview	All Crop Workers	Employed by Grower	Employed by Farm Labor Contractor	Migrant Crop Workers	Settled Crop Workers
<b>Pre-harvest</b>	27%	26%	28%	26%	27%
<b>Harvest</b>	26%	24%	31%	39%	23%
<b>Post-harvest</b>	16%	18%	9% <sup>a</sup>	12%	17%
<b>Technical Production</b>	31%	31%	32%	24%	33%

<sup>a</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

**Basis for Pay and Hours Worked**

Most crop workers in 2021–2022 reported that their basis for pay was an hourly wage (85%). Two percent of workers were paid a salary, and 7 percent were paid exclusively by the piece.

Respondents worked an average of 43 hours in the previous week at their current farm job. Agricultural employers’ labor needs can vary by season, crop, and task, and workers are sometimes needed for longer than normal hours over short periods of time. The data reflect the fluctuating nature of labor use. For example, workers who were harvesting field crops at the time they were interviewed in 2021–2022 reported working an average of 71 hours in the previous week. Workers who performed pre-harvest tasks (such as thinning and transplanting) in horticulture, on the other hand, reported an average of 40 hours of work the previous week (Figure 5.3).

**Figure 5.3: Average Number of Hours Worked in Week Prior to Interview by Crop and Task at Time of Interview, 2021–2022**

Crop	Pre-Harvest Tasks	Harvest Tasks	Post-Harvest Tasks	Technical Production Tasks
<b>Field Crops</b>	48	71	42	52
<b>Fruit and Nut Crops</b>	41	41	38	41
<b>Horticulture</b>	40	31	43	38
<b>Vegetable Crops</b>	42	44	44	47
<b>Miscellaneous/ Multiple</b>	43	39	53	53

The average number of hours worked in the previous week also varied by workers’ age, gender, U.S. farm work experience, and payment type. Respondents ages 14 to 17 reported the fewest hours (an average of 36), and workers ages 25 to 34 reported the most hours (an average of 45). Males reported working an average of 45 hours in the previous week, and females reported an average of 38 hours. Crop workers with 5 to 10 years of experience reported the fewest hours of work the previous week (an average of 40), while those with 21 or more years of experience reported the most hours (an average of 44). Crop workers paid a salary reported the greatest number of hours the previous week (an average of 44). Workers paid by the piece averaged 42 hours, those paid by the hour averaged 42 hours, and those paid a combination of hourly wage and piece rate averaged 42 hours of work the previous week (Figure 5.4).

**Figure 5.4: Average Number of Hours Worked in Week Prior to Interview by Crop worker Characteristic, 2021–2022**

Crop worker Characteristic	Average Number of Hours Worked in Week Prior to Interview
<b>14-17 years old</b>	36
<b>18-21 years old</b>	41
<b>22-24 years old</b>	37
<b>25-34 years old</b>	45
<b>35-44 years old</b>	43
<b>45-50 years old</b>	44
<b>51-54 years old</b>	44
<b>55-64 years old</b>	41
<b>65 or more years old</b>	42
<b>Male</b>	45
<b>Female</b>	38
<b>Less than 2 years of farm work experience</b>	43
<b>2-4 years farm work experience</b>	41
<b>5-10 years farm work experience</b>	40
<b>11-20 years farm work experience</b>	42
<b>21-30 years farm work experience</b>	44
<b>31 or more years farm work experience</b>	44
<b>Paid by the hour</b>	42
<b>Paid by the piece</b>	42
<b>Paid combination hourly wage and piece rate</b>	42
<b>Paid salary or other</b>	44

### **Wages**

When asked how much they were earning per hour at their current farm job, crop workers in 2021–2022 reported an average of \$14.53.<sup>36</sup> Workers who were being paid by the hour earned an average hourly wage of \$14.53, and those being paid by the piece earned an average of \$15.91 per hour.

Hourly wages increased with respondents' number of years working for their current employer. Workers who had been with their current employer 1 to 2 years earned an average of \$13.72 per hour, those working for their current employer 3 to 5 years earned an average of \$14.53 per hour, and those with 6 to 10 years earned an average of \$14.81 per hour. Workers who had worked for their current employer 11 years or more earned the highest hourly wage, an average of \$15.56 per hour.

<sup>36</sup> Piece rate and combination wages were converted to an hourly wage, then averaged with the wages of workers who were paid by the hour.

Among the tasks respondents reported performing at the time they were interviewed, those who worked in harvest tasks earned the highest average hourly wage, \$15.37. Pre-harvest workers earned an average of \$12.87 per hour, post-harvest workers earned an average of \$12.57 per hour, and those who worked in technical production tasks earned an average of \$13.80 per hour (Figure 5.5).

**Figure 5.5: Average Hourly Wage by Crop worker Characteristic, 2021–2022**

Crop Worker Characteristic	Average Hourly Wage
<b>All crop workers</b>	\$14.53
<b>Paid by the hour</b>	\$14.53
<b>Paid by the piece</b>	\$15.91
<b>Paid combination hourly wage and piece rate</b>	\$8.83 <sup>a</sup>
<b>Salary or Other</b>	\$18.19
<b>With current employer 1 to 2 years</b>	\$13.72
<b>With current employer 3 to 5 years</b>	\$14.53
<b>With current employer 6 to 10 years</b>	\$14.81
<b>With current employer 11 or more years</b>	\$15.56
<b>Performed pre-harvest tasks at time of interview</b>	\$14.61
<b>Performed harvest tasks at time of interview</b>	\$13.49
<b>Performed post-harvest tasks at time of interview</b>	\$14.41
<b>Performed technical production tasks at time of interview</b>	\$15.25

<sup>a</sup> A small number of crop workers reported being paid a combination hourly wage and piece rate at their current farm job.

### ***Worksite Availability of Water and Toilets***

NAWS respondents were asked if their current farm employer provided the following items at the worksite every day: drinking water and cups, a toilet, and water for washing hands. Ninety-three percent of crop workers in 2021–2022 reported that they were provided with drinking water and disposable cups every day, and 5 percent said they were provided water only. A notable share of workers said that their employer provided no water and no cups (2%). Nearly all workers affirmed that they were provided a toilet every day (99%) and water for washing their hands (99%).

### ***Pesticide Training***

The NAWS asks all respondents whether, at any time in the last 12 months, their current employer provided them with training or instruction in the safe use of pesticides. In 2021–2022, 64 percent of crop workers reported that they did receive this type of training.

### ***Insurance Benefits***

NAWS respondents were asked whether they were covered by Unemployment Insurance (UI) if they were to lose their current job. Forty-five percent of crop workers interviewed in 2021–2022

said “yes,” 48 percent said “no,” and 7 percent did not know.<sup>37</sup> Workers with authorization to work in the United States were far more likely than unauthorized workers to report that they would be covered by UI (74% and 5% respectively). Of the 48 percent of respondents who reported that they would not be covered by UI, 81 percent were unauthorized and would not qualify for the benefit were it provided.

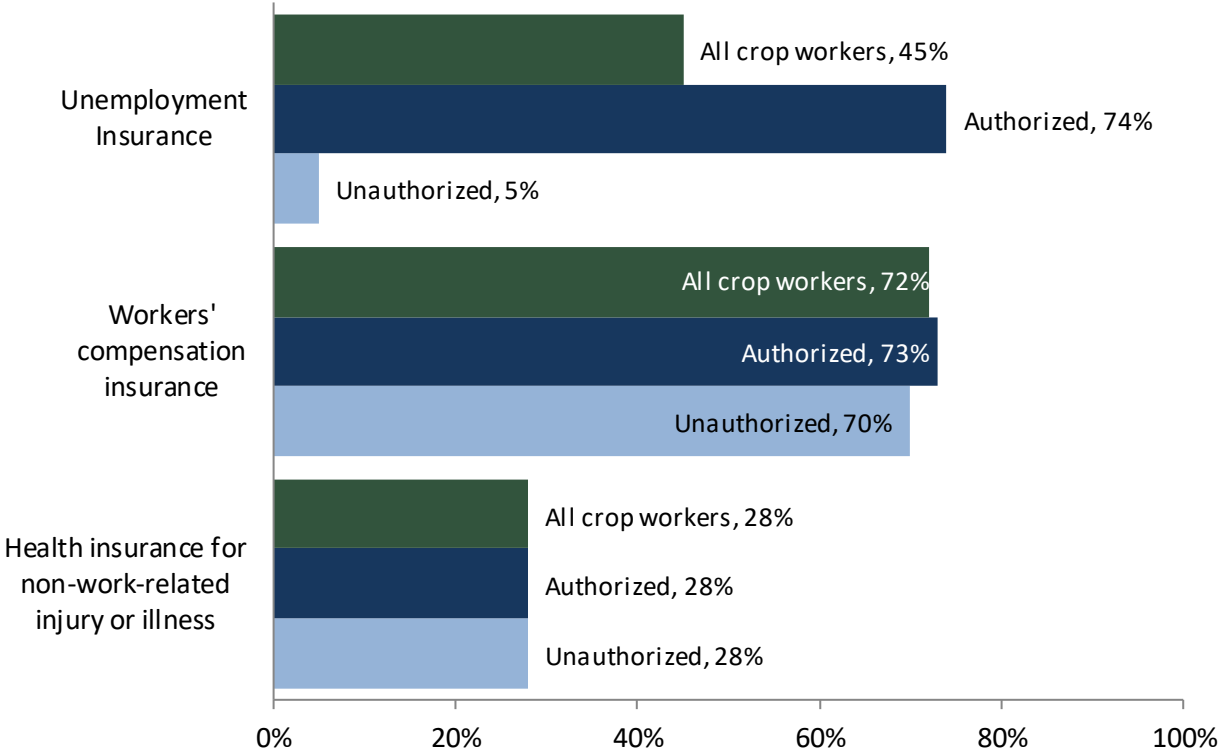
When asked whether they would receive workers’ compensation if they were injured at work or got sick as a result of their work, approximately 7 in 10 crop workers said “yes” (72%), 9 percent said “no,” and 19 percent did not know.<sup>38</sup> Furthermore, when asked whether their employer provided health insurance or paid for medical treatment for injury or illness suffered while off the job (regardless of whether or not the worker accepted or used the insurance), 28 percent confirmed that their employer offered such a benefit, 57 percent said their employer did not, and 16 percent were unsure. Similar proportions of authorized and unauthorized workers reported that they were covered by workers’ compensation insurance (73% and 70% respectively), and say that their employer offered health insurance for non-work-related injury or illness (28% and 28% respectively). See Figure 5.6. A discussion of crop workers’ participation in health insurance coverage for themselves and their family members can be found in Chapter 9.

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<sup>37</sup> UI coverage varies by state. For agricultural labor in most states, employers are required to pay UI taxes if they paid wages in cash of \$20,000 or more for agricultural labor in any calendar quarter in the current or preceding calendar year, or who employed 10 or more workers on at least 1 day in each of 20 different weeks in the current or immediately preceding calendar year. U.S. Department of Labor, Employment and Training Administration. (2017). *Comparison of State Unemployment Insurance Laws* (<https://workforcesecurity.doleta.gov/unemploy/pdf/uilawcompar/2017/complete.pdf>, p. 1-2).

<sup>38</sup> The rules for workers’ compensation coverage for agricultural workers vary among states. In 14 states, Puerto Rico and the Virgin Islands, rules require employers to cover seasonal agricultural workers to the same extent as all other workers. In an additional 21 states, employers provide workers’ compensation but coverage is limited to certain classifications of agricultural employers or workers such as the number of full-time workers employed. Fifteen states have optional coverage, allowing employers to elect to provide workers’ compensation coverage to their employees, though the coverage is not required by law. In many of these states, workers’ compensation is required for employers in other industries but optional for agriculture. *A Guide to Workers’ Compensation for Clinicians Serving Agricultural Workers* (<http://www.farmworkerjustice.org/sites/default/files/Workers%20Comp%20Guide%20FINAL%20%281%29.pdf>). Farmworker Justice and Migrant Clinicians Network (2015).

Figure 5.6: Percent of Crop Workers Whose Employer Offers Health Insurance, 2021–2022





## CHAPTER 6: Employment Experience

### Summary of Findings

- Eighty-four percent of crop workers interviewed worked for a single farm employer in the previous 12 months, and 16 percent worked for two or more employers.
- Crop workers averaged 8 years of employment with their current farm employer
- Crop workers worked an average of 37 weeks in the previous 12 months.
- Crop workers worked an average of five days per week for their current employer and an average of 205 days in farm work in the previous 12 months.
- Crop workers with a full year or more of farm work experience had an average of 18 years of U.S. farm work experience.
- Workers with more years of experience worked more days in the previous 12 months.
- Almost four-fifths of workers interviewed (77%) expected to continue doing farm work for at least another 5 years or as long as possible.

### Number of U.S. Farm Employers in Previous 12 Months

Crop workers in 2021–2022 worked for an average of 1 U.S. farm employer<sup>39</sup> in the 12 months prior to being interviewed. Eighty-four percent of workers reported having worked for only 1 farm employer, 12 percent worked for 2 employers, and 4 percent worked for 3 or more farm employers in the previous 12 months.

Unauthorized workers were more likely than authorized workers to have worked for more than 1 farm employer in the previous 12 months (22% compared to 12%), and migrant workers were almost twice as likely as settled workers to have had more than 1 farm employer in the previous 12 months (25% compared to 15%). See Figure 6.1.

**Figure 6.1: Percentage Distribution of Number of Farm Work Employers in Previous 12 Months by Crop worker Characteristic, 2021–2022**

Number of Farm Employers	All Crop Workers	Migrant	Settled	Authorized	Unauthorized
<b>One</b>	84%	75%	85%	88%	78%
<b>Two</b>	12%	13%	12%	10%	14%
<b>Three or more</b>	4%	12%	3%	2%	8%

<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

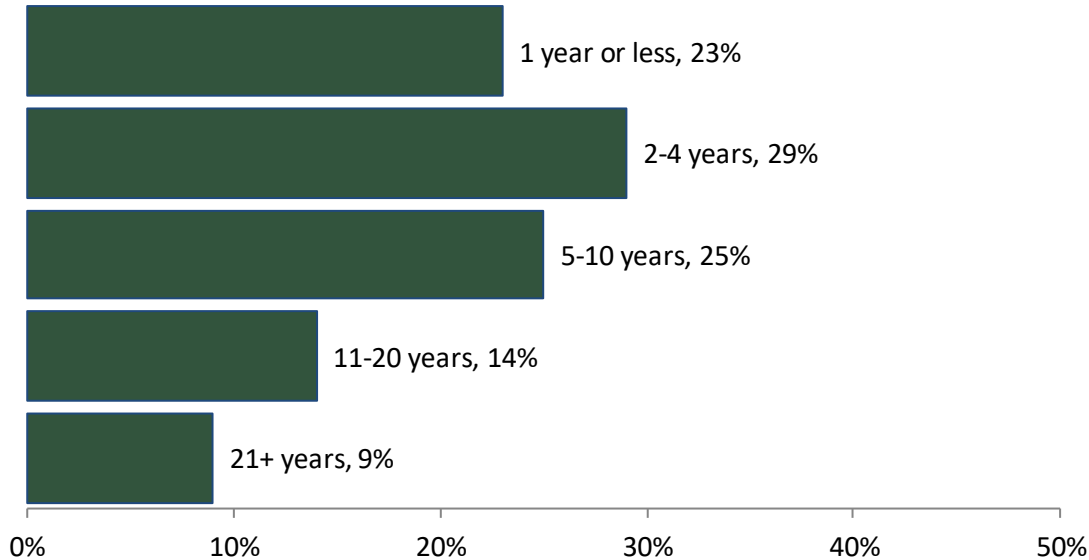
### Number of Years with Current Farm Employer

In 2021–2022, crop workers reported working for their current farm employer for an average of eight years.<sup>40</sup> About 5 in 10 said they had been with their current employer for fewer than 5 years (52%), and more than 2 in 10 said they had been with their current farm employer for 11 or more years (23%). See Figure 6.2.

<sup>39</sup> An employer can be either a farm owner or a farm labor contractor. While a worker employed by a farm labor contractor may work on more than one farm in a year, a single labor contractor is counted as one employer.

<sup>40</sup> Any employment for at least one day in the year qualifies as one year.

**Figure 6.2: Percentage Distribution of Number of Years with Current Farm Employer, 2021–2022**



### ***Weeks and Days of Farm Work in Previous 12 Months***

During the previous year, crop workers spent an average of 37 weeks (71% of the year) employed in U.S. farm work, with farm work participation varying depending on workers' work authorization, migrant status, and place of birth. Authorized workers, migrant workers, and U.S.-born workers worked fewer weeks in farm work (averages of 34, 30, and 31 weeks respectively) than unauthorized workers, settled workers, and foreign-born workers (averages of 40, 38, and 39 weeks respectively). Youth crop workers between the age of 14 and 17 were employed the fewest weeks in farm jobs, averaging 13 weeks of farm work in the previous 12 months, and workers aged over 50 worked the most, averaging 41 weeks in the previous 12 months (Figure 6.3).

**Figure 6.3: Average Number of Weeks of Farm Work in Previous 12 Months, by Crop worker Characteristic, 2021–2022**

Crop Worker Characteristic	Average Weeks of Farm Work in Previous 12 Months
<b>All crop workers</b>	37
<b>Migrant</b>	30
<b>Settled</b>	38
<b>Authorized</b>	34
<b>Unauthorized</b>	40
<b>U.S.-born</b>	31
<b>Foreign-born</b>	39
<b>14-17 years old</b>	13
<b>18-24 years old</b>	27
<b>25-50 years old</b>	38
<b>Over 50 years old</b>	41

For their employer at the time of interview, crop workers reported working an average of five days per week<sup>41</sup> (see Figure 6.4). Over the previous 12 months, respondents worked an average of 205 days in farm work, with averages varying depending upon workers' work authorization, migrant status, and place of birth. Unauthorized workers, settled workers, and foreign-born workers averaged a greater number of days than did their counterparts: Unauthorized workers worked an average of 227 days and authorized workers an average of 188 days; settled workers averaged 211 days while migrant workers averaged 171 days; foreign-born workers worked an average of 223 days and U.S.-born workers an average of 166 days (Figure 6.4).

**Figure 6.4: Average Number of Days Worked Per Week at Current Farm Job and Average Number of Days of Farm Work in Previous 12 Months by Crop worker Characteristic, 2021–2022**

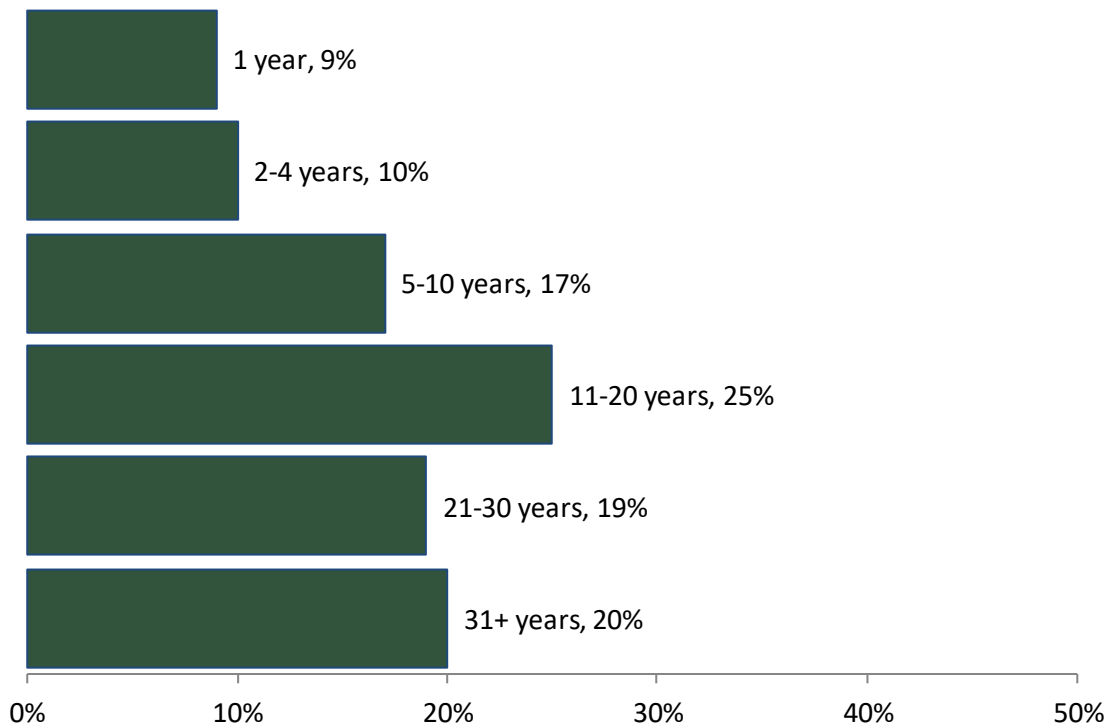
Crop Worker Characteristic	Average Days Worked Per Week Current Farm Job	Average Days of Farm Work in Previous 12 Months
<b>All crop workers</b>	5	205
<b>Migrant</b>	5	171
<b>Settled</b>	5	211
<b>Authorized</b>	5	188
<b>Unauthorized</b>	5	227
<b>U.S.-born</b>	5	166
<b>Foreign-born</b>	5	223

<sup>41</sup> Crop workers' approximate number of workdays per year was calculated using information on each employer the respondent had in the 12-month retrospective work history. Total workdays is the sum across all of a respondent's employers of the workdays for each employer, calculated from employment dates, number of days worked per week, and number of weeks worked per employer.

**Years of U.S. Farm Work Experience**

Crop workers with a full year or more of farm work experience had an average of 18 years of U.S. farm work experience. Thirty-six percent of crop workers with a full year or more of farm work experience had worked 1 to 10 years in farm jobs, another 44 percent had worked 11 to 30 years in farm jobs, and 20 percent had worked more than 30 years in farm jobs (Figure 6.5).

**Figure 6.5: Years U.S. Farm Work Experience, 2021–2022**



<sup>a</sup> Among workers with at least one year of U.S. farm work experience.

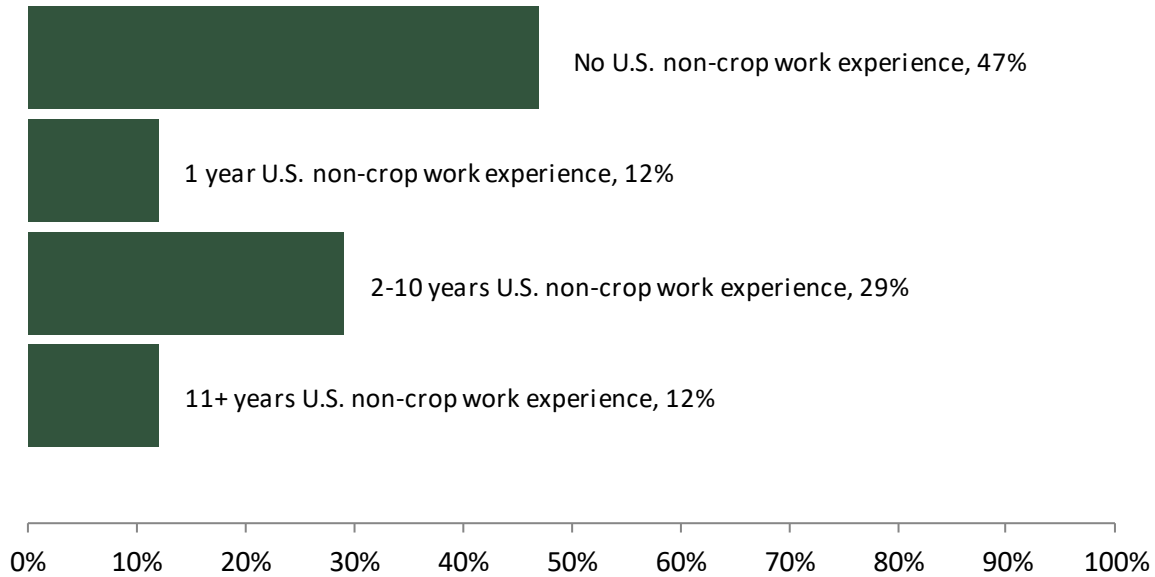
Years of U.S. farm work experience and farm workdays per year were positively correlated. Respondents who had less than 5 years of farm work experience worked an average of 211 days in farm work in the previous 12 months, while those with 11 years or more of experience averaged 237 days of farm work.

U.S. farm work experience was also related to work authorization. Thirty-five percent of those with 1–9 years of experience were unauthorized as were 47 percent of those with 10 years or more of experience.

**Other Work History**

Crop workers were asked to report the approximate number of years they had performed non-crop work in the United States. Fifty-three percent of crop workers in 2021–2022 reported at least 1 year of non-crop work<sup>42</sup> (Figure 6.6), and they had an average of 8 years of non-crop work experience.

**Figure 6.6: U.S. Non-Crop Work Experience, 2021–2022**



Crop workers were also asked to indicate the last time their parents did hired farm work in the United States. Fifty-six percent of workers said “never,” 13 percent reported that their parents were doing U.S. farm work “now” or within the last year, 3 percent said their parents last did U.S. farm work 1 to 5 years ago, 4 percent said their parents last did U.S. farm work 6 to 10 years ago, and 25 percent reported that their parents last did U.S. farm work 11 or more years ago. Foreign-born crop workers reported parents doing U.S. farm work with greater frequency than U.S.-born crop workers (45% and 41% respectively). See Figure 6.7.

<sup>42</sup> Any year in which 15 days of non-crop work were performed counts as one year of non-crop work.

**Figure 6.7: Last Time Parents Did Hired Farm Work in United States, 2021–2022**

Last Time Parents Did U.S. Farm Work	All Crop Workers	U.S.-Born	Foreign-Born
<b>Never</b>	56%	59%	54%
<b>Now/within last year</b>	13%	14%	12%
<b>1 to 5 years ago</b>	3%	3%	2%
<b>6 to 10 years ago</b>	4%	6%	2%
<b>More than 10 years ago</b>	25%	18%	29%
<b>Don't know</b>	<1% <sup>a</sup>	<sup>b</sup>	<1% <sup>a</sup>

<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

<sup>b</sup> Estimates are suppressed because number of responses is fewer than 4 or relative standard errors for the estimates are greater than 50%.

### ***Plans to Remain in Farm Work***

When asked how long they expected to continue to do farm work, 76 percent of workers interviewed in 2021–2022 believed they would continue for more than 5 years, and most workers indicated that they would continue as long as they are able to do the work (72%). Three percent of respondents said they would continue working in agriculture for less than one year, 13 percent planned to remain in farm work for 1 to 3 years, and 6 percent said they would continue in farm work for 4 to 5 years. See Figure 6.8. Further breakdown of workers' plans to remain in farm work by place of birth, work authorization, migrant status, gender, educational attainment, and age are shown in Figures 6.8–6.10. Workers who were not born in the U.S. or were unauthorized were more likely to plan to work as long as they are able. Workers with educational attainment of 12<sup>th</sup> grade or less were more likely to plan to work for as long as they are able, and a similar percentage of males and females reported they plan to work as long as they are able (Figure 6.9). When looking at age groups, younger workers are more likely to report that they plan to work for 1–3 years compared to older workers, and older workers are more likely to report that they plan to work for as long as they are able to compared to younger workers (Figure 6.10).

**Figure 6.8: Plans to Remain in Farm Work by Place of Birth and Work Authorization, 2021–2022**

Number of Years	All Crop Workers	U.S. Born	Foreign Born	Authorized	Unauthorized
<b>Less than one year</b>	3%	6% <sup>a</sup>	1%	4%	1% <sup>a</sup>
<b>1-3 years</b>	13%	20%	10%	16%	9%
<b>4-5 years</b>	6%	8%	4%	7%	4%
<b>Over 5 years</b>	4%	4%	5%	4%	5%
<b>Over 5 years/ As long as I am able</b>	72%	58%	79%	67%	80%
<b>Other</b>	b	b	b	b	b

<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

<sup>b</sup> Estimates are suppressed because number of responses is fewer than 4 or relative standard errors for the estimates are greater than 50%.

**Figure 6.9: Plans to Remain in Farm Work by Migrant Status, Gender, and Educational Attainment, 2021–2022**

Number of Years	Settled	Migrant	Male	Female	Did Not Complete 12th grade	Completed 12th grade or more
<b>Less than one year</b>	2%	4% <sup>a</sup>	2%	5% <sup>a</sup>	1%	5%
<b>1-3 years</b>	13%	13%	13%	13%	12%	17%
<b>4-5 years</b>	5%	6%	5%	6% <sup>a</sup>	4%	8%
<b>Over 5 years</b>	4%	4% <sup>a</sup>	4%	5%	4%	5%
<b>Over 5 years/ As long as I am able</b>	73%	71%	73%	71%	78%	60%
<b>Other</b>	b	b	b	0%	b	b

<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

<sup>b</sup> Estimates are suppressed because number of responses is fewer than 4 or relative standard errors for the estimates are greater than 50%.

**Figure 6.10: Plans to Remain in Farm Work by Age Group, 2021–2022**

Age groups	14-17	18-24	25-50	Over 50
<b>Less than one year</b>	14% <sup>a</sup>	8% <sup>a</sup>	1%	2% <sup>a</sup>
<b>1-3 years</b>	65%	22%	8%	13%
<b>4-5 years</b>	<sup>b</sup>	5%	5%	6% <sup>a</sup>
<b>Over 5 years</b>	<sup>b</sup>	6%	5%	4%
<b>Over 5 years/ As long as I am able</b>	18% <sup>a</sup>	57%	78%	75%
<b>Other</b>	0%	<sup>b</sup>	<sup>b</sup>	0%

<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

<sup>b</sup> Estimates are suppressed because number of responses is fewer than 4 or relative standard errors for the estimates are greater than 50%.



## CHAPTER 7: Non-Crop Work Activities During the Year

### ***Summary of Findings***

- During the previous year, surveyed crop workers spent an average of 37 weeks employed in farm work and 27 weeks not employed in farm work, including an average of 9 weeks living in the United States while not working and 3 weeks abroad.
- Seventeen percent of crop workers said they held at least one U.S. non-crop job during the previous year.
- The most common types of non-crop jobs held were mechanic, repair, or maintenance jobs (31%) and sales, service, or production in the food industry (17%<sup>43</sup>).
- About 7 in 10 crop worker respondents reported at least 1 period in the 12 months prior to their interview during which they did not work (69%), and these workers averaged 17 weeks without employment. Twenty-two percent of these respondents said they received UI during at least one of their periods of unemployment.

### ***Time Spent Not Employed or Abroad in Previous 12 Months***

During the previous year, crop workers lived in the United States but did not work for approximately 9 weeks (17% of the year) and were abroad for an average of 3 weeks (6% of the year). The number of weeks spent not working varied depending on workers' work authorization, migrant status, and place of birth. Unauthorized, migrant, and foreign-born crop workers spent, on average, fewer weeks in the United States not working (6, 5, and 8 weeks respectively) than authorized, settled, and U.S.-born crop workers (12, 10, and 13 weeks respectively). Migrant workers averaged 16 weeks abroad during the previous year.

Crop workers between the ages of 14 and 17 spent the most weeks not working while in the United States—36 weeks, or more than two-thirds of the year. Respondents ages 18 to 24 spent an average of 10 weeks not working and 8 weeks abroad, and respondents ages 25 years and older averaged 8 weeks in the United States not working and 2 weeks abroad (Figure 7.1).

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<sup>43</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

**Figure 7.1: Average Number of Weeks Not Employed and Abroad in Previous 12 Months, 2021–2022**

Crop Worker Characteristic	Weeks in United States and Not Working	Weeks Abroad
<b>All crop workers</b>	9	3
<b>Migrant</b>	5	16
<b>Settled</b>	10	<1 <sup>a</sup>
<b>Authorized</b>	12	2
<b>Unauthorized</b>	6	4
<b>U.S.-born</b>	13	1 <sup>a</sup>
<b>Foreign-born</b>	8	3
<b>14-17 years old</b>	36	<sup>b</sup>
<b>18-24 years old</b>	10	8
<b>25-50 years old</b>	8	2
<b>Over 50 years old</b>	8	2

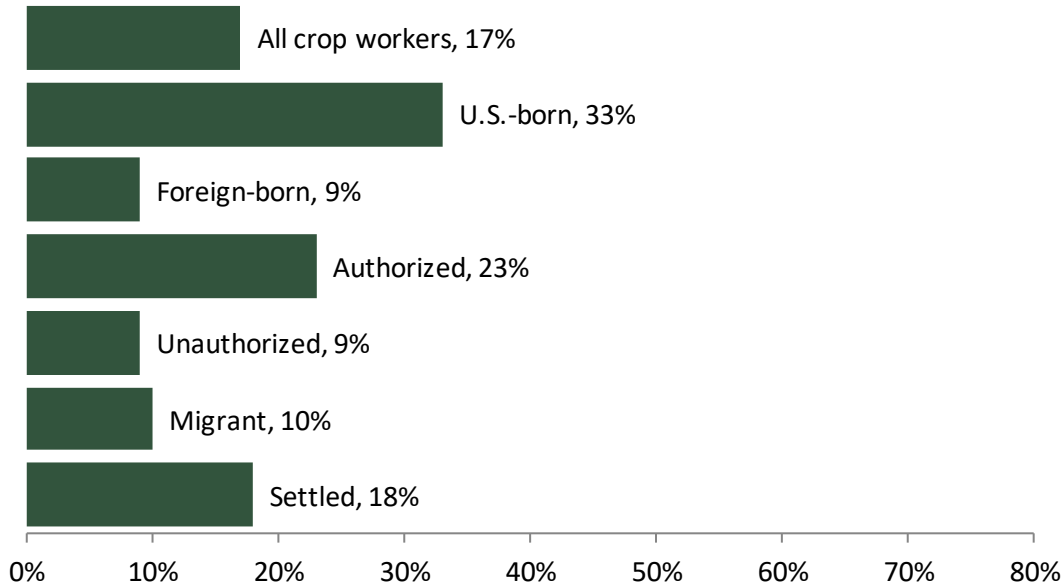
<sup>a</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has an RSE greater than 50 percent.

### ***Non-Crop Work in Previous 12 Months***

Seventeen percent of crop workers reported at least one job during the previous year that was not in U.S. crop production. U.S.-born workers were three times more likely than foreign-born workers to have had a non-crop job in the previous 12 months (33% compared to 9%), and authorized workers were twice as likely as unauthorized workers to have had a non-crop job (23% compared to 9%). See Figure 7.2.

**Figure 7.2: Percent of Crop Workers Who Held a Non-Crop Job the Previous Year, 2021–2022**



The 17 percent of crop workers who reported doing non-crop work during the previous year spent an average of 27 weeks in non-crop employment, and they held an average of 1 non-crop job. The most common types of non-crop jobs<sup>44</sup> were mechanic, repair, or maintenance jobs (31%) and sales, service, or production job in the food industry (17%<sup>45</sup>). Thirteen<sup>46</sup> percent did sales, service, or manufacturing in the non-food industry; 12%<sup>47</sup> had a job in non-crop agriculture; 7%<sup>48</sup> had a professional, technical, or managerial job; 5%<sup>49</sup> did structural or extractive work; 24% held other types of jobs, including clerical, government service, health, arts and entertainment, and transportation (Figure 7.3).

<sup>44</sup> Some non-crop jobs are farm jobs in other types of agriculture.  
<sup>45</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.  
<sup>46</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.  
<sup>47</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.  
<sup>48</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.  
<sup>49</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

**Figure 7.3: Types of Non-Crop Jobs Held in Previous 12 Months, 2021–2022**

Type of Non-Crop Job <sup>a</sup>	Percent of Workers Who Held At Least One Non-Crop Job
<b>Mechanic/Repair/Maintenance</b>	31%
<b>Food Industry -- Sales/Service/Production</b>	17% <sup>b</sup>
<b>Non-food Industry-- Sales/Service/Manufacturing</b>	13% <sup>b</sup>
<b>Non-Crop Agriculture</b>	12% <sup>b</sup>
<b>Professional/Technical/Manager</b>	7% <sup>b</sup>
<b>Structural/Extractive Work</b>	5% <sup>b</sup>
<b>Other</b>	24%

<sup>a</sup> Respondents may have reported multiple types of jobs.

<sup>b</sup> Estimates should be interpreted with caution because they have RSEs of 31 percent to 50 percent.

### ***Reasons for Leaving Non-Crop Work in Previous Year***

Among the 17 percent of crop workers who reported doing non-crop employment during the previous year, 54 percent left at least one of their non-crop jobs. The NAWS sample includes only crop workers actively employed in crop agriculture at the time of interview. However, some workers hold non-crop jobs and farm jobs simultaneously, and some perform non-crop work for their agricultural employers, thus changing jobs but not separating from the employer.

Whenever respondents reported having separated from an employer, they were asked the reason why. Approximately 8 in 10 workers (79%) who left a non-crop employer during the previous year reported leaving for voluntary reasons (“family responsibilities,” “school,” “moved,” “health reasons,” “vacation,” “retired,” “quit,” or “changed jobs”). More than one quarter of workers (19%) said their exits from non-crop work were involuntary in nature (“lay off/end of season” or “fired”). The remaining 2% of workers reported both voluntary and involuntary leaves from non-crop work.

### ***Periods of Unemployment During the Year***

About 7 in 10 crop worker respondents in 2021–2022 reported at least 1 period in the 12 months prior to their interview during which they did not work (69%), and these respondents averaged 17 weeks without employment. Each time a respondent reported a period of not working during the 12-month retrospective work history, the respondent was asked about receiving UI benefits during that time. Twenty-two percent of these respondents said “yes,” they had received UI benefits during at least one of their periods of unemployment.

## CHAPTER 8: Income, Assets, and Use of Assistance Programs

### *Summary of Findings*

- Interviewed crop workers' mean and median personal incomes the previous year were in the range of \$20,000 to \$24,999. Nine percent of workers earned less than \$10,000; 29 percent earned \$30,000 or more.
- Crop workers' mean and median total family incomes the previous year were in the range of \$30,000 to \$34,999. Fifteen percent of crop workers reported total family income of less than \$20,000, another 18 percent said their family income was \$20,000 to \$29,999, and 52 percent had a family income of \$30,000 or more.
- One-fifth of crop workers had family incomes below the poverty level (21%).
- Eighty percent of crop workers said they owned or were buying at least one asset in the United States. The most common assets listed were a vehicle (reported by 80% of workers) or a type of dwelling, such as a house, mobile home, condominium, or apartment (24% of workers).
- Seventeen percent of crop workers reported that they or someone in their household had received some form of benefit from a contribution-based program in the previous 2 years; 64 percent said someone in their household had received some form of benefit from a needs-based program in the previous 2 years.

### *Income*

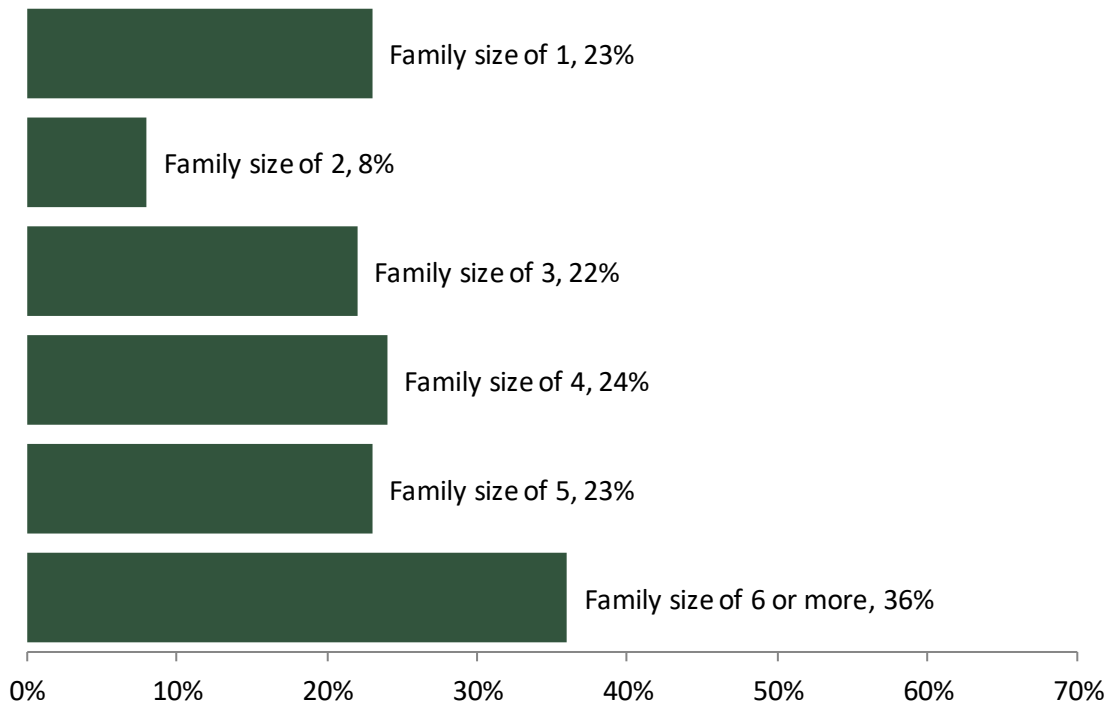
Crop workers were asked to report their total personal income in the calendar year prior to the year in which they were interviewed. Rather than providing a specific sum, respondents answered the question by indicating a range in which their income fell. Crop workers' mean and median personal incomes the previous year were in the range of \$20,000 to \$24,999. Nine percent of crop workers interviewed in 2021–2022 reported not working at all during the prior calendar year, 9 percent said their total personal income was less than \$10,000, 16 percent said they had personal incomes of \$10,000 to \$19,999, another 29 percent reported personal incomes of \$20,000 to \$29,999, and 29 percent reported total personal income of \$30,000 or more. Six percent of crop workers said they were unsure of their personal income for the previous year.

In addition to the question about their own personal income, workers were asked to report their total family income (for individuals residing in the United States) in the previous calendar year. For this question as well, respondents answered by indicating a range in which their income fell. Workers' mean and median total family incomes in the previous year were in the range of \$30,000 to \$34,999. Six percent of crop workers reported that they or their family had no earned income during the previous calendar year. Three percent of workers said their total family income the prior year was less than \$10,000, 11 percent said their family income was \$10,000 to \$19,999, 18 percent had a family income of \$20,000 to \$29,999, and 52 percent had a family income of \$30,000 or more. Four percent of crop workers reported not knowing their family's total income for the previous year.

To determine crop workers' poverty status, each worker's total family income was compared to a poverty threshold based on family size<sup>50</sup> from the U.S. Department of Health and Human Services' poverty guidelines<sup>51</sup> for the calendar year preceding the interview.<sup>52</sup> Using this method, 21 percent of crop workers in 2021–2022 were found to have family incomes below the poverty threshold.

Below-poverty income was more common among crop workers with larger families (see Figure 8.1). Over a third of crop workers with a family size of 6 or more had incomes below the poverty level (36%). Migrant workers' family incomes fell below poverty at a much greater rate than settled workers' (41% compared to 17%). See Figure 8.2.

**Figure 8.1: Percent of Crop Workers with Total Family Income Below Poverty Level by Family Size, 2021–2022**

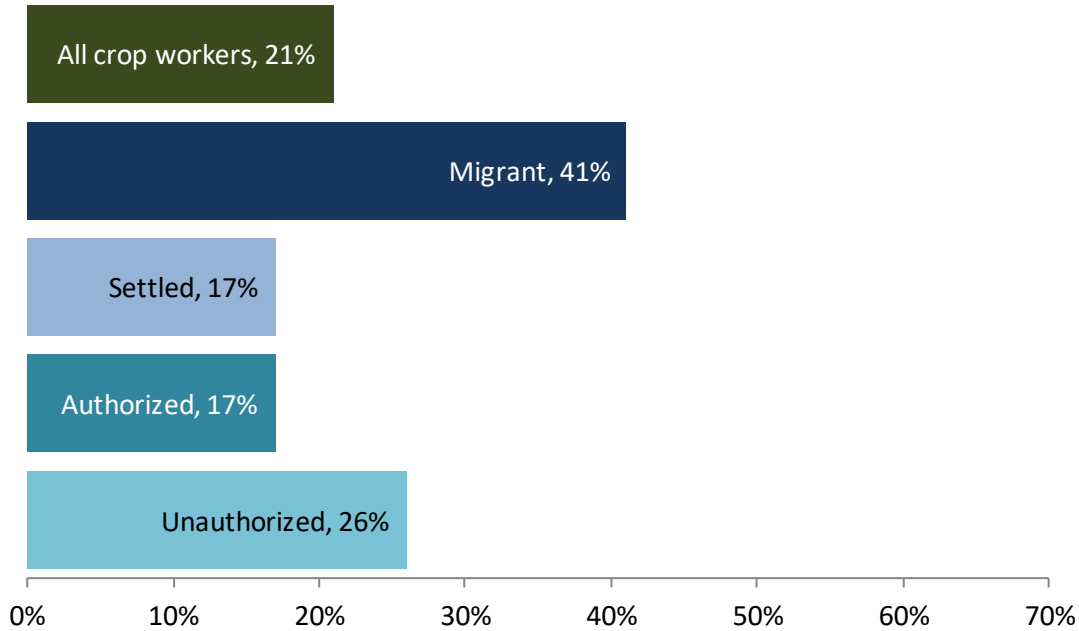


<sup>50</sup> Family size is defined as the number of family members who are living in the United States and who depend on the farmworker's income. Income was imputed for crop workers with no income information.

<sup>51</sup> U.S. Department of Health and Human Services poverty guidelines (<https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references>).

<sup>52</sup> Workers' family income and poverty levels were based on their income in the United States but were not adjusted for time in the United States. For additional information on the limitations of using traditional poverty statistics with migrant populations please see Pena's (2013) article on "Poverty Measurement for a Binational Population."

**Figure 8.2: Percent of Crop Workers with Total Family Income Below Poverty Level by Crop Worker Characteristic, 2021–2022**



***Assets in the United States and Abroad***

Respondents were asked about assets they own or are buying in the United States and, if foreign-born, in their home country. In 2021–2022, about 8 in 10 crop workers said they owned or were buying at least one asset in the United States (80%). U.S.-born workers were more likely to report that they owned or were buying an asset in the United States (87%) compared to foreign-born workers (76%). The most common asset reported among crop workers in the United States was a car or truck (80%) followed by housing (24%). See Figure 8.3. U.S.-born workers were more likely to own or be buying housing in the United States (36%) than were foreign-born workers (18%).

**Figure 8.3: Assets in the United States, 2021–2022**

Type of Asset in the United States	Percent of Crop Workers
<b>Any asset</b>	80%
<b>A car or truck</b>	80%
<b>A type of housing (house, mobile home, condominium, apartment)</b>	24%

***Use of Contribution- and Need-Based Programs***

In 2021–2022, crop workers were asked whether they or anyone in their household received assistance from either contribution- or need-based programs in the two-year period preceding the interview. Contribution-based benefits include disability insurance, Unemployment Insurance, Social Security, and veterans’ pay. Seventeen percent of the crop workers reported someone in their household receiving a benefit from at least one contribution-based program. Twelve percent of crop workers reported that they or a family member received payments from UI, 3 percent

said they or a family member received payments from disability insurance, and 2 percent said someone in their household received Social Security payments.

Need-based benefits include financial assistance through programs such as Temporary Assistance for Needy Families (TANF), general assistance or welfare, and publicly provided housing or medical and nutritional assistance such as Medicaid, Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and Supplemental Nutrition Assistance Program (SNAP).<sup>53</sup> In 2021–2022, 64 percent of crop workers reported that they or someone in their household used at least one type of need-based assistance in the previous two years. The programs most commonly used were Medicaid (37%), Medicaid (37%), public health clinics (26%), SNAP (12%), WIC (7%), low-income housing (2%<sup>54</sup>), welfare (general assistance) or Temporary Assistance for Needy Families (TANF) (1%<sup>55</sup>), and other (26%; e.g., stimulus relief).

**Figure 8.4: Percent of Crop Workers Who Reported That a Member of the Household Received Benefits from Contribution- or Needs-Based Programs in the Last Two Years, 2021–2022**

Contribution- and Need-Based Programs Utilized	Percent of Crop Workers
<b>Any contribution-based program</b>	17%
<b>UI</b>	12%
<b>Disability</b>	3%
<b>Social Security</b>	2%
<b>Any need-based program</b>	64%
<b>Medicaid</b>	37%
<b>Public health clinic</b>	26%
<b>SNAP</b>	12%
<b>WIC</b>	7%
<b>Low-income housing</b>	2% <sup>a</sup>
<b>Welfare (general assistance) or TANF (Temporary Assistance for Needy Families)</b>	1% <sup>a</sup>
<b>Other</b>	26%

<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>53</sup> The Supplemental Nutrition Assistance Program or SNAP was named The Federal Food Stamps Program until October 2008.

<sup>54</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>55</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.



## CHAPTER 9: Health Care in the United States

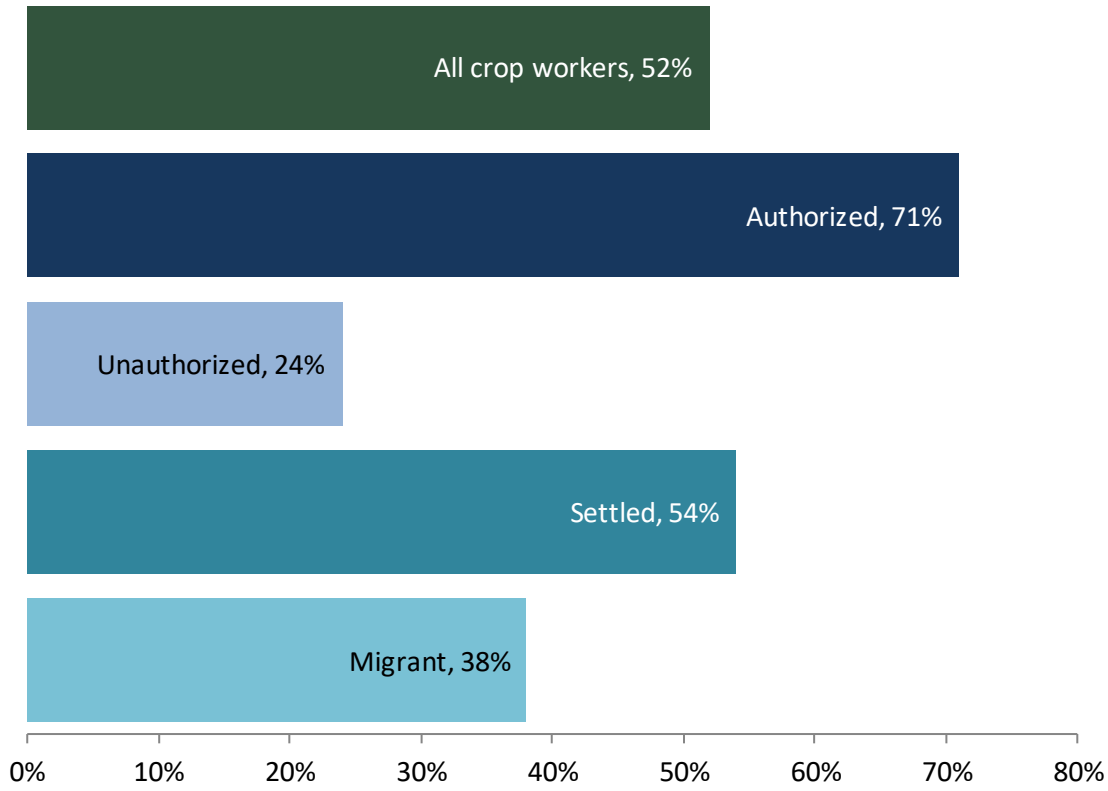
### *Summary of Findings*

- Fifty-two percent of surveyed crop workers reported having health insurance and 62 percent said their spouse had health insurance.
- Ninety-three percent of crop workers said all of their children had health insurance, and 2 percent said only some of their children had health insurance.
- The top providers of crop worker's health insurance were government program (43%) and their employer (18%).
- The top provider of spouse and children's health insurance was government program (48% and 83%, respectively).
- Almost two-thirds (60%) of crop workers visited a U.S. health care provider in the last 12 months.
- More than half (55%) of crop workers visited health care services for preventive care, 19% for illness, 4% for injury, 10% for dental treatment, and 30% for routine dental care.

### *Health Insurance Coverage for Crop workers and Family Members*

The NAWS had several questions about health insurance. One question asked workers to indicate who in their family had health insurance in the United States. Fifty-two percent of workers responded that they, themselves, had health insurance. Authorized workers and settled workers were much more likely to report having health insurance (71% and 54% respectively) than unauthorized workers and migrant workers (24% and 38% respectively). See Figure 9.1.

**Figure 9.1: Percent of Crop workers with Health Insurance, 2021–2022**



Crop workers who reported having health insurance were asked to identify their providers (multiple providers could be reported). Forty-three percent reported insurance provided by the government, 18 percent said their employer provided them with health insurance, 16 percent said they or their spouse paid for insurance themselves, 11 percent said they were covered by their parents’ or family’s plan, 10 percent said they had insurance under their spouse’s employer’s plan, and 5 percent indicated some other insurance source<sup>56</sup> (Figure 9.2).

**Figure 9.2: Sources of Crop workers' Health Insurance, 2021–2022**

Source of Crop Worker’s Health Insurance <sup>a,b</sup>	Percent of Crop Workers
Government program	43%
Crop worker’s employer	18%
Crop worker’s/Spouse’s self-purchased plan	16%
Parent’s/Family’s plan	11%
Spouse’s employer	10%
Other	5%

<sup>a</sup> Among crop workers who reported having health insurance.

<sup>b</sup> Crop workers might have health insurance through more than one source.

<sup>56</sup> “Other” sources included the Affordable Care Act, private health insurance companies (e.g., Aetna, Blue Cross), charity, and retirement/pension plans.

Of the 60 percent of crop workers who had a spouse, 62 percent reported that their spouse had health insurance. Among spouses with health insurance, 48 percent received their health insurance through a government program, 24 percent were insured through the spouse’s employer, 17 percent were covered by a self-purchased plan, 8 percent were covered by the crop worker’s employer plan, and 5 percent<sup>57</sup> indicated some other source (Figure 9.3). Authorized workers reported that their spouses had health insurance twice as frequently as unauthorized workers (78% and 39% respectively).

**Figure 9.3: Sources of Crop workers' Spouses' Health Insurance, 2021–2022**

Source of Spouse’s Health Insurance <sup>a, b</sup>	Percent of Crop Workers
Government program	48%
Spouse’s employer	24%
Crop worker’s/Spouse’s self-purchased plan	17%
Crop worker’s employer	8%
Other	5% <sup>c</sup>

<sup>a</sup> Among crop workers who reported that their spouse had health insurance.

<sup>b</sup> Spouses may have health insurance through more than one source.

<sup>c</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent

Among the 41 percent of crop workers with minor children, most reported that all of their children had health insurance (93%) while 2 percent reported that only some of their children had health insurance. Most of these workers said their children’s health insurance was provided by government programs (83%). Five percent reported that their children were insured through their employer or their spouse’s employer, and 7 percent<sup>58</sup> said their children were covered by insurance that the crop worker and/or their spouse purchased on their own (Figure 9.4). Fewer authorized workers reported that all or some of their children had health insurance than unauthorized workers (88% and 95% respectively).

**Figure 9.4: Sources of Crop workers' Children's Health Insurance, 2021–2022**

Source of Children’s Health Insurance <sup>a, b</sup>	Percent of Crop workers
Government program	83%
Crop worker’s/Spouse’s employer	8%
Crop worker’s/Spouse’s self-purchased plan	c
Other	c

<sup>a</sup> Among the 95 percent of crop workers who reported that all or some of their children had health insurance.

<sup>b</sup> Children may have health insurance through more than one source.

<sup>c</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

### **Quality of and Access to Health Care Supplement**

The NAWS Quality of and Access to Health Care Supplement provides information on crop workers’ experiences with health care; and it generates data federal and state agencies need for planning service delivery to MSFWs and their families.

<sup>57</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

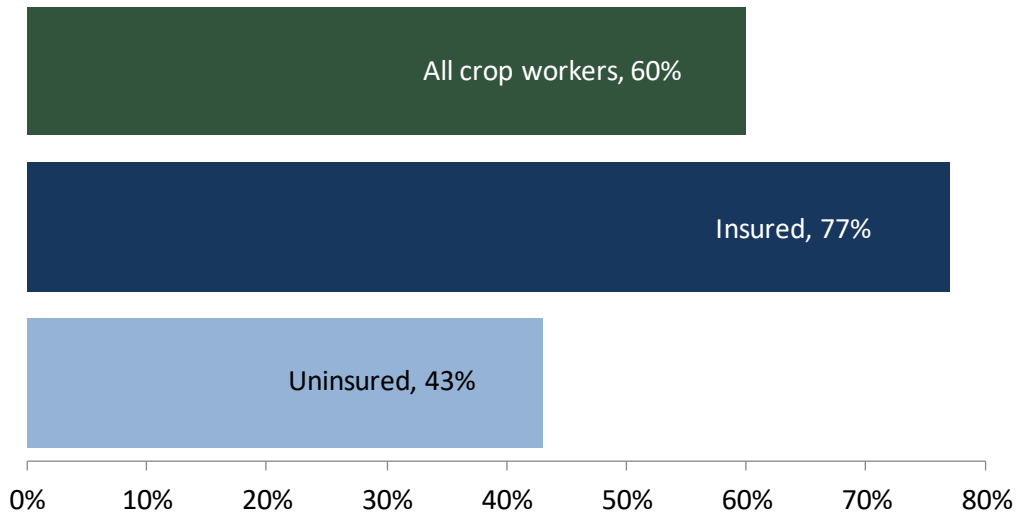
<sup>58</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

The questions are adopted from other national surveys and piloted with crop workers in three locations representing different regions with different migration patterns. Interviewers asked crop workers about health care services used in the last 12 months for illness, injury, dental, and the health care services their spouses and children used. The pilot study report is available at [https://www.reginfo.gov/public/do/PRAViewDocument?ref\\_nbr=201506-1205-006](https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201506-1205-006)

***Crop workers' Health Care Utilization and Barriers to Health Care***

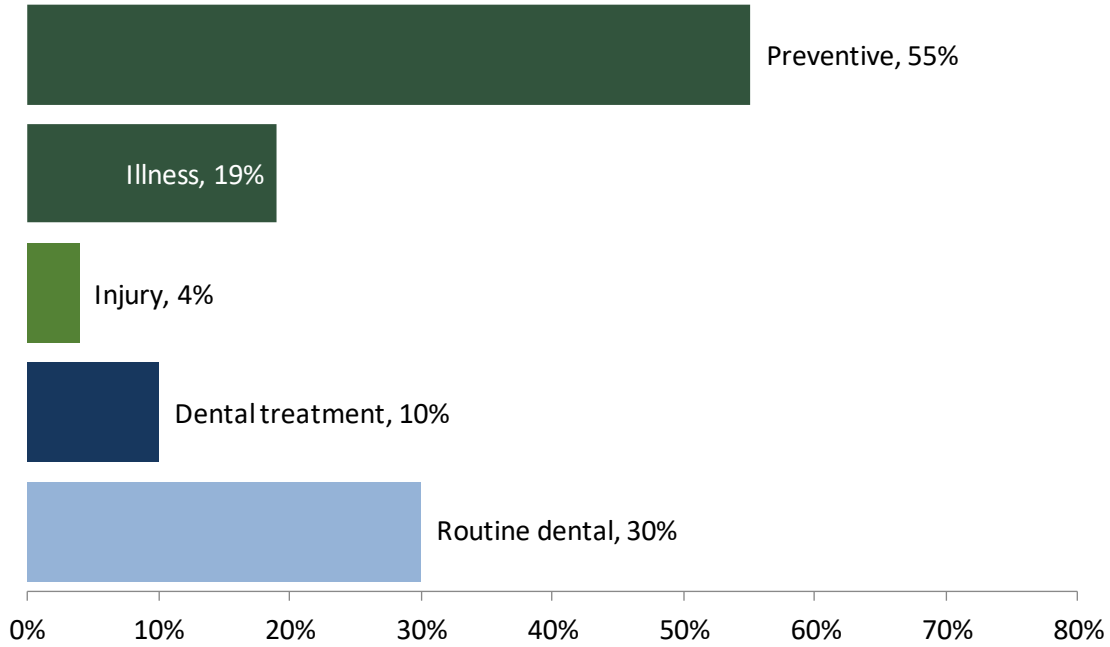
In 2021–2022, 60 percent of crop workers received health care services from doctors, nurses, dentists, clinics, or hospitals in the United States for routine or preventive care, illness, or injury in the 12 months prior to their interview (excluding dental treatment and routine dental cleaning or check-up). Workers with health insurance were more likely to report using health care services (77%) compared to workers without health insurance (43%; Figure 9.5).

**Figure 9.5: Visited a U.S. Health Care Provider in the Last 12 Months by Health Insurance Status, 2021–2022**



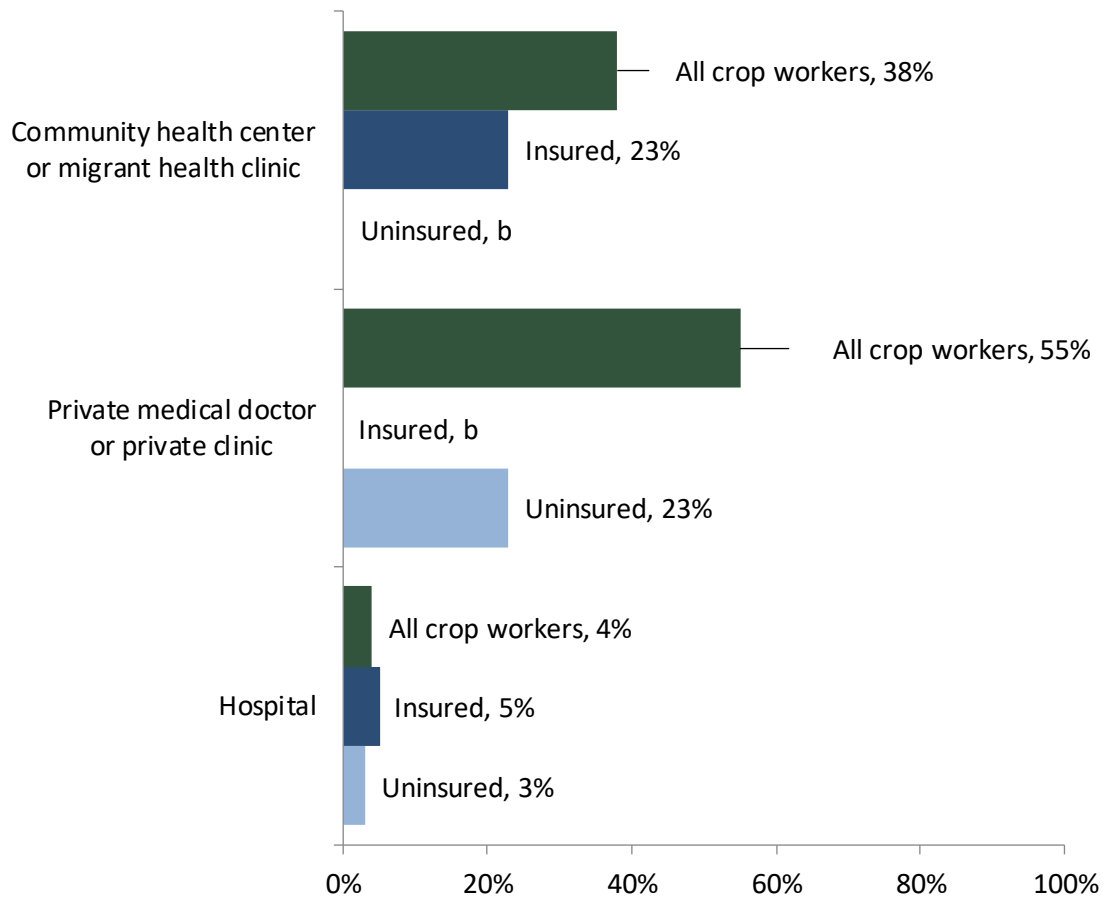
More than half (55%) of crop workers visited health care services for preventive care, 19% for illness, 4% for injury, 10% for dental treatment, and 30% for routine dental care (Figure 9.6).

**Figure 9.6: Visited a U.S. Health Care Provider in the Last 12 Months by Type of Service, 2021–2022**



Crop workers who sought health care in the U.S. sometime in the last 12 months were asked which health care provider they used the last time they saw one. Thirty-eight percent of workers said their most recent health care visit for preventive or routine care was to a community health center or migrant health clinic. Fifty-five percent said they visited a private medical doctor or private clinic (private provider), and 4 percent went to a hospital. See Figure 9.7.

**Figure 9.7: Top Providers for Preventive or Routine Care by Health Insurance Status, 2021–2022**

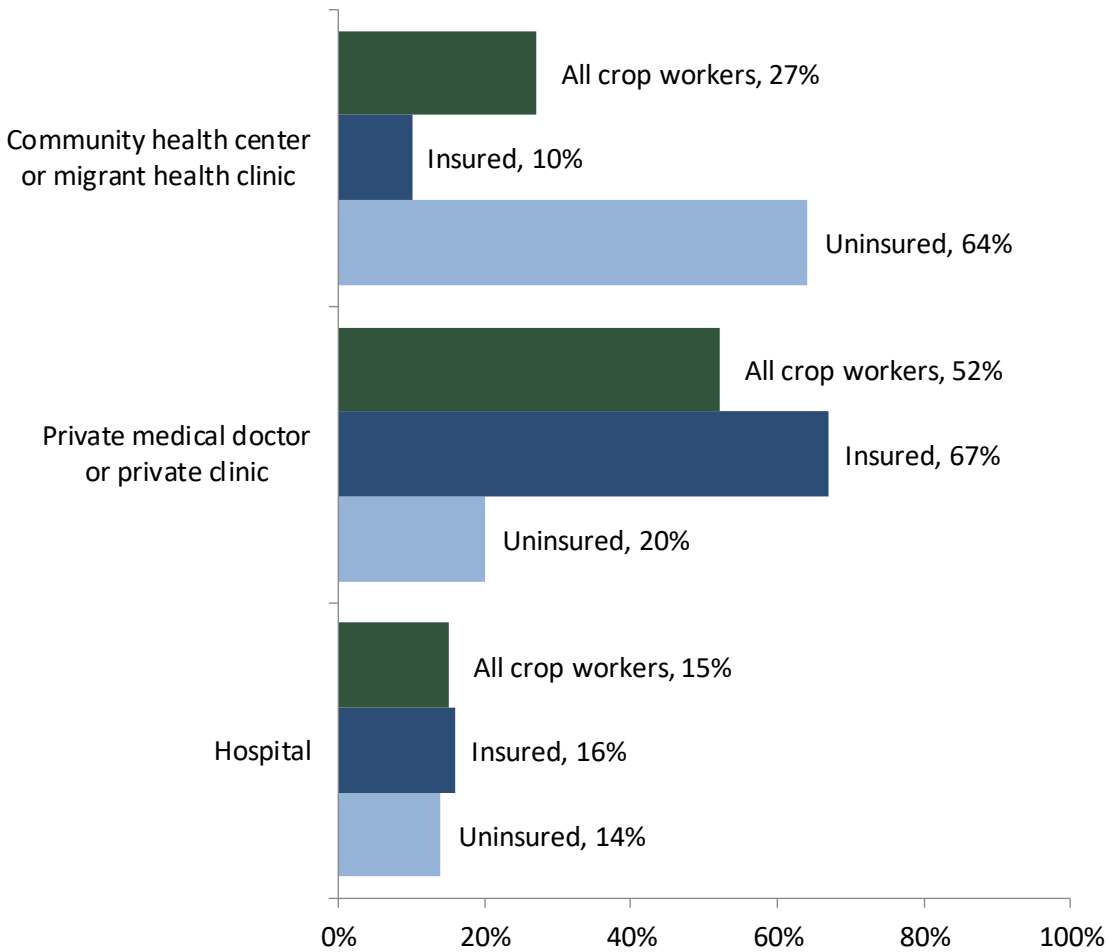


<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

Among workers who had a visit for illness, fewer insured workers visited a community health center or migrant health clinic (10% compared to 64% of uninsured), and more insured workers visited a private provider (67% compared to 20% uninsured). Similar proportions of insured (16%) and uninsured (14%) workers visited a hospital for illness (Figure 9.8).

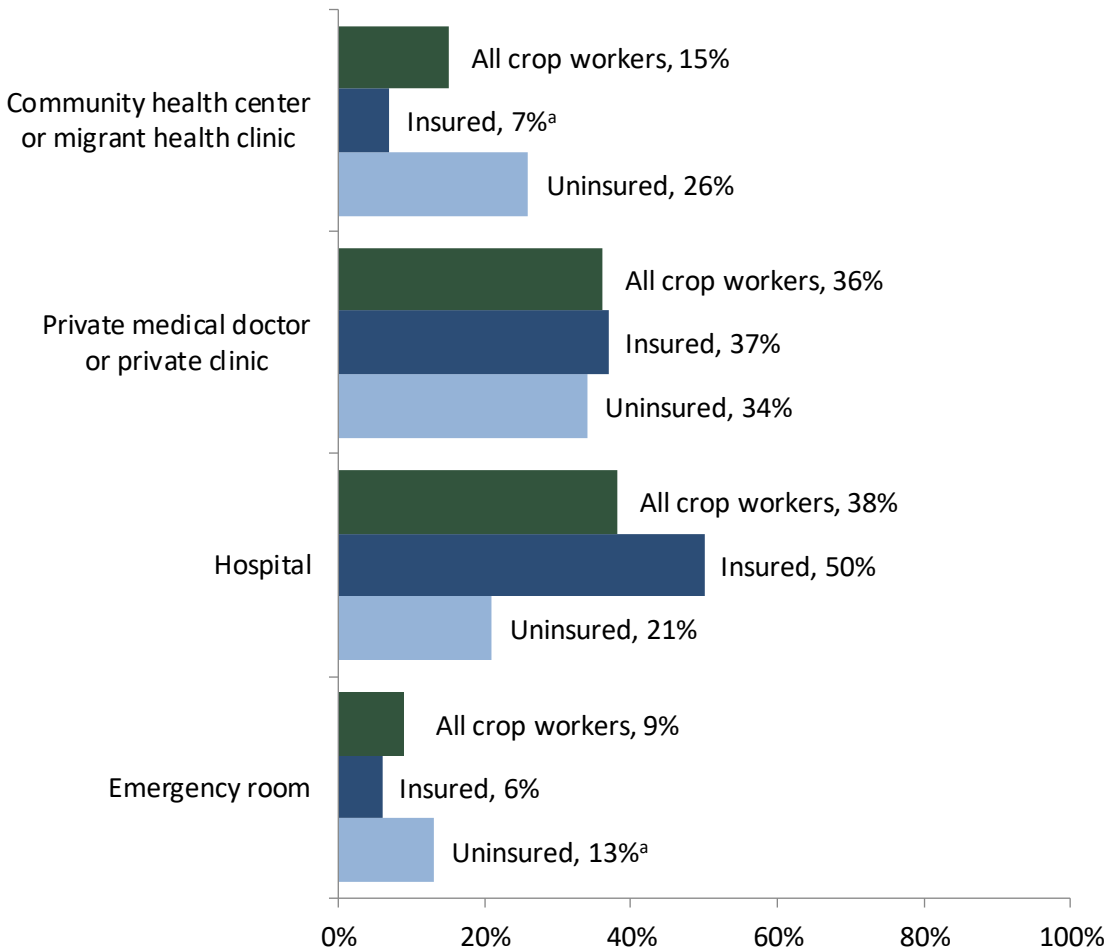
**Figure 9.8: Top Providers for Illness by Health Insurance Status, 2021–2022**



<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

Among workers who had a visit for injury, fewer insured workers visited a community health center or migrant health clinic (7%<sup>59</sup> compared to 26% uninsured). Similar proportions of insured (37%) and uninsured (34%) workers visited a private doctor or clinic. Similar proportions of insured (14%) and uninsured (13%<sup>60</sup>) workers visited a hospital for injury (Figure 9.9).

**Figure 9.9: Top Providers for Injury by Health Insurance Status, 2021–2022**



<sup>a</sup> Estimate should be interpreted with caution because it has an RSE of 31 percent to 50 percent.

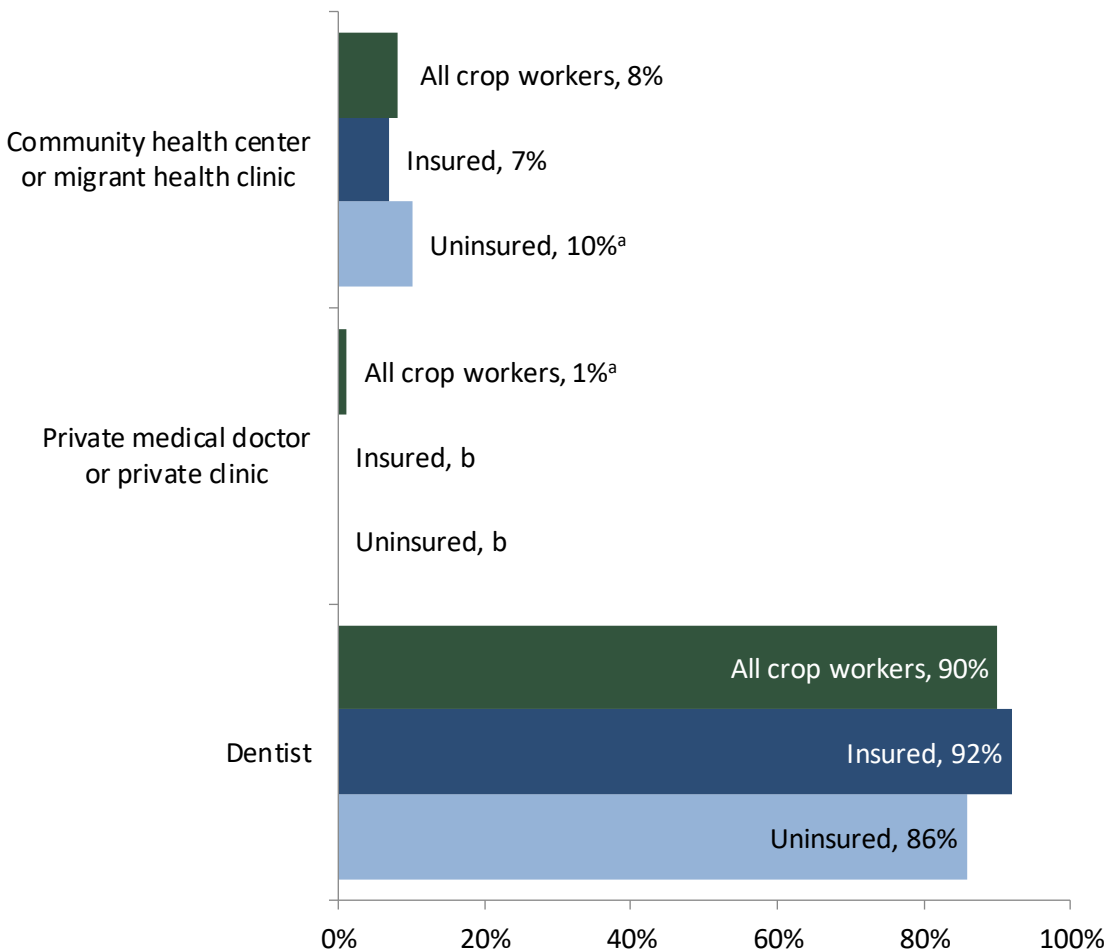
<sup>59</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.

<sup>60</sup> Estimate should be interpreted with caution because it has an RSE of 31 to 50 percent.



Among workers who had a visit for dental treatment or preventive care, more insured workers visited a dentist (92% compared to 86% uninsured; Figure 9.10), and similar proportions of insured (7%) and uninsured (10%<sup>61</sup>) workers visited a community health center or migrant health clinic.

**Figure 9.10: Top Providers for Dental Treatment or Preventive Care by Health Insurance Status, 2021–2022**



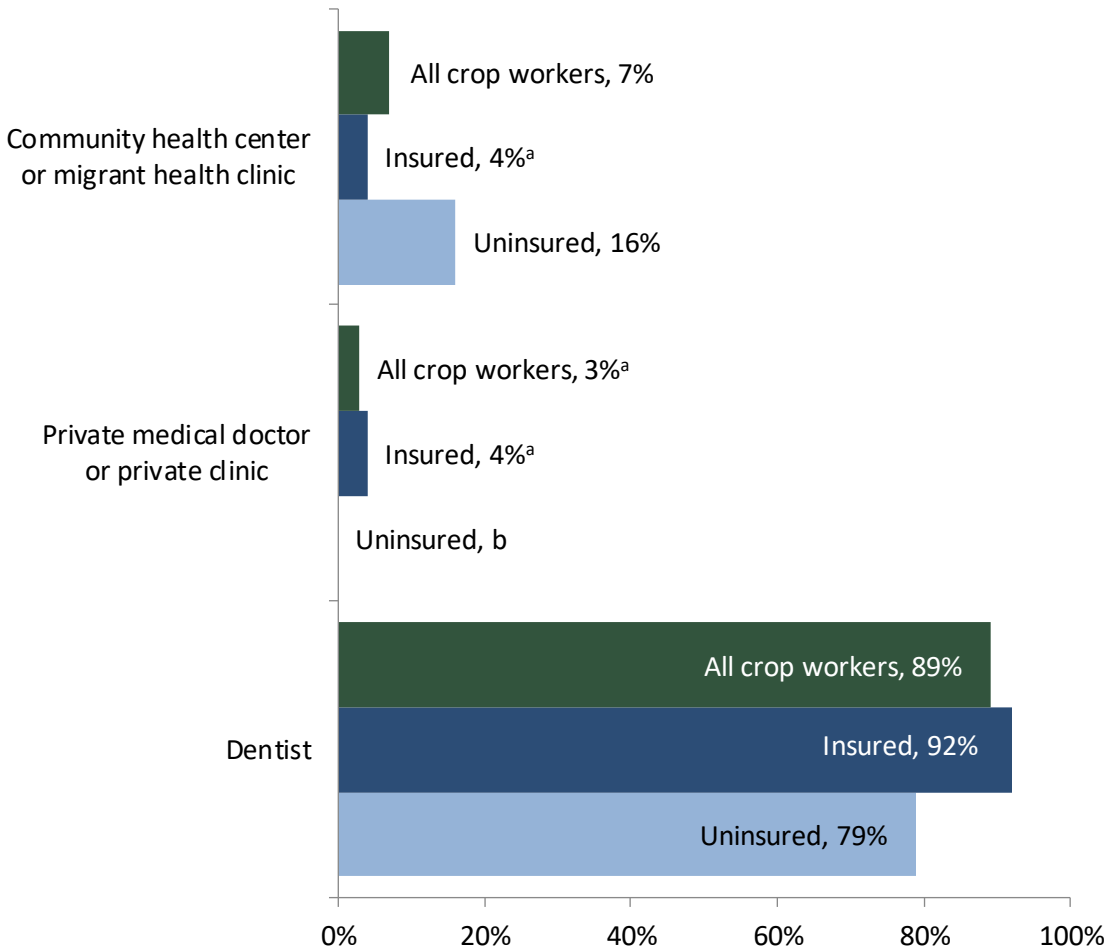
<sup>a</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

<sup>61</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

Among workers who had a visit for routine dental care, more insured workers visited a dentist (92% compared to 79% uninsured; Figure 9.11).

**Figure 9.11: Top Providers for Routine Dental Care by Health Insurance Status, 2021–2022**



<sup>a</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

Crop workers who sought health care in the U.S. were also asked who paid most of the cost of their last health care visit (Figure 9.12). Crop workers said that for preventative visits, 22% were paid by Medicaid/Medicare, 22% by self/family bought health plan, and 19% the public clinic did not charge them. For illness visits, the most frequent methods of payment were self/family bought health plan (24%), Medicaid/Medicare (21%), and 15% the clinic did not charge them. For injury visits, the most frequent methods of payment self/family bought health plan (31%), employer provided health plan (15%), and the worker copaid (11%). For dental treatment, the most frequent methods of payment were out of their own pocket (17%), crop worker- or family-bought health plan (21%<sup>62</sup>), and Medicaid/Medicare (17%<sup>63</sup>). For routine dental care, the most frequent method of payment were self/family bought plan (31%), Medicaid/Medicare (20%), and out of their own pocket (19%).

**Figure 9.12: Payment Source for Health Visits by Type of Care, 2021–2022**

Payer	Preventive	Illness	Injury	Dental Treatment	Routine Dental
<b>Out of pocket</b>	12%	11%	7% <sup>a</sup>	29%	19%
<b>Medicaid/Medicare</b>	22%	21%	8% <sup>a</sup>	17% <sup>a</sup>	20%
<b>Public clinic did not charge</b>	19%	15%	10% <sup>a</sup>	11%	9%
<b>Employer provided health plan</b>	13%	14%	15%	14% <sup>a</sup>	13%
<b>Self/family bought health plan</b>	22%	24%	31%	21% <sup>a</sup>	31%
<b>Billed, but did not pay</b>	<1% <sup>a</sup>	2% <sup>a</sup>	3% <sup>a</sup>	0%	0%
<b>Worker's comp</b>	b	b	7%	b	0%
<b>I paid some (copay)</b>	8%	9%	11%	5%	6%
<b>Spouse Employer</b>	2% <sup>a</sup>	1%	2%	b	2% <sup>a</sup>
<b>Other</b>	7%	7%	10%	4% <sup>a</sup>	3% <sup>a</sup>

<sup>a</sup> Estimate should be interpreted with caution because it has a RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

Crop workers were asked whether they faced barriers to accessing health care in the U.S (Figure 9.13). Most crop workers said they had no need to go or do not get sick as the reason they did not use health care services for preventive care (71%), illness (97%), injury (99%), dental treatment (87%), and routine dental care (60%). Many crop workers reported they did not use preventive, dental treatment, or routine dental care services because it was too expensive (16%, 10%, 22%, respectively) or because they did not have insurance (19%, 7%, 21%, respectively). Few crop workers reported not using health care services for illness or injury because of a barrier to access. Of the crop workers who did not use health care services for illness and injury, they reported not having insurance (2% and 1%, respectively).

<sup>62</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>63</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

Figure 9.13: Barrier to Health Access by Type of Care, 2021–2022

Barrier	Preventive	Illness	Injury	Dental Treatment	Routine Dental
Did not know where to go	1% <sup>a</sup>	b	b	1% <sup>a</sup>	2%
Too far away	<1% <sup>a</sup>	b	b	b	1% <sup>a</sup>
Health center not open when needed	3%	<1% <sup>a</sup>	<1%	<1% <sup>a</sup>	1%
No need to go / does not get sick	71%	97%	99%	87%	60%
Too expensive	16%	1%	<1% <sup>a</sup>	10%	22%
No insurance	19%	2%	1%	7%	21%
Fear of COVID	2% <sup>a</sup>	b	b	<1% <sup>a</sup>	2% <sup>a</sup>
Limited/No apt due to COVID	2% <sup>a</sup>	b	b	<1% <sup>a</sup>	1%
Other	7%	1%	1%	3%	9%

*Note:* Three barriers, “No transportation,” “Sick with COVID”, and “Exposed to COVID/could not get appointment” are not shown in the table because the estimates have an RSE greater than 50 percent and were suppressed.

<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

Crop workers were asked about their satisfaction with the health care services they received (Figure 9.14). Most crop workers who sought care were very satisfied with the care they received. Preventive services and routine dental care had the highest rates of satisfaction with 98% reporting being very satisfied. Injury care had the highest rate of dissatisfaction with 5% of crop workers saying they were not at all satisfied.

Figure 9.14: Satisfaction with Health Care Received by Type of Care, 2021–2022

How Satisfied	Preventive	Illness	Injury	Dental Treatment	Routine Dental
Very satisfied	98%	92%	93%	92%	98%
Somewhat satisfied	2%	7%	2% <sup>a</sup>	5%	1% <sup>a</sup>
Not at all satisfied	<1% <sup>a</sup>	1%	5%	4% <sup>a</sup>	1% <sup>a</sup>

<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

### ***Crop Workers' Health Care Utilization by Location and Demographics***

Among those who used health care services for preventive care, there were differences by family composition (married/parent status), education, and work authorization (Figure 9.15). Those who are married and have no children visited a health care provider more often (61%) compared to other marital and children statuses (51%–56%). More crop workers who had work authorization visited a health care provider for preventive care (62%) than those who did not have work authorization (46%).

**Figure 9.15: Visited a U.S. Health Care Provider for Preventive Services in the Last 12 Months by Crop worker Characteristics, 2021–2022**

<b>Crop Worker Characteristic</b>	<b>Visited a U.S. Health Care Provider for Preventive Care</b>
<b>Married, parent</b>	56%
<b>Unmarried, parent</b>	55%
<b>Married, no children</b>	61%
<b>Single, no children</b>	51%
<b>Completed 12<sup>th</sup> grade</b>	56%
<b>Did not complete 12<sup>th</sup> grade</b>	54%
<b>Authorized</b>	62%
<b>Unauthorized</b>	46%

Use of health care services differs by location, demographics, and other characteristics including stream (Eastern, Midwest, and Western; a map of the three streams is shown in Appendix A), age, gender, primary language, country of birth, family composition, migrant status, and whether the crop worker has a chronic condition (Figure 9.16). For all types of health care visits (excluding dental), more crop workers in the Midwest stream used health care services (72%) compared to the Eastern (59%) and Western (57%) streams. More crop workers aged 14–17 and over 50 used health care services (83% and 74%, respectively) than other age groups. A greater percentage of female crop workers than males used health care services (69% vs. 56%). Fewer crop workers whose primary language is Spanish used health care services (60%) than those who speak English (64%) or bilingual Spanish/English (68%). Fewer crop workers whose place of birth was Mexico used health care services (57%) compared to those born in U.S. or Puerto Rico (64%) or Central America (69%). Health care service use were similar between married and single crop workers with children (61% and 65%) and but differed between those without children (67% married without children and 55% single without children). Health care use was higher among settled crop workers (63%) than migrant crop workers (47%).

**Figure 9.16: Visited a U.S. Health Care Provider (Excluding Dental) in the Last 12 Months by Location and Demographics, 2021–2022**

<b>Crop Worker Characteristic</b>	<b>Visited a U.S. Health Care Provider (Excluding Dental)</b>
Eastern stream	59%
Midwest stream	72%
Western stream	57%
14-17 years old	83%
18-24 years old	42%
25-50 years old	58%
Over 50 years old	74%
Male	56%
Female	69%
Spanish	60%
English	64%
Bilingual Spanish/English	68%
More than one language	51%
Indigenous	16% <sup>a</sup>
Mexico	57%
U.S./Puerto Rico	64%
Central America	69%
Married, parent	61%
Unmarried, parent	65%
Married, no children	67%
Single, no children	55%
Migrant	47%
Settled	63%

<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

## CHAPTER 10: Digital Access

### **Summary of Findings**

- Almost all (99%) crop workers reported that they had digital access.
- They also reported that 98 percent of their spouses and 89 percent of their children had digital access.
- Most crop workers had a phone with text (92%) or a phone with internet (96%).
- Over a third (40%) of crop workers had a computer, and almost a quarter (18%) had a tablet.

### **Digital Access Supplement**

The NAWS digital access supplement was developed to provide valuable information on an important cross-agency federal digital initiative, described in the *National Broadband Plan*. The supplement was also expected to be of use to a range of federal and state agencies for planning service delivery to MSFWs and their families.

The digital access questions were based on questions asked by other national surveys and were piloted with crop workers in three locations representing different geographic areas with different migration patterns. Interviewers asked crop workers about digital access in general, the type of devices they have, what they used digital devices for, and whether anyone helped them use digital devices. Furthermore, interviewers asked crop workers the same questions about their spouse and children. The pilot study report is available [here](#).

### **Digital Access**

In 2021–2022 crop workers were asked whether they or any member of their family have access to digital information sources (digital access) such as internet or cellphone with internet. Almost all (99%) crop workers reported that they had digital access. They also reported that 98 percent of their spouses and 89 percent of their children had digital access. The results were broken down into the Eastern, Midwest, and Western streams. Digital access for crop workers was similar across the three streams, with 99 percent reporting having digital access in the Eastern Stream, 99 percent in the Midwest Stream, and 98 percent in the Western Stream (Figure 10.1). A similar pattern can be seen for crop workers' spouse and children across the streams. Spouse's digital access ranged from 97 to 100 percent across the streams (Figure 10.2). Children's digital access ranged from 88 to 93, with the Western Stream having lowest proportion of children having digital access (Figure 10.3).

Figure 10.1: Crop workers' Digital Access by Stream, 2021–2022

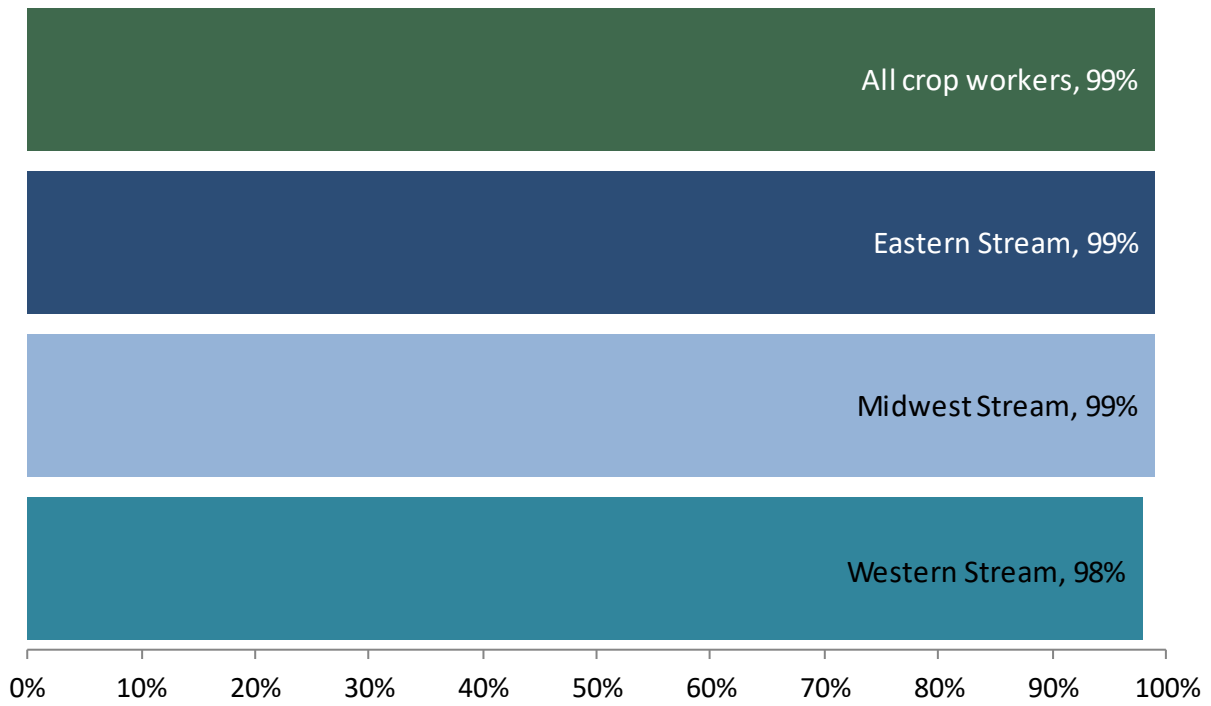




Figure 10.2: Spouse’s Digital Access by Stream, 2021–2022

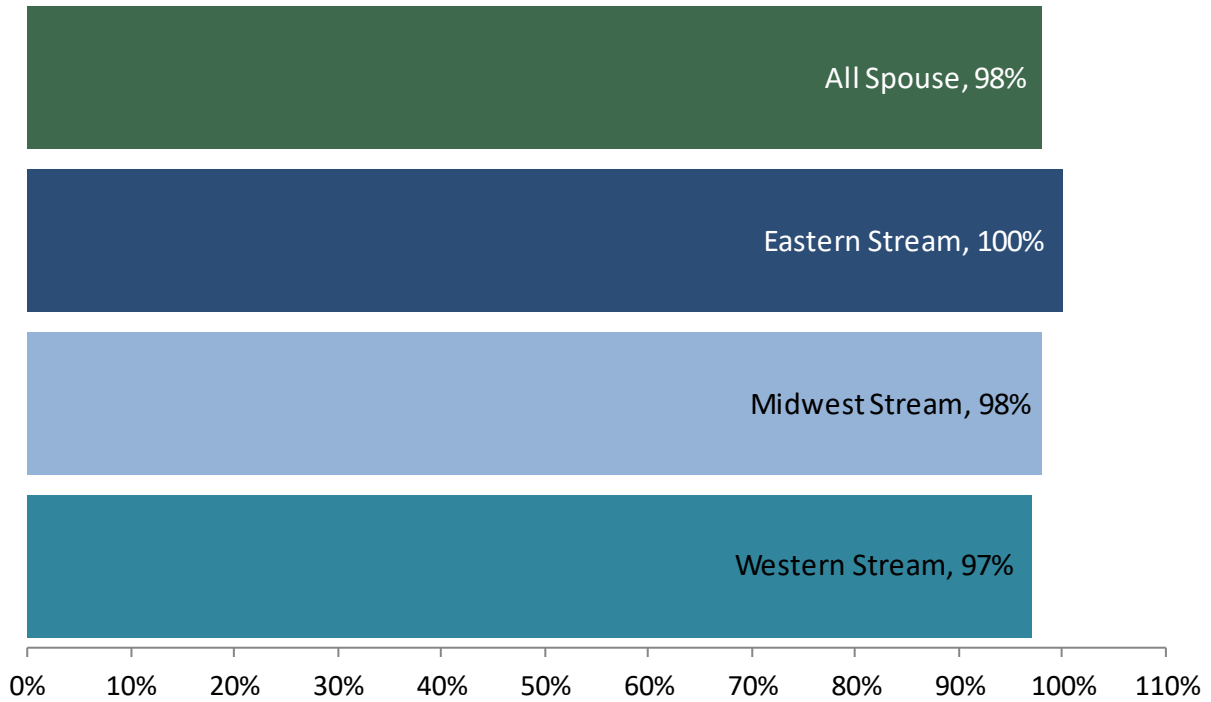
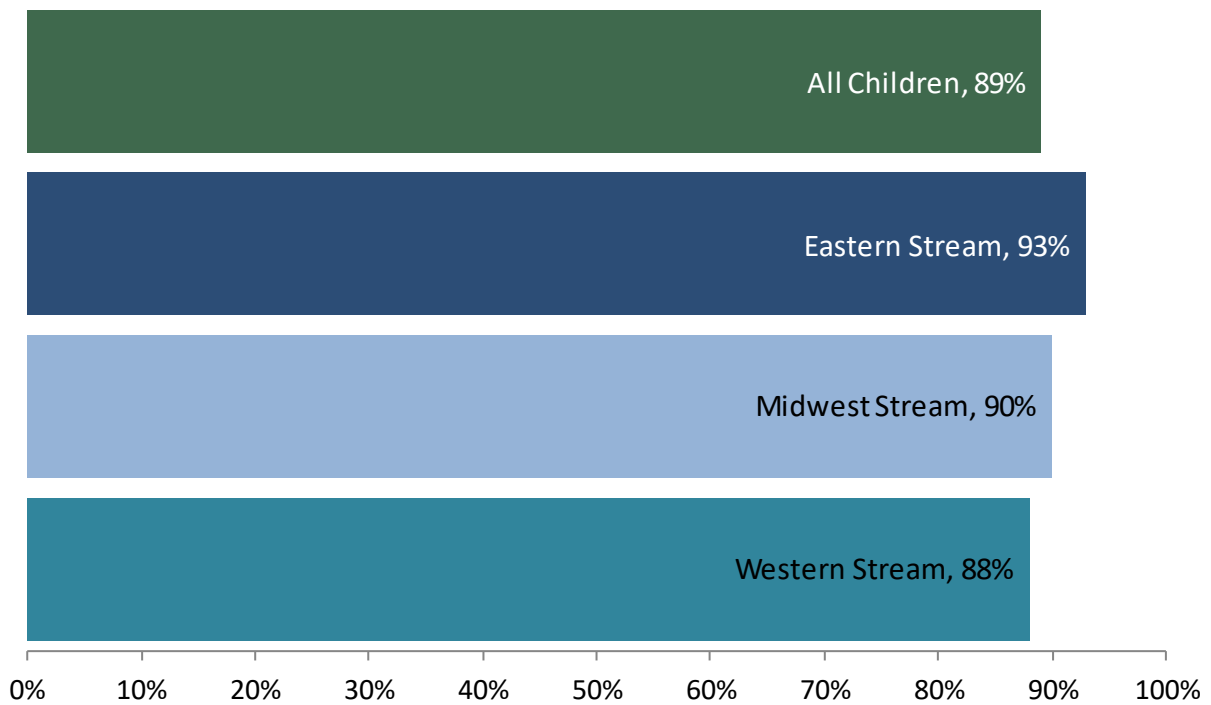


Figure 10.3: Children’s Digital Access by Stream, 2021–2022



A further breakdown of crop workers' digital access by crop worker characteristics is shown in Figure 10.4, including age, gender, primary language, English speaking/reading ability, country of birth, family composition, migrant status, chronic health condition, education, income. Overall, most (94–100%) crop workers had digital access across the different characteristics. The group that has the lowest proportion was crop workers ages 65 years or older, where 94 percent had digital access.

**Figure 10.4: Crop Workers' Digital Access by Demographics, 2021–2022**

Crop Worker Characteristic	Had Digital Access (Percent)
14–19 years old	100
20–24 years old	100
25–34 years old	100
35–44 years old	98
45–54 years old	99
55–64 years old	98
65 years and older	94
Male	99
Female	99
Spanish	98
English	99
Bilingual Spanish/English	100
More than one language	99
Indigenous	99
English speaking ability: Not at all	98
English speaking ability: A little	98
English speaking ability: Somewhat/well	100
English reading ability: Not at all	97
English reading ability: A little	99
English reading ability: Somewhat/well	100
County of Birth: Mexico	98
County of Birth: U.S./Puerto Rico	99
County of Birth: Central America	99
Married, parent	99
Unmarried, parent	99
Married, no children	98
Single, no children	98
Migrant	99
Settled	99
Has a chronic condition	99
No chronic condition	99
Highest grade completed: 1–6	98

Crop Worker Characteristic	Had Digital Access (Percent)
Highest grade completed: 7–9	99
Highest grade completed: 10–12	100
Highest grade completed: More than 12	100
Household income: Less than \$10,000	97
Household income: \$10,000–\$19,999	99
Household income: \$20,000–\$29,999	97
Household income: Over \$30,000	99

### Digital Devices

In addition to general digital access, crop workers were asked what digital devices they and their spouses and children have. In 2021–2022, the majority of crop workers had a phone with text (92%) or a phone with internet (96%). Over a third (40%) of crop workers had a computer, and almost a quarter (18%) had a tablet. See Figure 10.5. Crop workers' device ownership by stream is shown in Figure 10.6. Across all three streams, similar proportions of crop workers had a phone with text or internet; 91 to 95 percent had a phone with text and 95 to 98 percent having a phone with internet. The Western Stream has the lowest proportion of ownership for all devices; 91 percent had a phone with text, 95 percent had a phone with internet, 30 percent had a computer, and 14 percent had a tablet.

**Figure 10.5: Crop Workers' Digital Device Ownership, 2021–2022**

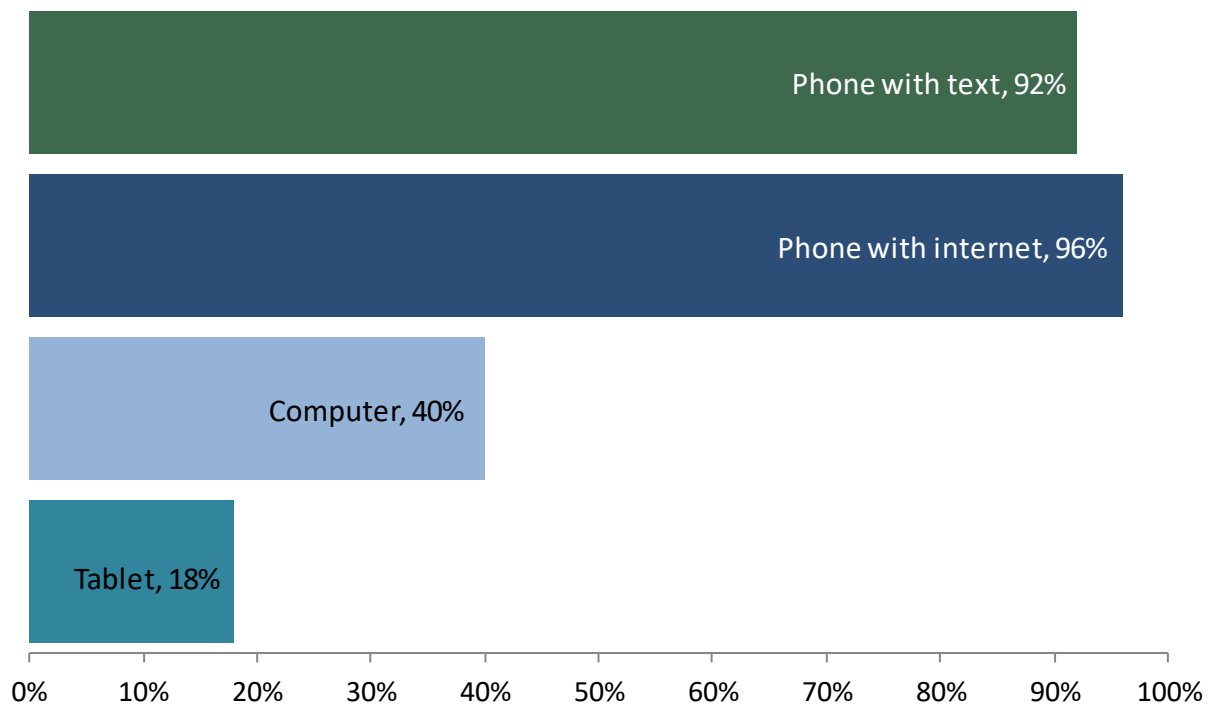


Figure 10.6: Crop Workers' Digital Device Ownership by Stream, 2021–2022

Device	Eastern Stream (Percent)	Midwest Stream (Percent)	Western Stream (Percent)
Phone with text	95	94	91
Phone with internet	97	98	95
Computer	42	67	30
Tablet	23	24	14

A breakdown of crop workers' digital device ownership by crop worker characteristics is shown in Figure 10.7. Overall, 84–97 percent of crop workers had a phone with text, 72–100 percent had a phone with internet, 11–86 percent had a computer, and 6–36 percent had a tablet.

Figure 10.7: Crop Workers' Digital Device Ownership by Demographics, 2021–2022

Crop Worker Characteristic	Phone with Text (Percent)	Phone with Internet (Percent)	Computer (Percent)	Tablet (Percent)
14–19 years old	92	99	56	34
20–24 years old	93	97	54	19
25–34 years old	90	98	47	21
35–44 years old	93	98	42	17
45–54 years old	91	96	28	13
55–64 years old	96	92	30	19
65 years and older	94	82	11	<sup>b</sup>
Male	92	96	36	16
Female	94	97	48	23
Spanish	90	95	25	10
English	96	100	74	31
Bilingual Spanish/English	90	99	56	36
More than one language	96	94	20	13 <sup>a</sup>
Indigenous	85	72	0	<sup>b</sup>
English speaking ability: Not at all	87	92	11	6
English speaking ability: A little	95	96	29	10
English speaking ability: Somewhat/well	94	99	60	28
English reading ability: Not at all	88	92	12	6
English reading ability: A little	97	98	32	13
English reading ability: Somewhat/well	93	99	63	29
County of Birth: Mexico	91	94	25	11
County of Birth: U.S./Puerto Rico	95	100	72	33
County of Birth: Central America	92	98	18 <sup>a</sup>	5 <sup>a</sup>
Married, parent	93	97	39	16

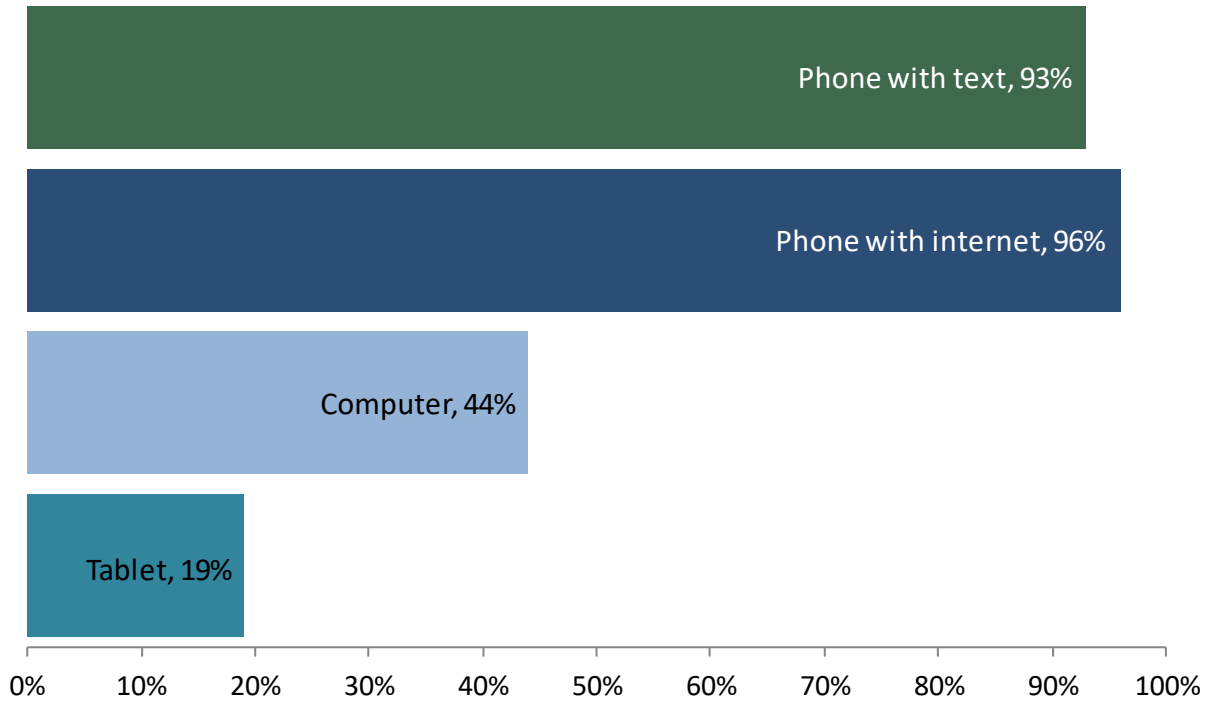
Crop Worker Characteristic	Phone with Text (Percent)	Phone with Internet (Percent)	Computer (Percent)	Tablet (Percent)
<b>Unmarried, parent</b>	87	98	32	16
<b>Married, no children</b>	93	92	32	21
<b>Single, no children</b>	92	98	47	20
<b>Migrant</b>	84	95	17	9
<b>Settled</b>	94	96	44	20
<b>Has a chronic condition</b>	94	96	40	17
<b>No chronic condition</b>	91	96	40	19
<b>Highest grade completed: 1–6</b>	94	93	19	8
<b>Highest grade completed: 7–9</b>	89	97	31	16
<b>Highest grade completed: 10–12</b>	93	99	48	23
<b>Highest grade completed: More than 12</b>	95	100	86	35
<b>Household income: Less than \$10,000</b>	87	98	42	17 <sup>a</sup>
<b>Household income: \$10,000–\$19,999</b>	94	98	30	9
<b>Household income: \$20,000–\$29,999</b>	93	94	31	12
<b>Household income: Over \$30,000</b>	93	96	48	24

<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

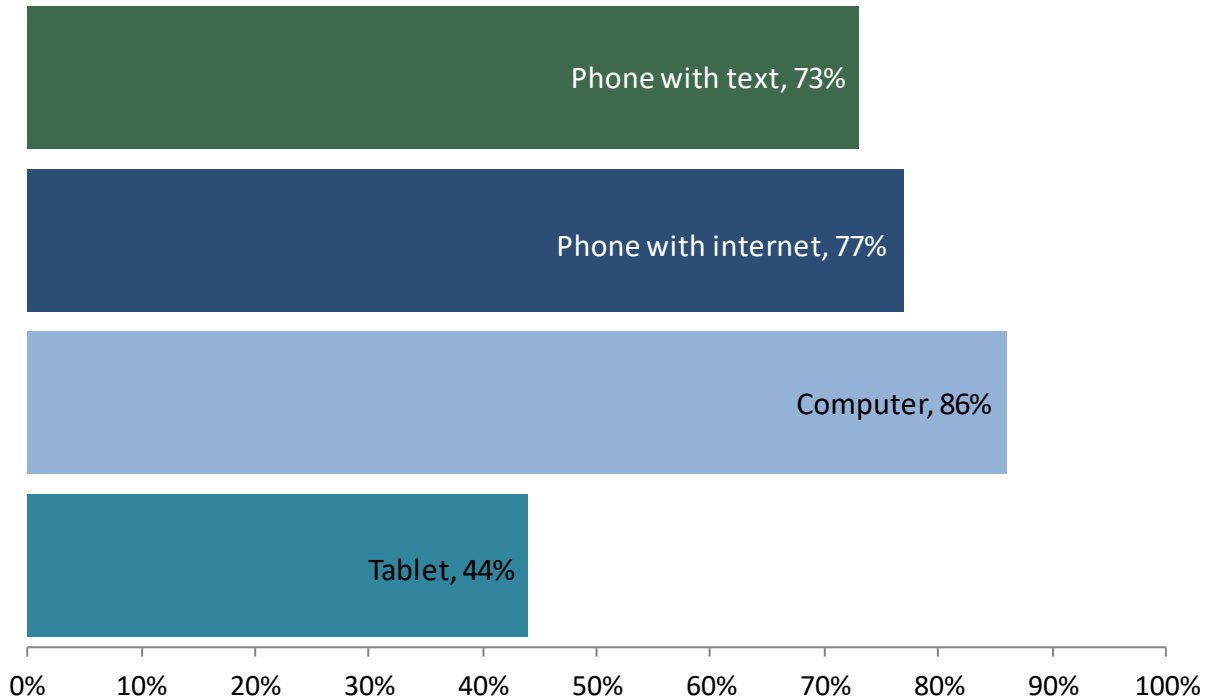
When it comes to the crop workers' spouse, 93 percent had a phone with text, 96 percent had a phone with internet, 44% had a computer, and 19 percent had a tablet (Figure 10.8).

**Figure 10.8: Spouse Digital Device Ownership, 2021–2022**



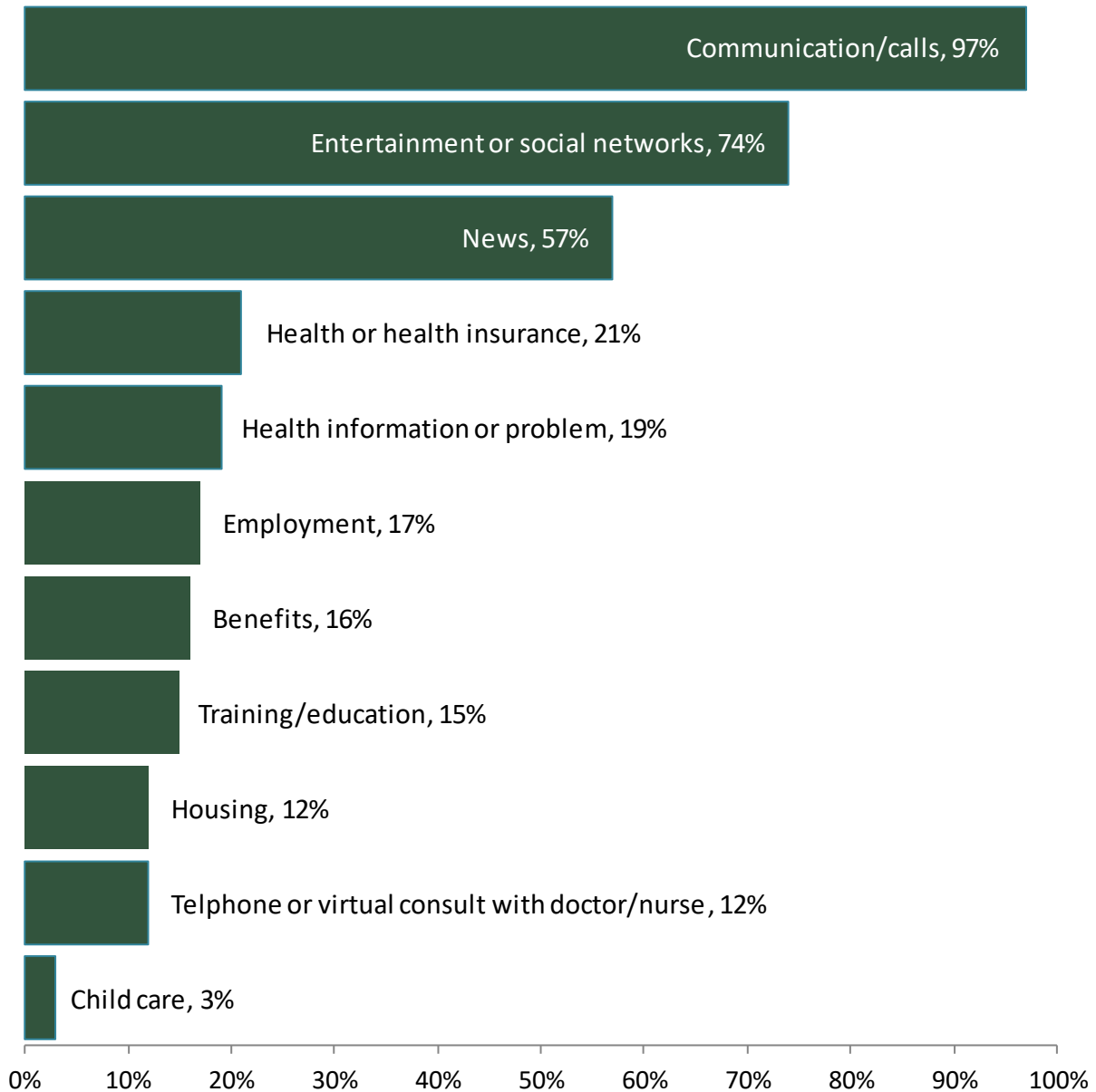
For the crop workers' children, 73 percent had a phone with text, 77 percent had a phone with internet, 86% had a computer, and 44 percent had a tablet (Figure 10.9).

**Figure 10.9: Children Digital Device Ownership, 2021–2022**



### ***Digital Devices Usage***

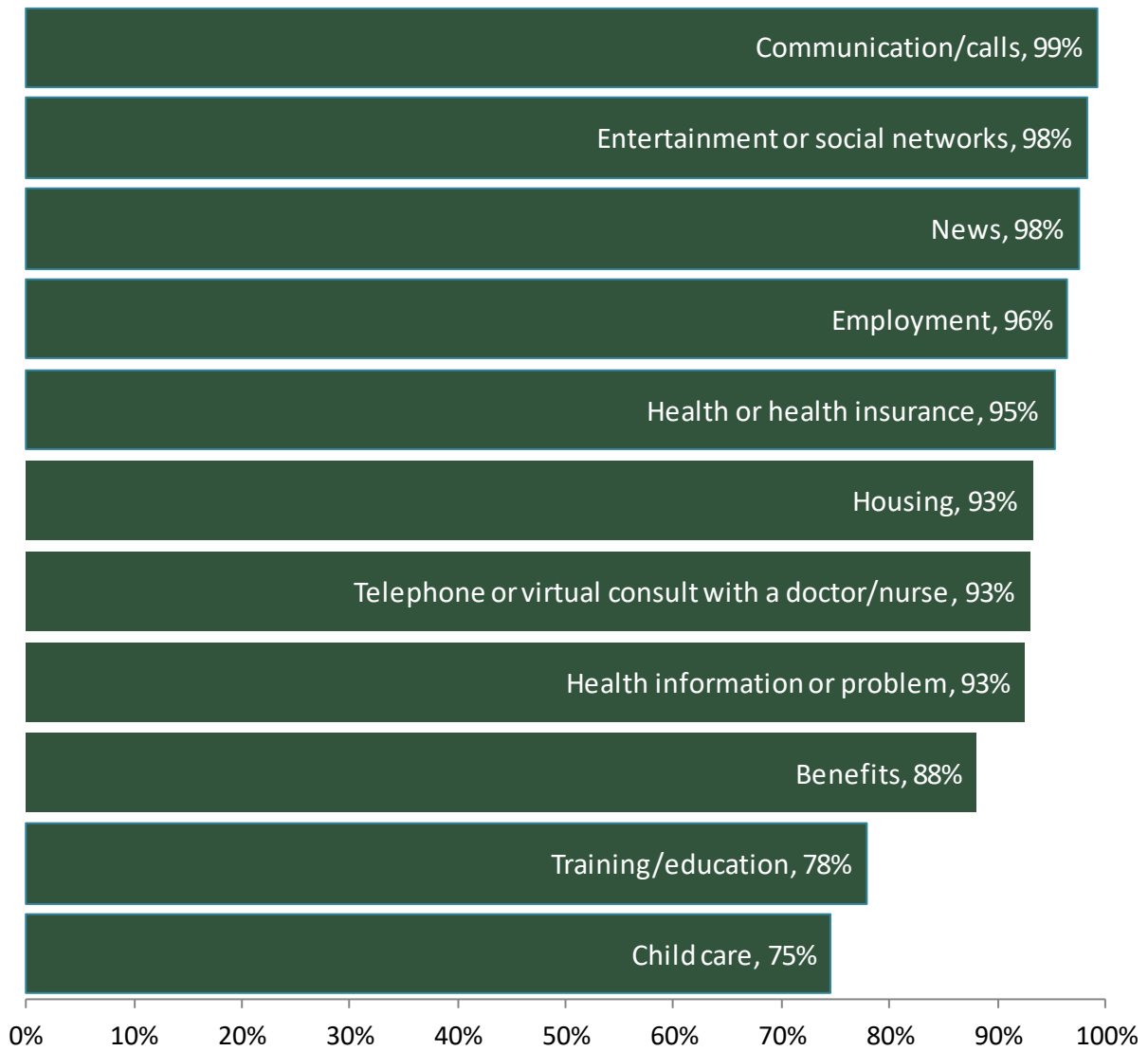
Crop workers were asked whether they used, or anyone helped them use, any digital devices to seek or obtain information about employment, health/health insurance, training/education, benefits (e.g., unemployment, Social Security, food stamps, retirement, etc.), housing, child care, health information or problem, news, communication/calls, entertainment or social networks, and telephone or virtual consult with a doctor/nurse (Figure 10.10). Crop workers used digital devices mostly for communications/calls (97%), entertainment or social networks (74%), and news (57%).

**Figure 10.10: Crop workers' Digital Devices Usage, 2021–2022**

Crop workers were also asked whether they received any help using digital devices to obtain the information mentioned above. The majority (75–99%) of crop workers used their digital devices themselves to obtain the information (Figure 10.11).

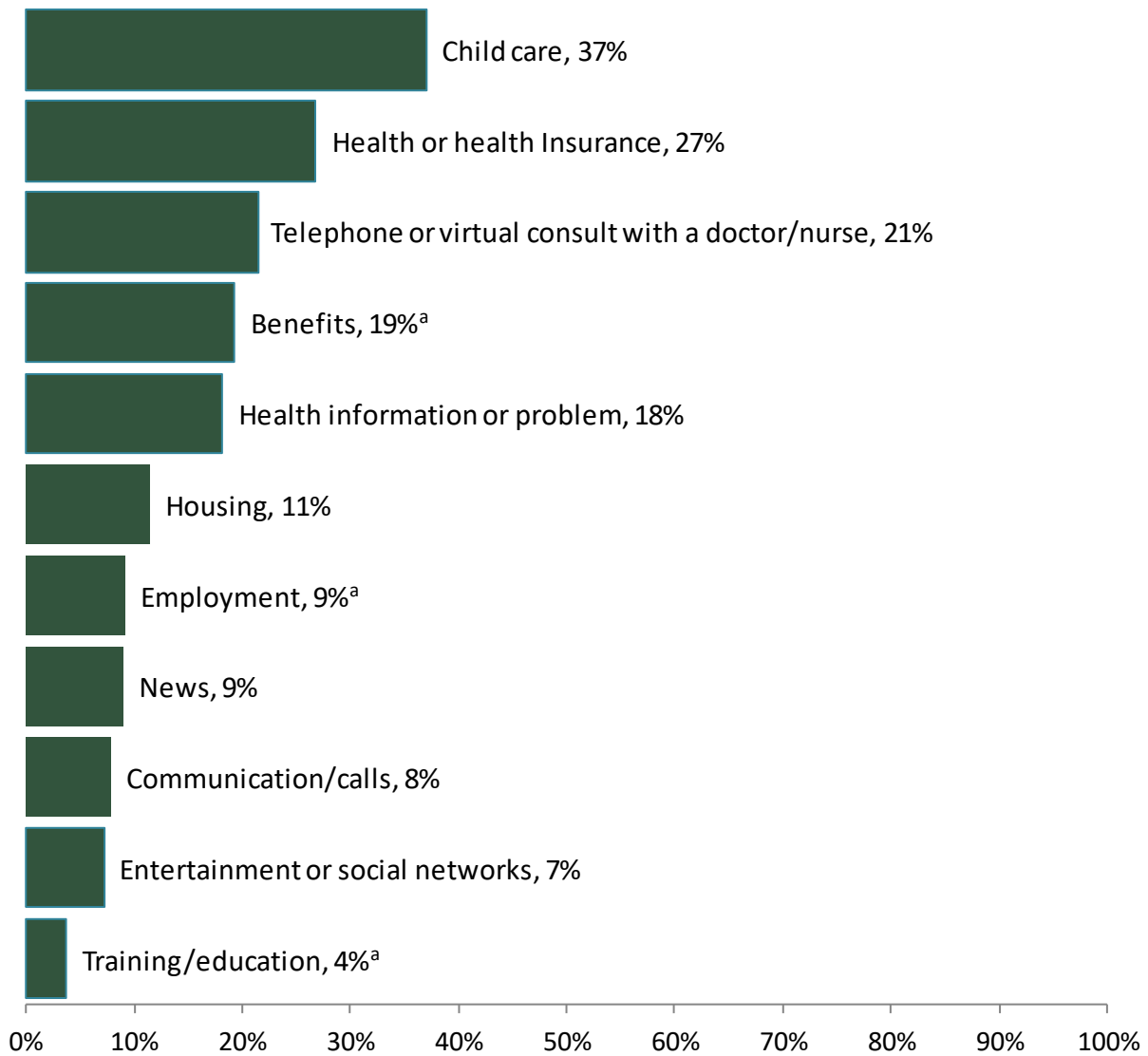


**Figure 10.11: Crop Workers Who Did Not Receive Help Using Digital Devices to Seek Information, 2021–2022**



Sometimes, crop workers receive help from their spouse or children when using digital devices to obtain the information. They received help from their spouse mostly on obtaining information about child care (37%), health or health insurance (27%), and telephone or virtual consult with a doctor or nurse (21%). See Figure 10.12.

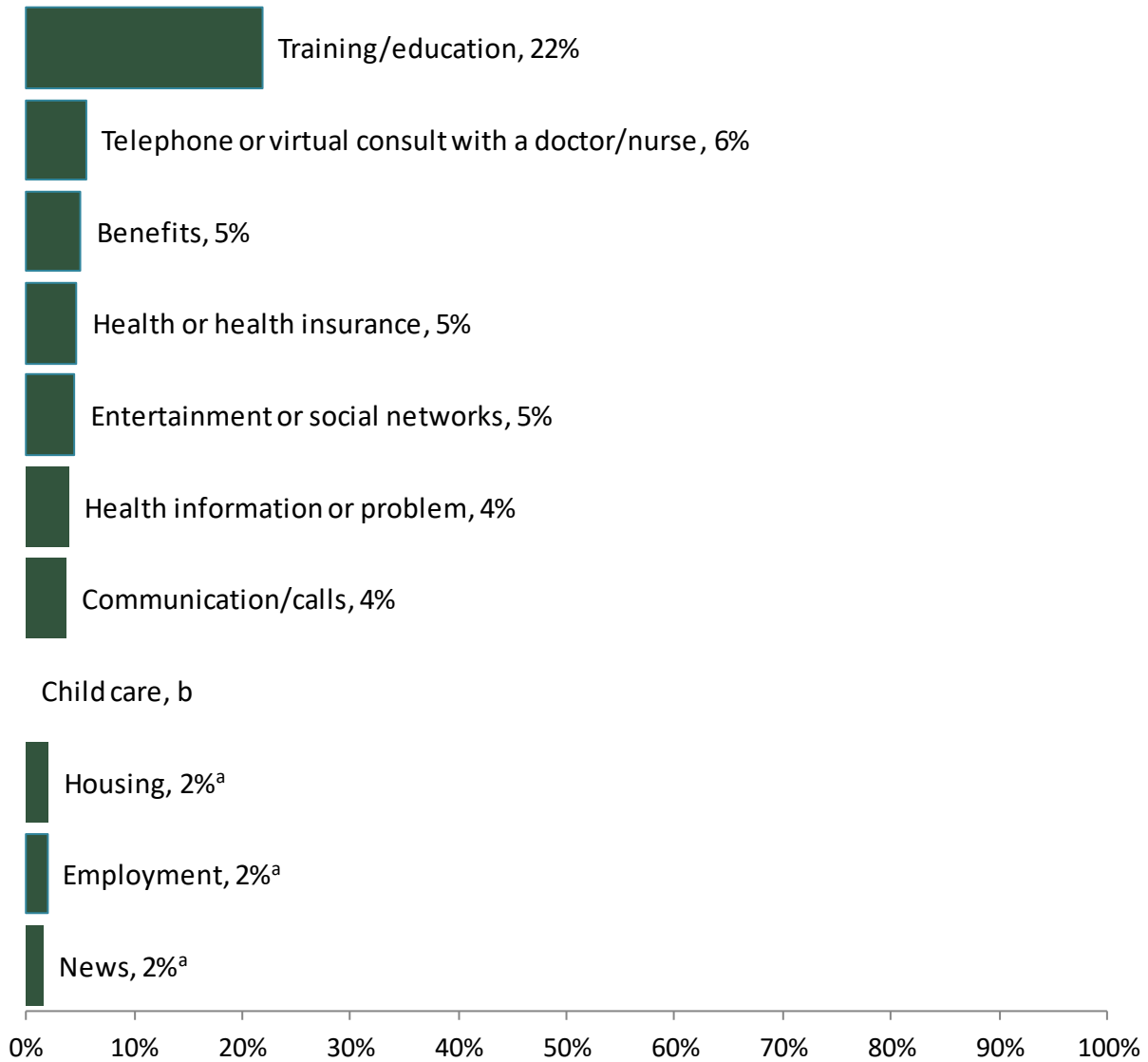
**Figure 10.12: Received Help from Spouse to Seek Information, 2021–2022**



<sup>a</sup> Estimate should be interpreted with caution because it has a n RSE of 31 percent to 50 percent.

They also received help from their children mostly on obtaining information about training or education (22%). See Figure 10.13. It should be noted since spouse and children were involved with topics that applied to them, it is difficult to distinguish if they helped the crop worker with the technology or the task of obtaining information.

**Figure 10.13: Received Help from Children to Seek Information, 2021–2022**



<sup>a</sup> Estimate should be interpreted with caution because it has an RSE of 31 percent to 50 percent.

<sup>b</sup> Estimate is suppressed because it has a RSE greater than 50 percent.

## APPENDIX A: Methodology

### **Overview**

The NAWS data come from a nationally representative, random sample of crop crop workers. During 2019-2020, the NAWS used stratified, multi-stage sampling to account for seasonal and regional fluctuations in the level of farm employment. The stratification included three interviewing cycles per year and 12 geographic regions, resulting in 36 time-by-space strata. For each interviewing cycle, NAWS staff drew a random sample of locations for each of the 12 regions. Together, the 12 regions have a universe of 928 Farm Labor Areas (FLA). FLAs were single- or multi-county sampling units that form the survey's primary sampling units (PSUs). Counties were the secondary level sampling units, ZIP Code regions were the third, agricultural employers were the fourth, and workers were the fifth.

### **Stratification**

#### **Interviewing Cycles**

To account for industry seasonality, interviews were conducted 3 times each year in cycles lasting 4 months. The cycles started in February, June, and October. The number of interviews conducted in each cycle was proportional to the number of agricultural field workers employed at that time of the year. The USDA's National Agricultural Statistics Service (NASS) provided the Employment and Training Administration (ETA) with the agricultural employment figures for workers hired by agricultural producers, which came from the USDA's Farm Labor Survey (FLS). Figures for workers employed by farm labor contractors were obtained from the BLS Quarterly Census of Employment and Wages (QCEW).

#### **Regions**

Regional stratification entailed defining 12 distinct agricultural regions based on the USDA's 17 agricultural regions. At the start of the survey in 1988, the 17 regions were collapsed into 12 by combining those regions that were most similar based on statistical analysis of cropping patterns. In each cycle, all 12 agricultural regions were included in the sample. The number of interviews per region was proportional to the size of the seasonal farm labor force in that region at that time of the year, as determined by the NASS and the Bureau of Labor Statistics (BLS) using information obtained from the Farm Labor Survey and QCEW.

#### **Sampling within Strata**

##### **Farm Labor Areas (FLAs)**

Each region was composed of several single- or multi-county sampling units called FLAs. There were 928 FLAs that form a universe from which sampling locations were selected. FLAs are aggregates of counties roughly similar in size with similar farm labor usage. FLA size is more homogeneous within region than across regions.

The FLA size measure is an estimate of the amount of farm labor in the FLA during a cycle. In this case, the measure was based on the hired and contract labor expenses from the most recent Census of Agriculture (CoA) available at the time the sample was drawn. The CoA labor expenses were adjusted using seasonality estimates that identified the percentage of labor expenses that fell into each of the NAWS cycles—fall, spring and summer. The seasonality

estimates were based on monthly data from the QCEW and were constructed by aggregating the reported monthly employment for each month included in the corresponding NAWS cycle (e.g., June, July, August, and September for the summer cycle). The share of employment corresponding to each cycle became an FLA's seasonality estimate.

FLAs were selected in two stages. In the first stage, a roster of approximately 15 FLAs per cycle and region stratum was selected. In the second stage, all FLAs on each stratum roster were randomly sorted.

### **Counties**

Selecting counties within FLAs was done using an iterative sampling procedure to ensure that an adequate number of counties was selected for each region. In most cases, interviews were completed in the first county within each FLA, and no additional counties were needed. However, because there was tremendous uncertainty about the number of workers in a county, additional counties were occasionally needed to complete the county allocation. Counties were selected one at a time, without replacement, using probabilities proportional to the size of each county's farm labor expenditures. Interviews began in the first selected county. If the work force within the county was depleted before all the allocated interviews in the FLA were completed, interviewing moved to the second randomly selected county on the list, and so forth, until all allocated interviews were completed. In FLAs where farm work was sparse, interviewers might have had to travel to several counties to encounter sufficient workers to complete the FLA allocation.

### **ZIP Code Regions**

Prior to generating lists of employers, sampled counties were divided into ZIP Code regions, which were smaller areas based on geographic proximity. A small county might be a single ZIP code region while a large county might have multiple regions. In a county with multiple ZIP Code regions, the regions were designed to be roughly equal in size.

Where there were multiple ZIP Code regions in a county, the regions were randomly sorted to produce a list that determined the order in which the areas would be visited. Field staff contacted agricultural employers in the first ZIP Code region on the list and moved down the list, following the random order, until the interview allocation for the FLA was filled or the county's workforce was exhausted.

### **Employers**

Within each selected ZIP Code region, interviewers received a list of randomly sorted agricultural employers. The list was compiled from marketing and administrative lists of employers in crop agriculture. An important component of the list was employer names in selected North American Industrial Classification Codes that the BLS provided directly to the contractor per the terms of an interagency agreement between the ETA and the BLS.

### **Workers**

Once the randomly selected employer was located, the NAWS interviewer explained the purpose of the survey and obtained access to the work site to schedule interviews. If the employer was not familiar with his or her work force, the interviewer sought the name of the manager, personnel manager, farm labor contractor, or crew leader who could help construct a sampling frame of the

workers in the operation. Interviewers documented the number of workers employed on the day of worker selection to construct worker selection probabilities.

When the number of workers available for interview was greater than the number of interviews allocated, the selection of workers for interview followed specific sampling instructions designed by a sampling statistician to ensure selection of a random sample of workers at each selected employer. Only workers employed in agriculture at the time of the interview were included in the sample. Selected workers were usually interviewed at the worksite, either before or after work or during breaks. Respondents might have also been interviewed at another location if that was more convenient for them. Respondents received a 20-dollar honorarium for participating in the survey.

### **Weighting**

The NAWS used a variety of weighting factors to construct weights for calculating unbiased population estimates.

- Sampling weights were calculated based on each sample member's probability of selection at the FLA, county, ZIP Code region, employer, and worker levels.
- Non-response factors were used to correct sampling weights for deviations from the sampling plan, such as discrepancies in the number of interviews planned and collected in specific locations.
- Post-sampling adjustment factors were used to adjust the weights given to each interview to compute unbiased population estimates from the sample data.

A full explanation of how the weights were calculated can be found in the *Statistical Methods of the National Agricultural Workers Survey* available at the U.S. Department of Labor, Employment and Training Administration's National Agricultural Workers Survey website ([https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS\\_Statistical\\_Methods\\_AKA\\_Supporting\\_Statement\\_Part\\_B.pdf](https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS_Statistical_Methods_AKA_Supporting_Statement_Part_B.pdf)).

### **Reliability of Estimates**

One measure of sampling error is the relative standard error (RSE), a measure of relative dispersion of the data. The RSE is calculated by dividing the standard error of the estimate (mean or percentage) by the estimate itself and reporting the result as a percentage. Higher RSE's indicate that the estimate of the mean might not represent the true mean of the distribution of responses.<sup>64</sup>

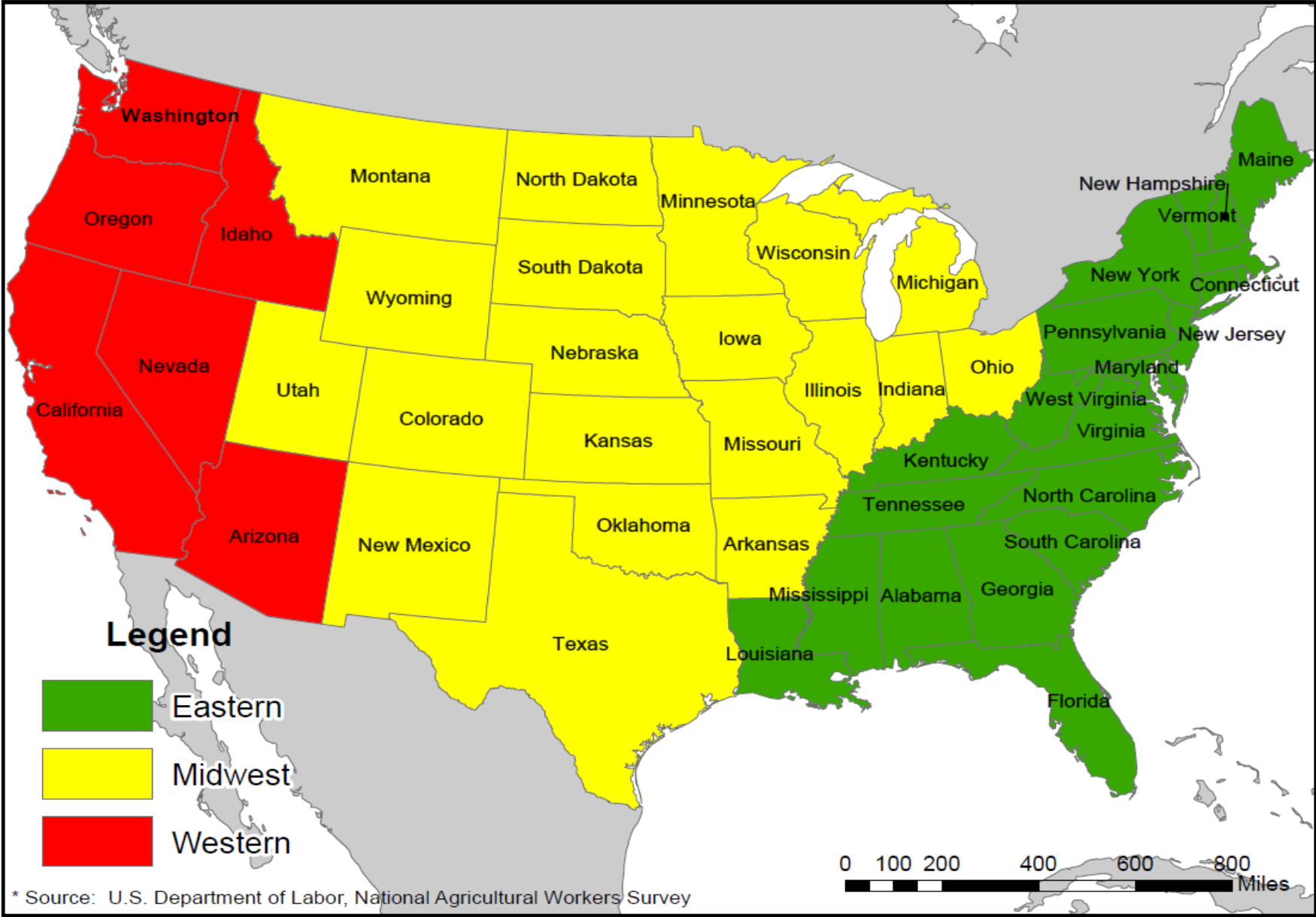
For reporting data, the NAWS has adopted the following data suppression rules.

- Estimates with RSEs greater than 30 percent but no more than 50 percent are published but should be used with caution.
- Estimates with RSEs greater than 50 percent are considered statistically unreliable and are suppressed.

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<sup>64</sup> Sommer, J. E., Green, R, and Korb, P (1998). *Structural and Financial Characteristics of U.S. Farms, 1995: 20<sup>th</sup> Annual Family Farm Report to Congress* ([https://www.ers.usda.gov/webdocs/publications/42178/32556\\_aib746\\_002.pdf?v=42487](https://www.ers.usda.gov/webdocs/publications/42178/32556_aib746_002.pdf?v=42487)). Agriculture Information Bulletin No. (AIB-746), 118 pp, December 1998 (p. 62).

APPENDIX B: Map of the NAWS Migrant Streams



## APPENDIX C: Index of Percentages and Means for Key Variables

The following tables list the names, descriptions, and categories of the key variables analyzed for this report, as well as the estimates (percentages or means) reported and the 95-percent confidence limits, standard errors, and relative standard errors (RSEs) of the estimates. Estimates with RSEs greater than 30 percent are identified throughout the tables. The RSE is calculated by dividing the standard error of the estimate by the estimate itself. Estimates with RSEs greater than 30 percent but no more than 50 percent are published but should be used with caution; these are identified with a superscript ‘a.’ Estimates based on fewer than 4 observations or with RSEs greater than 50 percent are considered statistically unreliable and are suppressed from the tables. Suppressed statistics are indicated with a ‘b.’

### Chapter 1

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
A07	Country of birth	US or Puerto Rico	621	32%	2.7%	27%	37%	8%
A07	Country of birth	Mexico	1,838	61%	2.7%	55%	66%	4%
A07	Country of birth	Central America	116	6%	1.1%	3%	8%	20%
A07	Country of birth	Other (South America, Caribbean, South East Asia, Pacific Islands, Asia)	22	2% <sup>a</sup>	0.7%	<1%	3%	38%
HISP	Hispanic	Hispanic	2,120	75%	2.8%	69%	81%	4%
B01	Hispanic category	Mexican American	223	9%	1.4%	7%	12%	15%
B01	Hispanic category	Mexican	1,731	57%	2.7%	52%	62%	5%
B01	Hispanic category	Chicano, Puerto Rican, or other Hispanic	47	2% <sup>a</sup>	1.0%	<1%	14%	41%
B01	Hispanic category	Not Hispanic or Latino	476	25%	2.8%	19%	31%	11%
B02	Race	White	799	32%	2.6%	27%	37%	8%
B02	Race	Black/African American	22	3%	0.4%	2%	3%	14%
B02	Race	American Indian/Alaska Native	12	b	b	b	b	63%
B02	Race	Other	1,752	64%	2.6%	59%	70%	4%
B02	Race	Don't know	13	b	b	b	b	52%
INDIGENOUS	Crop worker is indigenous	Crop worker is indigenous	271	9%	1.6%	6%	12%	18%



**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
USSTAY	Years in US	Average	1,974	21	0.7	20	22	3%
USSTAY	Years in US	Less than 1 year (newcomer)	31	5% <sup>a</sup>	1.5%	2%	8%	33%
USSTAY	Years in US	1-4 years	166	10%	1.4%	7%	12%	15%
USSTAY	Years in US	5-9 years	131	7%	1.1%	5%	9%	16%
USSTAY	Years in US	10-14 years	158	7%	0.8%	6%	9%	11%
USSTAY	Years in US	15-19 years	329	17%	1.3%	14%	19%	8%
USSTAY	Years in US	20-29 years	576	29%	1.5%	26%	32%	5%
USSTAY	Years in US	30-39 years	365	16%	1.0%	14%	18%	7%
USSTAY	Years in US	40+ years	218	10%	1.2%	8%	12%	12%
B18 (by A07)	State of birth (by country of birth)	Baja California (among country of birth is Mexico)	71	5%	1.1%	2%	7%	24%
B18 (by A07)	State of birth (by country of birth)	Guanajuato (among country of birth is Mexico)	265	17%	2.5%	12%	21%	15%
B18 (by A07)	State of birth (by country of birth)	Guerrero (among country of birth is Mexico)	180	9%	1.4%	7%	12%	15%
B18 (by A07)	State of birth (by country of birth)	Jalisco (among country of birth is Mexico)	136	6%	0.7%	5%	8%	11%
B18 (by A07)	State of birth (by country of birth)	Michoacán (among country of birth is Mexico)	371	20%	2.1%	16%	24%	11%
B18 (by A07)	State of birth (by country of birth)	Oaxaca (among country of birth is Mexico)	201	12%	2.2%	7%	16%	19%
CURRSTAT	Current work authorization	Citizen	779	38%	2.6%	33%	43%	7%
CURRSTAT	Current work authorization	Lawful permanent resident	502	18%	1.6%	15%	21%	9%
CURRSTAT	Current work authorization	Other work authorized	44	2%	0.4%	1%	2%	24%
CURRSTAT	Current work authorization	Unauthorized	1259	42%	2.6%	37%	47%	6%
MIGRANT	Migrant	Migrant	342	15%	1.6%	12%	18%	11%

Chapter 2

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
GENDER	Gender	Male	1,823	68%	2.2%	64%	72%	3%
GENDER	Gender	Female	775	32%	2.2%	28%	36%	7%
AGE	Age	Average	2,595	39	0.6	38	41	2%
AGE	Age	14-19	95	7%	1.2%	4%	9%	19%
AGE	Age	20-24	225	11%	1.5%	8%	14%	14%
AGE	Age	25-34	549	25%	1.4%	22%	27%	6%
AGE	Age	35-44	608	22%	1.7%	18%	25%	8%
AGE	Age	45-54	575	18%	1.3%	16%	21%	7%
AGE	Age	55-64	400	13%	1.1%	10%	15%	9%
AGE	Age	65 and over	143	5%	0.7%	4%	6%	14%
MARRIED, FWPARENT	Crop worker is married, Crop worker is a parent	Married, parent	1,091	42%	2.2%	38%	47%	5%
MARRIED, FWPARENT	Crop worker is married, Crop worker is a parent	Married, no children	539	17%	1.2%	15%	20%	7%
MARRIED, FWPARENT	Crop worker is married, Crop worker is a parent	Unmarried, parent	220	7%	0.7%	6%	8%	9%
MARRIED, FWPARENT	Crop worker is married, Crop worker is a parent	Unmarried, no children	746	33%	2.3%	29%	38%	7%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by crop worker is a parent)	Average (among crop worker parents)	1,022	2	0.1	2	2	3%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by crop worker is a parent)	1 child (among crop worker parents)	381	38%	3.0%	32%	44%	8%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by crop worker is a parent)	2 children (among crop worker parents)	339	31%	2.9%	25%	37%	9%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by crop worker is a parent)	3 children (among crop worker parents)	196	19%	1.7%	16%	23%	9%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by crop worker is a parent)	4 children (among crop worker parents)	75	9%	2.3%	5%	14%	25%
HKIDLT18 (by FWPARENT)	Number of children under age 18 in the household (by crop worker is a parent)	5 or more children (among crop worker parents)	31	3%	0.7%	1%	4%	25%
ACCOMP	Nuclear family lives in household	Unaccompanied	874	34%	2.2%	29%	38%	6%
ACCOMP	Nuclear family lives in household	Accompanied	1,724	66%	2.2%	62%	71%	3%

Chapter 3

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
PRIMLANG18	Adult primary language	English	504	27%	2.8%	21%	32%	11%
PRIMLANG18	Adult primary language	Spanish	1,703	57%	2.4%	52%	62%	4%
PRIMLANG18	Adult primary language	Indigenous	41	2% <sup>a</sup>	0.5%	1%	2%	32%
PRIMLANG18	Adult primary language	Other	8	<1% <sup>a</sup>	0.1%	<1%	<1%	44%
PRIMLANG18	Adult primary language	Bilingual Spanish/English	168	8%	1.0%	6%	10%	12%
PRIMLANG18	Adult primary language	More than one language	165	7%	1.3%	4%	9%	20%
HIGHGRDE	Highest grade completed	Average	2,578	9	0.2	8	9	2%
HIGHGRDE	Highest grade completed	No schooling	104	4%	0.7%	3%	5%	17%
HIGHGRDE	Highest grade completed	K-6 <sup>th</sup> grade	955	30%	1.8%	27%	34%	6%
HIGHGRDE	Highest grade completed	7 <sup>th</sup> -9 <sup>th</sup> grade	583	23%	1.7%	20%	26%	7%
HIGHGRDE	Highest grade completed	10 <sup>th</sup> -12 <sup>th</sup> grade	602	27%	1.8%	23%	31%	7%
HIGHGRDE	Highest grade completed	13 grades or more	334	16%	2.5%	11%	21%	16%
B07	Ability to speak English	Not at all	768	27%	2.2%	22%	31%	8%
B07	Ability to speak English	A little	748	23%	1.4%	20%	26%	6%
B07	Ability to speak English	Somewhat	341	13%	1.3%	10%	15%	10%
B07	Ability to speak English	Well	737	37%	2.7%	32%	43%	7%
B08	Ability to read English	Not at all	997	34%	2.3%	29%	38%	7%
B08	Ability to read English	A little	625	19%	1.3%	17%	22%	7%
B08	Ability to read English	Somewhat	243	10%	1.2%	8%	13%	12%
B08	Ability to read English	Well	728	37%	2.7%	31%	42%	7%
B22b	Ability to speak Spanish	Not at all	0					
B22b	Ability to speak Spanish	A little	6	b	b	b	b	59%
B22b	Ability to speak Spanish	Somewhat	37	2%	0.5%	1%	3%	22%
B22b	Ability to speak Spanish	Well	1,652	98%	0.5%	97%	99%	1%
B23b	Ability to read Spanish	Not at all	40	3%	0.6%	1%	4%	24%
B23b	Ability to read Spanish	A little	116	7%	0.7%	5%	8%	11%
B23b	Ability to read Spanish	Somewhat	209	10%	1.1%	8%	12%	11%
B23b	Ability to read Spanish	Well	1,331	80%	1.5%	77%	83%	2%

Chapter 4

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
D35b	Location of housing while at current farm job	Off-farm in property NOT owned or administered by your present employer	2,231	89%	1.4%	86%	91%	2%
D35b	Location of housing while at current farm job	Off-farm in property owned or administered by your present employer	41	2%	0.4%	1%	3%	17%
D35b	Location of housing while at current farm job	On farm or next to or adjacent to a farm owned by the grower you currently work for	284	8%	1.2%	6%	11%	15%
D35b	Location of housing while at current farm job	On farm or next to or adjacent to a farm NOT owned by the grower you currently work for	38	1%	0.3%	1%	2%	27%
D35b	Location of housing while at current farm job	Other	1	b	b	b	b	99%
D33a	Payment arrangement for living quarters	EMPLOYER-PROVIDED: I pay for housing provided by my employer	86	2%	0.4%	1%	3%	19%
D33a	Payment arrangement for living quarters	I pay for housing provided by govt, charity, other organization	78	3%	0.7%	2%	4%	24%
D33a	Payment arrangement for living quarters	EMPLOYER-PROVIDED: I receive free housing from my employer	232	8%	1.2%	5%	10%	16%
D33a	Payment arrangement for living quarters	I (or family member) own the house	734	30%	1.7%	27%	33%	6%
D33a	Payment arrangement for living quarters	I rent from non-employer/non-relative	1,454	56%	2.1%	52%	60%	4%
D33a	Payment arrangement for living quarters	Other	13	1% <sup>a</sup>	0.4%	0%	2%	34%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D50MTCOD	How much paid for housing per month (coded)	Under \$200	47	4%	0.7%	2%	5%	19%
D50MTCOD	How much paid for housing per month (coded)	\$200-299	97	7%	1.1%	5%	9%	16%
D50MTCOD	How much paid for housing per month (coded)	\$300-399	133	8%	1.1%	6%	10%	14%
D50MTCOD	How much paid for housing per month (coded)	\$400-499	135	10%	1.9%	6%	13%	20%
D50MTCOD	How much paid for housing per month (coded)	\$500-599	160	11%	2.2%	7%	16%	19%
D50MTCOD	How much paid for housing per month (coded)	\$600 or more	1,001	61%	2.5%	56%	66%	4%
D34b	Type of housing	Mobile home	508	17%	1.2%	15%	19%	7%
D34b	Type of housing	Single-family home	1,508	59%	1.7%	56%	63%	3%
D34b	Type of housing	Other (includes duplex or triplex, dormitory or barracks, motel or hotel, and 'other')	26	1% <sup>a</sup>	0.4%	<1%	2%	39%
D34b	Type of housing	Apartment	548	23%	1.7%	19%	26%	8%
D54a	Number of bedrooms in current living quarters	Average	2,598	3	0.04	3	3	2%
D54b	Number of bathrooms in current living quarters	Average	2,596	2	0.03	2	2	2%
D54c	Number of kitchens in current living quarters	Average	2,595	1	0.01	1	1	1%
D54f	Number of other rooms in current living quarters	Average	2,547	1	0.03	1	1	3%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
CROWDED1	Household is crowded, based on US Census Bureau definition of a crowded household as one in which the number of persons per room exceeds one	Crowded	579	22%	1.7%	19%	25%	8%
D37a	Distance of current farm job from current residence	I'm located at the job	304	9%	1.3%	7%	12%	14%
D37a	Distance of current farm job from current residence	Within 9 miles	882	32%	2.1%	28%	36%	7%
D37a	Distance of current farm job from current residence	10-24 miles	988	39%	2.3%	35%	44%	6%
D37a	Distance of current farm job from current residence	25-49 miles	363	16%	1.6%	13%	19%	10%
D37a	Distance of current farm job from current residence	50+ miles	61	4%	0.9%	2%	5%	25%
D37	Mode of transportation to work	Drive car	1,853	71%	2.0%	67%	75%	3%
D37	Mode of transportation to work	Walk	250	8%	1.2%	5%	10%	16%
D37	Mode of transportation to work	Ride with others	219	10%	1.4%	7%	13%	14%
D37	Mode of transportation to work	Public transportation, other	9	<1% <sup>a</sup>	0.1%	<1%	<1%	41%
D37	Mode of transportation to work	Labor bus, truck, van	54	2% <sup>a</sup>	0.8%	<1%	4%	43%
D37	Mode of transportation to work	Raitero	197	8%	1.0%	6%	10%	12%
D38a	Transport is mandatory	Yes						

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D38	Pay a fee for rides to work	No	122	26%	4.2%	18%	34%	16%
D38	Pay a fee for rides to work	Yes, a fee	139	31%	3.3%	24%	38%	11%
D38	Pay a fee for rides to work	Yes, just for gas	218	43%	3.7%	35%	50%	9%



Chapter 5

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
FLC	Employer is a farm labor contractor	Employer: Grower, nursery, packing house	2,157	78%	3.2%	72%	85%	4%
FLC	Employer is a farm labor contractor	Employer: Farm labor contractor	441	22%	3.2%	15%	28%	15%
D30	How current job was obtained	Applied for the job on my own	812	30%	1.8%	26%	33%	6%
D30	How current job was obtained	Recruited by a grower/his foreman	156	6%	0.8%	4%	7%	15%
D30	How current job was obtained	Recruited by farm labor contractor/his foreman	52	1%	0.3%	1%	2%	22%
D30	How current job was obtained	Referred by the employment service, welfare office, labor union, other means	51	3% <sup>a</sup>	1.1%	0%	5%	43%
D30	How current job was obtained	Referred by relative/friend/workmate	1,527	61%	2.1%	56%	65%	4%
CROP	Primary crop at time of interview	Field crops	212	10%	1.3%	8%	13%	13%
CROP	Primary crop at time of interview	Fruits and nuts	1,119	40%	3.3%	33%	47%	8%
CROP	Primary crop at time of interview	Horticulture	618	23%	2.6%	18%	28%	11%
CROP	Primary crop at time of interview	Vegetables	580	24%	3.0%	18%	30%	12%
CROP	Primary crop at time of interview	Miscellaneous or multiple crops	52	1.4% <sup>a</sup>	0.4%	0%	2%	32%
TASK	Primary task at time of interview	Pre-harvest	742	27%	2.1%	22%	31%	8%
TASK	Primary task at time of interview	Harvest	577	26%	2.8%	20%	31%	11%
TASK	Primary task at time of interview	Post-harvest	371	16%	1.6%	13%	20%	10%
TASK	Primary task at time of interview	Technical production	862	31%	2.7%	26%	37%	9%
D04	Number of hours worked the previous week at current farm job	Average	2,559	43	0.6	41	44	1%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D11	Basis of pay	By the hour	2,247	85%	2.1%	81%	90%	2%
D11	Basis of pay	By the piece	173	7%	1.8%	4%	11%	25%
D11	Basis of pay	Combination hourly wage and piece rate	54	b	b	b	b	52%
D11	Basis of pay	Salary or other	34	2% <sup>a</sup>	0.5%	0%	3%	35%
WAGET1	Hourly wage for primary task	Average	2,382	\$14.53	0.2	\$14.21	\$14.84	1%
NS01	Employer provides clean drinking water and disposable cups every day	No water, no cups	66	2%	0.4%	1%	3%	22%
NS01	Employer provides clean drinking water and disposable cups every day	Yes, water only	93	5%	1.2%	3%	8%	23%
NS01	Employer provides clean drinking water and disposable cups every day	Yes, water and disposable cups	2,436	93%	1.3%	90%	95%	1%
NS04	Employer provides a toilet every day	Yes	2,579	99%	0.2%	99%	100%	0%
NS09	Employer provides water to wash hands every day	Yes	2,590	99%	0.3%	99%	100%	0%
NT02a	Current employer provided training in safe use of pesticides in last 12 months	Yes	1,756	64%	2.9%	59%	70%	4%
D26	Covered by Unemployment Insurance	No	1,420	48%	2.5%	43%	53%	5%
D26	Covered by Unemployment Insurance	Yes	1,066	45%	2.4%	40%	50%	5%
D26	Covered by Unemployment Insurance	Don't know	112	7%	0.9%	5%	8%	13%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
D23	Receive workers' compensation if injured at work or get sick as a result of work	No	249	9%	1.3%	6%	11%	15%
D23	Receive workers' compensation if injured at work or get sick as a result of work	Yes	1,938	72%	2.0%	68%	76%	3%
D23	Receive workers' compensation if injured at work or get sick as a result of work	Don't know	411	19%	1.7%	16%	23%	9%
D24	Employer provides health insurance or pays for health care for injuries or illness while off the job	No	1,472	57%	2.4%	52%	61%	4%
D24	Employer provides health insurance or pays for health care for injuries or illness while off the job	Yes	772	28%	2.3%	23%	32%	8%
D24	Employer provides health insurance or pays for health care for injuries or illness while off the job	Don't know	354	16%	1.3%	13%	18%	9%

Chapter 6

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
NUMFEMPL	Number of farm employers in previous 12 months	Average	2,598	1	0.03	1	1	2%
NUMFEMPL	Number of farm employers in previous 12 months	1 employer	2,110	84%	1.7%	80%	87%	2%
NUMFEMPL	Number of farm employers in previous 12 months	2 employers	350	12%	1.3%	9%	15%	11%
NUMFEMPL	Number of farm employers in previous 12 months	3 or more employers	138	4%	0.7%	3%	6%	17%
D27	Number of years with current employer	Average	2,590	8	0.4	7	9	5%
D27	Number of years with current employer	1 year or less	381	23%	2.6%	18%	28%	11%
D27	Number of years with current employer	2-4 years	800	29%	1.6%	26%	32%	6%
D27	Number of years with current employer	5-10 years	659	25%	1.9%	21%	29%	7%
D27	Number of years with current employer	11-20 years	427	14%	1.4%	11%	17%	10%
D27	Number of years with current employer	21 or more years	323	9%	0.9%	7%	11%	10%
FWWEEKS	Number of weeks of farm work the previous year	Average	2,598	37	0.9	35	38	2%
C10	Number of work days per week	Average	2,594	5	0.1	5	5	1%
FWRDAYS	Number of farm work days the previous year	Average	2,597	205	5.3	194	215	3%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	Average (among one or more years of farm work)	2,447	18	0.5	17	19	3%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	1 year (among one or more years of farm work)	149	9%	0.9%	7%	10%	10%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	2-4 years (among one or more years of farm work)	261	10%	1.1%	8%	12%	11%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	5-10 years (among one or more years of farm work)	347	17%	1.6%	14%	21%	9%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	11-20 years (among one or more years of farm work)	639	25%	1.6%	22%	28%	6%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	21-30 years (among one or more years of farm work)	504	19%	1.6%	16%	22%	8%
NUMYRSFW (by NEWFWKR)	Number of years since first did farm work (by new crop worker: less than 1 year, 1 year, more than 1 year)	31 or more years (among one or more years of farm work)	547	20%	1.3%	17%	22%	7%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
B12	Number of years of non-crop work in the US	None	1,332	47%	2.5%	42%	52%	5%
B12	Number of years of non-crop work in the US	1 year	307	12%	1.5%	10%	15%	12%
B12	Number of years of non-crop work in the US	2-10 years	633	29%	2.1%	24%	33%	7%
B12	Number of years of non-crop work in the US	11 or more years	303	12%	1.2%	10%	15%	10%
B12	Number of years of non-crop work in the US	Average, among those with at least 1 year on non-crop work in the US	1,243	8	0.4	7	8	5%
B13	Last time parents did hired farm work in the US	Never	1,463	56%	1.8%	52%	59%	3%
B13	Last time parents did hired farm work in the US	Now/within the last year	281	13%	1.1%	11%	15%	9%
B13	Last time parents did hired farm work in the US	1-5 years ago	69	3%	0.4%	2%	4%	17%
B13	Last time parents did hired farm work in the US	6-10 years ago	65	4%	0.3%	3%	4%	8%
B13	Last time parents did hired farm work in the US	11 or more years ago	705	25%	1.5%	22%	28%	6%
B13	Last time parents did hired farm work in the US	Don't know	9	0.2% <sup>a</sup>	0.1%	0%	0%	36%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
E02	How long expect to continue doing farm work	Less than one year	61	3%	0.6%	1%	4%	23%
E02	How long expect to continue doing farm work	1-3 years	293	13%	1.2%	11%	16%	9%
E02	How long expect to continue doing farm work	4-5 years	132	6%	0.9%	4%	7%	16%
E02	How long expect to continue doing farm work	Over 5 years	133	4%	0.5%	3%	5%	12%
E02	How long expect to continue doing farm work	Over 5 years/as long as I am able	1,854	72%	1.9%	69%	76%	3%
E02	How long expect to continue doing farm work	Other	5	b	b	b	b	69%

Chapter 7

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
NWEEKS	Number of weeks living in the US but not working the previous year	Average	2,598	9	0.7	8	11	8%
ABWEEKS	Number of weeks abroad the previous year	Average	2,598	3	0.4	2	3	16%
NFWEKES	Number of weeks of non-crop work the previous year	NFWEKES>0	384	17%	2%	13%	21%	12%
NFWEKES	Number of weeks of non-crop work the previous year	Average, among those with NFWEKES>0	384	27	2.5	22	32	9%
NUMNFJOBS	Number of non-crop jobs the previous year	Average, among those with NFWEKES>0	384	1	0.1	1	2	5%
HasNFLeave (by NFWEKES)	Left at least one non-crop employer in the previous year (by number of weeks of non-crop work the previous year)	Left at least one non-crop employer in the previous year (among NFWEKES>0)	218	54%	5.4%	43%	64%	10%
NFleaves (by HasNFLeave)	Type of leave from non-crop work (by left at least one non-crop employer in the previous year)	All leaves from non-crop work were involuntary (among left at least one non-crop employer in the previous year)	41	19%	3.4%	12%	26%	18%
NFleaves (by HasNFLeave)	Type of leave from non-crop work (by left at least one non-crop employer in the previous year)	All leaves from non-crop work were voluntary (among left at least one non-crop employer in the previous year)	168	79%	3.3%	72%	85%	4%
NFleaves (by HasNFLeave)	Type of leave from non-crop work (by left at least one non-crop employer in the previous year)	Both voluntary and involuntary leaves from non-crop work (among left at least one non-crop employer in the previous year)	9	2%	0.7%	1%	4%	29%
HadNW	Had at least one period of not working in previous year	Yes	1,759	69%	2.4%	64%	74%	4%



**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
WeeksNotWorking	Number of weeks not working in previous year	Average, among those who had at least one period of not working in previous year	1,759	17	0.9	16	19	5%
RecvdUI	Received unemployment during at least one period of not working	Yes (among those who had at least one period of not working in previous year)	293	22%	2.4%	17%	26%	11%

Chapter 8

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
G01	Total personal income the previous year	Average	2,318	11 (\$20,000 to \$24,999)	0.2	11 (\$20,000 to \$24,999)	11 (\$20,000 to \$24,999)	1%
G01	Total personal income the previous year	Median	2,318	11 (\$20,000 to \$24,999)	0.2	11 (\$20,000 to \$24,999)	11 (\$20,000 to \$24,999)	1%
G01	Total personal income the previous year	Did not work at all the previous year	115	9%	1.3%	7%	11%	14%
G01	Total personal income the previous year	Under \$500	1	b	b	b	b	82%
G01	Total personal income the previous year	\$500-\$999	9	1% <sup>a</sup>	0.4%	0%	2%	48%
G01	Total personal income the previous year	\$1,000-\$2,499	14	1% <sup>a</sup>	0.2%	0%	1%	36%
G01	Total personal income the previous year	\$2,500-\$4,999	36	4%	1.0%	2%	6%	28%
G01	Total personal income the previous year	\$5,000-\$7,499	33	2%	0.3%	1%	2%	21%
G01	Total personal income the previous year	\$7,500-\$9,999	48	2%	0.4%	1%	3%	19%
G01	Total personal income the previous year	\$10,000-\$12,499	60	3%	0.7%	2%	4%	23%
G01	Total personal income the previous year	\$12,500-\$14,999	87	3%	0.3%	2%	3%	13%
G01	Total personal income the previous year	\$15,000-\$17,499	123	6%	1.5%	4%	9%	23%
G01	Total personal income the previous year	\$17,500-\$19,999	123	4%	0.6%	3%	5%	13%
G01	Total personal income the previous year	\$20,000-\$24,999	400	15%	1.1%	12%	17%	8%
G01	Total personal income the previous year	\$25,000-\$29,999	443	15%	1.3%	12%	17%	9%
G01	Total personal income the previous year	\$30,000-\$34,999	338	10%	0.9%	8%	12%	10%
G01	Total personal income the previous year	\$35,000-\$39,999	262	7%	0.8%	6%	9%	11%
G01	Total personal income the previous year	Over \$40,000	341	12%	1.5%	9%	15%	13%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
G01	Total personal income the previous year	Don't remember (don't know)	147	6%	0.7%	5%	8%	10%
G01	Total personal income the previous year	Refused to answer	18	1%	0.3%	1%	2%	26%
G03	Family's total income the previous year	Average	2,335	13 (\$30,000 to \$34,999)	0.4	13 (\$30,000 to \$34,999)	14 (\$35,000 to \$39,999)	3%
G03	Family's total income the previous year	Median	2,335	13 (\$30,000 to \$34,999)	0.2	13 (\$30,000 to \$34,999)	14 (\$35,000 to \$39,999)	3%
G03	Family's total income the previous year	Did not work at all the previous year	78	6%	1.2%	4%	9%	18%
G03	Family's total income the previous year	Under \$500	1	b	b	b	b	82%
G03	Family's total income the previous year	\$1,000-\$2,499	14	1% <sup>a</sup>	0.2%	0%	1%	34%
G03	Family's total income the previous year	\$2,500-\$4,999	16	1%	0.3%	0%	2%	29%
G03	Family's total income the previous year	\$5,000-\$7,499	15	1%	0.2%	0%	1%	26%
G03	Family's total income the previous year	\$7,500-\$9,999	29	1%	0.2%	1%	1%	24%
G03	Family's total income the previous year	\$10,000-\$12,499	29	2% <sup>a</sup>	0.6%	0%	3%	36%
G03	Family's total income the previous year	\$12,500-\$14,999	49	2%	0.3%	1%	2%	17%
G03	Family's total income the previous year	\$15,000-\$17,499	78	6%	1.4%	3%	9%	25%
G03	Family's total income the previous year	\$17,500-\$19,999	57	2%	0.4%	1%	3%	18%
G03	Family's total income the previous year	\$20,000-\$24,999	239	9%	1.1%	7%	11%	12%
G03	Family's total income the previous year	\$25,000-\$29,999	287	9%	0.8%	7%	10%	9%
G03	Family's total income the previous year	\$30,000-\$34,999	260	9%	0.8%	7%	10%	9%
G03	Family's total income the previous year	\$35,000-\$39,999	270	8%	0.8%	7%	10%	9%
G03	Family's total income the previous year	Over \$40,000	978	35%	2.0%	31%	39%	6%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
G03	Family's total income the previous year	Don't remember (don't know)	106	4%	0.7%	3%	5%	18%
G03	Family's total income the previous year	Refused to answer	21	1%	0.3%	1%	2%	26%
FAMPOV	Family income below the poverty level	Below poverty level	370	21%	1.9%	17%	25%	9%
ASSETUS	Assets in US	Any US asset	2,111	80%	1.6%	76%	83%	2%
G06a	Type of US asset	Plot of land	65	3% <sup>a</sup>	1.0%	1%	5%	31%
G06d	Type of US asset	Car or truck	2,106	80%	1.6%	77%	83%	2%
G06h	Type of US asset	A type of housing, such as a house, mobile home, condominium, or apartment	568	24%	1.6%	21%	27%	7%
G04c	Type of contribution-based program household member utilized in the last 2 years	Disability insurance	34	3%	0.4%	3%	4%	11%
G04d	Type of contribution-based program household member utilized in the last 2 years	Unemployment Insurance	253	12%	1.6%	9%	15%	13%
G04e	Type of contribution-based program household member utilized in the last 2 years	Social Security	52	2%	0.6%	1%	3%	30%
G04b	Type of need-based program household member utilized in the last 2 years	Supplemental Nutrition Assistance Program	234	12%	1.6%	9%	15%	13%
G04h	Type of need-based program household member utilized in the last 2 years	Received low income housing	30	2% <sup>a</sup>	1.1%	0%	4%	47%
G04i	Type of need-based program household member utilized in the last 2 years	Public health clinics	797	26%	2.2%	22%	31%	9%
G04j	Type of need-based program household member utilized in the last 2 years	Medicaid	1,015	37%	2.0%	33%	41%	5%
G04k	Type of need-based program household member utilized in the last 2 years	WIC	166	7%	1.0%	5%	9%	14%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
G04l	Type of need-based program household member utilized in the last 2 years	Received disaster relief	1	b	b	b	b	94%
G04m	Type of need-based program household member utilized in the last 2 years	Received legal services	0					
G04n	Type of need-based program household member utilized in the last 2 years	Received other	617	26%	1.8%	22%	29%	7%
G04r	Type of need-based program household member utilized in the last 2 years	Welfare (general assistance) or Temporary Assistance for Needy Families (TANF)	23	1% <sup>a</sup>	0.4%	0%	2%	34%

**Chapter 9**

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
A21a	Crop worker has health insurance	Yes	1,186	52%	2.4%	47%	56%	5%
A23a1	Who pays for crop worker's health insurance	Crop worker	155	15%	2.6%	10%	20%	17%
A23a2	Who pays for crop worker's health insurance	Crop worker's spouse	18	1% <sup>a</sup>	0.3%	<1%	2%	31%
A23a3	Who pays for crop worker's health insurance	Crop worker's employer	287	18%	2.1%	14%	22%	11%
A23a4	Who pays for crop worker's health insurance	Crop worker's spouse's employer	92	10%	2.1%	6%	14%	21%
A23a5	Who pays for crop worker's health insurance	Government	521	43%	3.5%	36%	50%	8%
A23a6	Who pays for crop worker's health insurance	Other	47	5%	1.2%	2%	7%	25%
A23a7	Who pays for crop worker's health insurance	Crop worker's parents'/family's plan	104	11%	3.1%	5%	17%	28%
A21b	Spouse has health insurance	Yes	1,641	60%	2.3%	56%	65%	4%
A23b1	Who pays for spouse's insurance	Crop worker	65	12%	3.6%	5%	19%	29%
A23b2	Who pays for spouse's insurance	Crop worker's spouse	42	4%	0.7%	3%	6%	16%
A23b3	Who pays for spouse's insurance	Crop worker's employer	76	8%	1.7%	5%	12%	21%
A23b4	Who pays for spouse's insurance	Crop worker's spouse's employer	193	24%	3.3%	17%	30%	14%
A23b5	Who pays for spouse's insurance	Government	402	48%	3.6%	41%	56%	7%
A23b6	Who pays for spouse's insurance	Other	29	5% <sup>a</sup>	1.7%	2%	8%	34%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
A21c2	Children have health insurance	Yes, all have it (among those who have minor children in the U.S. or Puerto Rico)	953	93%	1.0%	91%	95%	1%
A21c2	Children have health insurance	Yes, only some have it (among those who have minor children in the U.S. or Puerto Rico)	36	2%	0.5%	1%	3%	20%
A23c1	Who pays for children's insurance	Crop worker	31	7% <sup>a</sup>	3.2%	1%	14%	43%
A23c2	Who pays for children's insurance	Crop worker's spouse	4	b	b	b	b	50%
A23c3	Who pays for children's insurance	Crop worker's employer	30	3% <sup>a</sup>	0.9%	<1%	5%	34%
A23c4	Who pays for children's insurance	Crop worker's spouse's employer	49	5%	1.3%	3%	8%	25%
A23c5	Who pays for children's insurance	Government	871	83%	3.3%	77%	90%	4%
A23c6	Who pays for children's insurance	Other	12	b	b	b	b	62%
HA01a	Used health care for illness	Yes	515	19%	1.6%	16%	22%	9%
HA01b	Used health care for injury	Yes	106	4%	1%	3%	5%	16%
HA01c	Used health care for routine or preventive care	Yes	1,390	55%	2.0%	51%	59%	4%
HA01d	Used health care for dental treatment	Yes	270	10%	1.2%	7%	12%	12%
HA01e	Used health care for routine dental cleaning/check-up	Yes	729	30%	2.2%	25%	34%	7%
HA02a1	Where – Community/migrant health center – Illness	Yes	178	27%	3.0%	21%	33%	11%
HA02a2	Where – Private clinic or doctor – Illness	Yes	241	52%	4.0%	44%	60%	8%
HA02a3	Where – Hospital - Illness	Yes	73	15%	2.8%	10%	21%	19%
HA02a4	Where – Emergency room - Illness	Yes	9	2% <sup>a</sup>	1.1%	0%	4%	46%
HA02a5	Where – Dentist - Illness	Yes	8	b	b	b	b	84%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
HA02b1	Where – Community/migrant health center – Injury	Yes	25	15%	4.3%	6%	24%	29%
HA02b2	Where – Private clinic or doctor – Injury	Yes	37	36%	4.8%	26%	46%	13%
HA02b3	Where – Hospital - Injury	Yes	29	38%	7%	23%	52%	19%
HA02b4	Where – Emergency room - Injury	Yes	11	9%	2%	4%	13%	24%
HA02b5	Where – Dentist - Injury	Yes	0					
HA02c1	Where – Community/migrant health center – Routine or preventive care	Yes	646	38%	2.9%	33%	44%	8%
HA02c2	Where – Private clinic or doctor – Routine or preventive care	Yes	670	55%	3.1%	49%	61%	6%
HA02c3	Where – Hospital - Routine or preventive care	Yes	52	4%	1.0%	2%	6%	23%
HA02c4	Where – Emergency room - Routine or preventive care	Yes	1	b	b	b	b	94%
HA02c5	Where – Dentist - Routine or preventive care	Yes	2	b	b	b	b	81%
HA02d1	Where – Community/migrant health center – Dental treatment	Yes	19	8%	1.8%	4%	11%	24%
HA02d2	Where – Private clinic or doctor – Dental treatment	Yes	7	1% <sup>a</sup>	0.5%	0%	2%	47%
HA02d3	Where – Hospital - Dental treatment	Yes	0					
HA02d4	Where – Emergency room - Dental treatment	Yes	0					
HA02d5	Where – Dentist - Dental treatment	Yes	241	90%	2.1%	86%	94%	2%



**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
HA02e1	Where – Community/migrant health center – Routine dental cleaning/check-up	Yes	45	7%	1.8%	4%	11%	24%
HA02e2	Where – Private clinic or doctor – Routine dental cleaning/check-up	Yes	20	3% <sup>a</sup>	1%	1%	5%	34%
HA02e3	Where – Hospital - Routine dental cleaning/check-up	Yes	1	b	b	b	b	83%
HA02e4	Where – Emergency room - Routine dental cleaning/check-up	Yes	0					
HA02e5	Where – Dentist - Routine dental cleaning/check-up	Yes	477	89%	2.2%	84%	93%	2%

Chapter 10

Variable	Variable Description	Variable Level(s)	Number of Observations	Estimate (Percentage or Mean)	Standard Error	95% Lower Confidence Limit	95% Upper Confidence Limit	Relative Standard Error
DA01a	Access to digital information sources - Worker	Yes	2,548	99%	0.2%	98%	99%	0%
DA01b	Access to digital information sources - Spouse	Yes	1,499	98%	0.4%	97%	99%	0%
DA01c	Access to digital information sources - Children	Yes	1,063	89%	1.5%	86%	92%	2%
DA02a	What devices? Computer – Worker	Yes	920	40%	2.6%	35%	45%	6%
DA03a	What devices? Cellular phone with Internet – Worker	Yes	2,428	96%	0.6%	95%	97%	1%
DA04a	What devices? Cellular phone with text – Worker	Yes	2,364	92%	1.4%	89%	95%	2%
DA05a	What devices? Tablet – Worker	Yes	443	18%	1.3%	16%	21%	7%
DA02b	What devices? Computer – Spouse	Yes	570	44%	2.8%	38%	49%	6%
DA03b	What devices? Cellular phone with Internet – Spouse	Yes	1,428	96%	0.7%	95%	97%	1%
DA04b	What devices? Cellular phone with text – Spouse	Yes	1,398	93%	1.3%	90%	96%	1%
DA05b	What devices? Tablet – Spouse	Yes	264	19%	1.9%	15%	22%	10%
DA02c	What devices? Computer – Children	Yes	853	86%	1.9%	83%	90%	2%
DA03c	What devices? Cellular phone with Internet – Children	Yes	796	77%	2.6%	72%	82%	3%
DA04c	What devices? Cellular phone with text – Children	Yes	745	73%	2.7%	68%	78%	4%
DA05c	What devices? Tablet – Children	Yes	465	44%	2.6%	39%	49%	6%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
DA07a	Used digital device to seek information – Health insurance	Yes	507	21%	2.1%	17%	25%	10%
DA07b	Used digital device to seek information – Employment	Yes	352	17%	2.0%	13%	21%	12%
DA07c	Used digital device to seek information – Training/education	Yes	263	15%	1.8%	11%	19%	12%
DA07d	Used digital device to seek information – Child care	Yes	101	3%	0.6%	2%	5%	19%
DA07e	Used digital device to seek information – Housing	Yes	238	12%	1.6%	8%	15%	14%
DA07f	Used digital device to seek information – Benefits	Yes	370	16%	1.8%	13%	20%	11%
DA07g	Used digital device to seek information – Health information or problem	Yes	458	19%	1.5%	16%	22%	8%
DA07h	Used digital device to seek information – News	Yes	1,416	57%	2.5%	52%	62%	4%
DA07i	Used digital device to seek information – Communication/calls	Yes	2,492	97%	0.5%	96%	98%	<1%
DA07j	Used digital device to seek information – Entertainment or social media	Yes	1,807	74%	1.6%	71%	77%	2%
DA07k	Used digital device to seek information – Telephone or virtual consult with a doctor/nurse	Yes	351	12%	1.3%	10%	15%	10%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
DA09a1	Who helped worker – Health insurance – Self	Yes	479	95%	1.6%	92%	98%	2%
DA09b1	Who helped worker – Employment – Self	Yes	335	96%	1.2%	94%	99%	1%
DA09c1	Who helped worker – Training/education – Self	Yes	196	78%	6.0%	66%	90%	8%
DA09d1	Who helped worker – Child care – Self	Yes	80	75%	6.5%	61%	88%	9%
DA09e1	Who helped worker – Housing – Self	Yes	217	93%	1.9%	90%	97%	2%
DA09f1	Who helped worker – Benefits – Self	Yes	346	88%	6.2%	76%	100%	7%
DA09g1	Who helped worker – Health information or problem – Self	Yes	419	93%	1.7%	89%	96%	2%
DA09h1	Who helped worker – News – Self	Yes	1,393	98%	0.7%	96%	99%	1%
DA09i1	Who helped worker – Communication/calls – Self	Yes	2,469	99%	0.4%	99%	100%	<1%
DA09j1	Who helped worker – Entertainment or social media – Self	Yes	1,774	98%	0.5%	97%	99%	1%
DA09k1	Who helped worker – Telephone or virtual consult with a doctor/nurse – Self	Yes	318	93%	1.4%	90%	96%	2%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
DA09a2	Who helped worker – Health insurance – Spouse	Yes	127	27%	5.0%	17%	37%	19%
DA09b2	Who helped worker – Employment – Spouse	Yes	42	9% <sup>a</sup>	2.8%	4%	15%	31%
DA09c2	Who helped worker – Training/education – Spouse	Yes	12	4% <sup>a</sup>	1.3%	1%	6%	33%
DA09d2	Who helped worker – Child care – Spouse	Yes	41	37%	5.8%	25%	49%	16%
DA09e2	Who helped worker – Housing – Spouse	Yes	32	11%	2.9%	6%	17%	26%
DA09f2	Who helped worker – Benefits – Spouse	Yes	76	19% <sup>a</sup>	6.1%	7%	32%	32%
DA09g2	Who helped worker – Health information or problem – Spouse	Yes	75	18%	3.0%	12%	24%	16%
DA09h2	Who helped worker – News – Spouse	Yes	107	9%	2.1%	5%	13%	24%
DA09i2	Who helped worker – Communication/calls – Spouse	Yes	180	8%	1.5%	5%	11%	19%
DA09j2	Who helped worker – Entertainment or social media – Spouse	Yes	114	7%	1.4%	4%	10%	19%
DA09k2	Who helped worker – Telephone or virtual consult with a doctor/nurse – Spouse	Yes	75	21%	3.4%	15%	28%	16%

**Appendix C: Index of Percentages and Means for Key Variables**

<b>Variable</b>	<b>Variable Description</b>	<b>Variable Level(s)</b>	<b>Number of Observations</b>	<b>Estimate (Percentage or Mean)</b>	<b>Standard Error</b>	<b>95% Lower Confidence Limit</b>	<b>95% Upper Confidence Limit</b>	<b>Relative Standard Error</b>
DA09a3	Who helped worker – Health insurance – Children	Yes	37	5%	1%	3%	6%	18%
DA09b3	Who helped worker – Employment – Children	Yes	13	2% <sup>a</sup>	1%	1%	3%	34%
DA09c3	Who helped worker – Training/education – Children	Yes	68	22%	6%	10%	34%	28%
DA09d3	Who helped worker – Child care – Children	Yes	4	b	b	b	b	65%
DA09e3	Who helped worker – Housing – Children	Yes	10	2% <sup>a</sup>	1%	0%	4%	43%
DA09f3	Who helped worker – Benefits – Children	Yes	30	5%	1%	3%	8%	25%
DA09g3	Who helped worker – Health information or problem – Children	Yes	26	4%	1%	2%	6%	24%
DA09h3	Who helped worker – News – Children	Yes	29	2% <sup>a</sup>	1%	1%	3%	33%
DA09i3	Who helped worker – Communication/calls – Children	Yes	83	4%	1%	2%	6%	29%
DA09j3	Who helped worker – Entertainment or social media – Children	Yes	80	5%	1%	2%	7%	29%
DA09k3	Who helped worker – Telephone or virtual consult with a doctor/nurse – Children	Yes	24	6%	1%	3%	8%	25%

## APPENDIX D: Data on National Demographic and Employment Characteristics since 1989

Table 1: Crop worker Demographics, National Estimates, Nine Time Periods\*

Characteristic	Fiscal Years 1989-1991	Fiscal Years 1998-2000	Fiscal Years 2007-2009	Fiscal Years 2010-2012	Fiscal Years 2013-2014	Fiscal Years 2015-2016	Fiscal Years 2017-2018	Fiscal Years 2019-2020	Fiscal Year 2021-2022
U.S.-born	40%	17%	29%	26%	27%	25%	32%	30%	32%
Foreign-born	60%	83%	71%	74%	73%	75%	68%	70%	68%
Authorized	86%	46%	52%	50%	53%	51%	64%	56%	58%
Unauthorized	14%	54%	48%	50%	47%	49%	36%	44%	42%
Place of birth: United States/Puerto Rico	40%	17%	29%	26%	27%	25%	32%	30%	32%
Place of birth: Mexico	54%	79%	68%	67%	68%	69%	64%	63%	61%
Place of birth: Central America	2%	2%	3%	6%	4%	6%	3%	5%	6%
Place of birth: Other	3%	1%	1%	1%	1%	1%	1% <sup>(a)</sup>	<sup>(b)</sup>	2% <sup>(a)</sup>
Current work authorization: U.S. citizen (by birth or naturalization)	43%	20%	33%	29%	31%	29%	38%	36%	38%
Current work authorization: Lawful permanent resident (green card)	13%	25%	18%	19%	21%	21%	24%	19%	18%
Current work authorization: Other work authorized	29%	1%	1%	1%	2%	1%	2%	1%	2%
Current work authorization: Unauthorized	14%	54%	48%	50%	47%	49%	36%	44%	42%
Migrant type: Settled (did not migrate) <sup>1</sup>	59%	45%	74%	79%	84%	81%	87%	85%	84%
Migrant type: Shuttle migrant <sup>2</sup>	23%	22%	12%	14%	10%	10%	8%	11%	8%
Migrant type: Follow-the-crop migrant <sup>3</sup>	14%	10%	5%	6%	4%	6%	4%	4%	3%
Migrant type: Foreign-born newcomer <sup>4</sup>	4%	22%	9%	2%	2%	4%	2%	1%	4%
Male	73%	80%	78%	73%	72%	68%	69%	66%	68%
Average age	33	31	36	37	38	38	41	41	39

**Appendix D: Data on National Demographic and Employment Characteristics**

<b>Characteristic</b>	<b>Fiscal Years 1989-1991</b>	<b>Fiscal Years 1998-2000</b>	<b>Fiscal Years 2007-2009</b>	<b>Fiscal Years 2010-2012</b>	<b>Fiscal Years 2013-2014</b>	<b>Fiscal Years 2015-2016</b>	<b>Fiscal Years 2017-2018</b>	<b>Fiscal Years 2019-2020</b>	<b>Fiscal Years 2021-2022</b>
Age: 14-17	4%	5%	3%	2%	1%	3%	3%	2% <sup>(a)</sup>	3%
Age: 18-19	8%	9%	6%	4%	4%	4%	3%	3%	3%
Age: 20-24	19%	21%	16%	14%	12%	11%	8%	9%	11%
Age: 25-34	32%	31%	26%	27%	27%	26%	21%	23%	25%
Age: 35-44	19%	19%	21%	25%	24%	23%	23%	26%	22%
Age: 45-54	10%	9%	18%	17%	18%	19%	24%	18%	18%
Age: 55-64	6%	4%	8%	9%	11%	11%	14%	14%	13%
Age: 65 or older	1%	1%	2%	2%	3%	4%	4%	5%	5%
Age first worked in U.S. agriculture: Before age 14	no data	8%	8%	7%	6%	6%	5%	8%	6%
Age first worked in U.S. agriculture: At age 14-18	no data	33%	32%	32%	34%	29%	32%	32%	30%
Age first worked in U.S. agriculture: At age 19-21	no data	18%	19%	17%	17%	18%	17%	19%	18%
Age first worked in U.S. agriculture: At age 22-24	no data	12%	11%	10%	12%	12%	11%	11%	12%
Age first worked in U.S. agriculture: At age 25 or older	no data	28%	31%	33%	31%	35%	35%	31%	33%
Average highest grade completed in school	8th	7th	8th	8th	8th	8th	9th	9th	9th
Highest grade completed: No schooling	5%	4%	5%	4%	3%	4%	2%	4%	4%
Highest grade completed: 1st to 3rd	13%	14%	11%	12%	10%	11%	9%	10%	10%
Highest grade completed: 4th to 7th	30%	41%	32%	30%	28%	28%	27%	27%	22%
Highest grade completed: 8th to 11th	26%	27%	24%	23%	26%	26%	24%	27%	29%
Highest grade completed: 12th (high school graduate)	20%	10%	19%	19%	21%	21%	24%	19%	19%
Highest grade completed: 13 or more (college)	6%	4%	9%	12%	11%	10%	12%	14%	16%



**Appendix D: Data on National Demographic and Employment Characteristics**

<b>Characteristic</b>	<b>Fiscal Years 1989-1991</b>	<b>Fiscal Years 1998-2000</b>	<b>Fiscal Years 2007-2009</b>	<b>Fiscal Years 2010-2012</b>	<b>Fiscal Years 2013-2014</b>	<b>Fiscal Years 2015-2016</b>	<b>Fiscal Years 2017-2018</b>	<b>Fiscal Years 2019-2020</b>	<b>Fiscal Years 2021-2022</b>
English speaking ability (self-reported): Not at all	35%	48%	35%	30%	27%	30%	23%	29%	27%
English speaking ability (self-reported): A little	32%	27%	27%	31%	32%	32%	28%	26%	23%
English speaking ability (self-reported): Somewhat	9%	7%	8%	9%	11%	9%	13%	12%	13%
English speaking ability (self-reported): Well	23%	18%	30%	30%	31%	29%	36%	32%	37%
English reading ability (self-reported): Not at all	38%	59%	45%	40%	38%	41%	33%	40%	34%
English reading ability (self-reported): A little	18%	21%	20%	24%	23%	24%	21%	19%	19%
English reading ability (self-reported): Somewhat	5%	5%	6%	7%	9%	7%	11%	10%	10%
English reading ability (self-reported): Well	40%	16%	29%	29%	30%	28%	35%	31%	37%
English reading ability (self-reported): Don't Know	0%	0%	0%	0%	0%	0%	0%	0%	<sup>(b)</sup>
Family composition: Married parent	44%	42%	45%	47%	48%	41%	39%	37%	42%
Family composition: Married, no children	14%	10%	14%	12%	15%	15%	18%	19%	17%
Family composition: Unmarried parent	8%	5%	8%	8%	9%	13%	11%	13%	7%
Family composition: Single, no children	34%	43%	33%	32%	27%	30%	32%	31%	33%
Median personal income range (all income sources)	\$5,000-\$7,499	\$7,500-\$9,999	\$15,000-\$17,499	\$12,500-\$14,999	\$15,000-\$17,499	\$17,500-\$19,999	\$20,000-\$24,999	\$20,000-\$24,999	\$20,000-\$24,999
Average personal income range (all income sources)	\$5,000-\$7,499	\$7,500-\$9,999	\$15,000-\$17,499	\$15,000-\$17,499	\$17,500-\$19,999	\$17,500-\$19,999	\$20,000-\$24,999	\$20,000-\$24,999	\$20,000-\$24,999
Median family income range (all income sources)	\$7,500-\$9,999	\$7,500-\$9,999	\$17,500-\$19,999	\$17,500-\$19,999	\$20,000-\$24,999	\$20,000-\$24,999	\$25,000-\$29,999	\$25,000-\$29,999	\$30,000-\$34,999
Average family income range (all income sources)	\$10,000-\$12,499	\$10,000-\$12,499	\$17,500-\$19,999	\$17,500-\$19,999	\$20,000-\$24,999	\$20,000-\$24,999	\$25,000-\$29,999	\$25,000-\$29,999	\$30,000-\$34,999

**Appendix D: Data on National Demographic and Employment Characteristics**

<b>Characteristic</b>	<b>Fiscal Years 1989-1991</b>	<b>Fiscal Years 1998-2000</b>	<b>Fiscal Years 2007-2009</b>	<b>Fiscal Years 2010-2012</b>	<b>Fiscal Years 2013-2014</b>	<b>Fiscal Years 2015-2016</b>	<b>Fiscal Years 2017-2018</b>	<b>Fiscal Years 2019-2020</b>	<b>Fiscal Years 2021-2022</b>
Share of families with below poverty level income	no data	55%	33%	31%	29%	31%	20%	20%	21%
Share of families that received benefits from contribution-based programs <sup>5</sup>	28%	21%	21%	20%	19%	14%	18%	13%	16%
Share of families that received benefits from need-based programs <sup>6</sup>	20%	22%	31%	46%	50%	55%	54%	63%	64%
Ethnicity: Mexican-American	10%	5%	6%	7%	9%	9%	11%	10%	9%
Ethnicity: Mexican	53%	81%	65%	65%	65%	65%	61%	60%	57%
Ethnicity: Chicano	1%	1%	<1% <sup>(a)</sup>	<1%	<1%	1%	1% <sup>(a)</sup>	<1%	<sup>(b)</sup>
Ethnicity: Puerto Rican	2%	1%	1% <sup>(a)</sup>	1% <sup>(a)</sup>	1% <sup>(a)</sup>	1% <sup>(a)</sup>	<sup>(b)</sup>	<sup>(b)</sup>	<sup>(b)</sup>
Ethnicity: Other Hispanic	4%	2%	4%	7%	5%	8%	4%	7%	7%
Ethnicity: Not Hispanic or Latino	30%	10%	24%	20%	20%	16%	23%	22%	25%
Accompanied (respondent was living with at least one nuclear family member at the time of interview)	60%	37%	52%	57%	61%	60%	62%	62%	66%
Among parents, share accompanied	74%	59%	72%	82%	83%	85%	91%	89%	90%

\*Table 1 illustrates weighted data on crop workers from the Employment and Training Administration's National Agricultural Workers Survey, Public Data, Fiscal Years (FY) 1989-2022.

<sup>a</sup> Estimates should be interpreted with caution because they have relative standard errors between 31 and 50 percent.

<sup>b</sup> Estimates are suppressed because they are based on fewer than four observations or have relative standard errors greater than 50 percent.

<sup>1</sup> Settled crop workers are employed at locations that are within 75 miles of each other.

<sup>2</sup> Shuttle migrants have a home base where they do not engage in farm work and have one farm work location that is more than 75 miles from the home base. They might hold multiple farm jobs at the farm work location, but those jobs are within 75 miles of each other.

<sup>3</sup> Follow-the-crop migrants have at least two farm jobs that are separated by more than 75 miles.

<sup>4</sup> Newcomers are foreign-born crop workers whose first arrival to the United States occurred within the year preceding the interview and whose migration patterns have not yet been established.

<sup>5</sup> Contribution-based benefits include programs to which the recipient or their employer contributed such as disability insurance, Unemployment Insurance, or Social Security.

<sup>6</sup> Need-based benefits include financial assistance through programs such as Temporary Assistance for Needy Families (TANF), general assistance or welfare, and publicly provided housing or medical and nutritional assistance such as Medicaid, Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and Supplemental Nutrition Assistance Program (SNAP).

**Table 2: Crop worker Employment Characteristics, National Estimates, Nine Time Periods\***

Characteristic	Fiscal Years 1989-1991	Fiscal Years 1998-2000	Fiscal Years 2007-2009	Fiscal Years 2010-2012	Fiscal Years 2013-2014	Fiscal Years 2015-2016	Fiscal Years 2017-2018	Fiscal Years 2019-2020	Fiscal Years 2021-2022
Employment type at current farm job: Directly-hired	84%	73%	88%	88%	85%	80%	89%	88%	78%
Employment type at current farm job: Labor-contracted	16%	27%	12%	12%	15%	20%	11%	12%	22%
Average number of years of U.S. farm work experience	10	8	13	12	14	14	16	17	15
Years of U.S. farm work experience: 0-1	10%	26%	14%	10%	7%	11%	8%	6%	13%
Years of U.S. farm work experience: 2-4	25%	24%	18%	17%	14%	17%	14%	15%	16%
Years of U.S. farm work experience: 5-10	30%	22%	23%	29%	25%	22%	18%	17%	18%
Years of U.S. farm work experience: 11-20	22%	18%	23%	25%	28%	24%	27%	31%	22%
Years of U.S. farm work experience: 21 or more	13%	10%	22%	20%	25%	25%	33%	31%	31%
Average number of years with current farm employer	5	3	6	6	7	7	8	8	8
Years with current farm employer: 0-1	37%	44%	27%	25%	23%	26%	22%	18%	23%
Years with current farm employer: 2-4	32%	36%	33%	33%	32%	32%	28%	31%	29%
Years with current farm employer: 5-10	19%	14%	23%	25%	24%	22%	24%	24%	25%
Years with current farm employer: 11-20	9%	5%	12%	13%	15%	14%	16%	17%	14%
Years with current farm employer: 21 or more	3%	1%	5%	4%	6%	6%	10%	9%	9%
Average hourly earnings at current farm job	\$5.15	\$6.52	\$9.14	\$9.38	\$10.20	\$10.61	\$12.32	\$13.59	\$14.53
Paid below the minimum wage at current farm job	8%	6%	2%	4%	2%	3% <sup>(a)</sup>	<sup>(b)</sup>	<sup>(b)</sup>	<sup>(b)</sup>

Appendix D: Data on National Demographic and Employment Characteristics

Characteristic	Fiscal Years 1989-1991	Fiscal Years 1998-2000	Fiscal Years 2007-2009	Fiscal Years 2010-2012	Fiscal Years 2013-2014	Fiscal Years 2015-2016	Fiscal Years 2017-2018	Fiscal Years 2019-2020	Fiscal Years 2021-2022
Average number of days worked on a farm last 12 months	159	153	194	187	192	192	198	227	205
Average number of weeks worked on a farm last 12 months	28	27	35	34	35	33	35	39	37
Average number of hours worked per week at current farm job	40	41	45	44	44	45	45	46	43
Number of hours worked per week at current farm job: 1-20	15%	10%	4%	4%	6%	6%	5%	4%	6%
Number of hours worked per week at current farm job: 21-40	43%	43%	36%	42%	42%	36%	37%	39%	50%
Number of hours worked per week at current farm job: 41-50	23%	29%	35%	29%	28%	30%	30%	31%	29%
Number of hours worked per week at current farm job: 51-60	10%	11%	17%	19%	17%	21%	21%	14%	11%
Number of hours worked per week at current farm job: More than 60	8%	6%	8%	6%	7%	7%	6%	11% <sup>(a)</sup>	5%
Average number of days worked per week at current farm job	no data	5	6	5	5	5	4	4	5
Median number of days worked per week at current farm job	no data	5	5	5	5	5	5	5	5
Number of days worked per week at current farm job: 1-5 days	no data	54%	42%	50%	50%	46%	57%	55%	56%
Number of days worked per week at current farm job: 6-7 days	no data	46%	58%	50%	50%	54%	43%	45%	44%

**Appendix D: Data on National Demographic and Employment Characteristics**

<b>Characteristic</b>	<b>Fiscal Years 1989-1991</b>	<b>Fiscal Years 1998-2000</b>	<b>Fiscal Years 2007-2009</b>	<b>Fiscal Years 2010-2012</b>	<b>Fiscal Years 2013-2014</b>	<b>Fiscal Years 2015-2016</b>	<b>Fiscal Years 2017-2018</b>	<b>Fiscal Years 2019-2020</b>	<b>Fiscal Years 2021-2022</b>
Average number of hours worked per day**	no data	8	8	8	8	8	8	8	8
Number of hours worked per day: 1-6	no data	19%	12%	11%	15%	15%	12%	11%	9%
Number of hours worked per day: 6.1-8	no data	44%	43%	50%	46%	40%	46%	46%	59%
Number of hours worked per day: 8.1-10	no data	28%	35%	30%	31%	37%	34%	33%	24%
Number of hours worked per day: 10.1-14**	no data	8%	10%	9%	9%	8%	8%	9% <sup>(a)</sup>	7%
Average number of farm employers in the last 12 months	2.14	1.57	1.29	1.29	1.34	1.32	1.29	1.25	1.22
Number of farm employers in the last 12 months: 1	52%	65%	81%	81%	79%	80%	81%	83%	84%
Number of farm employers in the last 12 months: 2	21%	21%	13%	13%	13%	13%	12%	11%	12%
Number of farm employers in the last 12 months: 3	10%	8%	4%	4%	5%	4%	4%	4%	3%
Number of farm employers in the last 12 months: 4	6%	3%	2%	1%	2%	1%	1%	1% <sup>(a)</sup>	1%
Number of farm employers in the last 12 months: 5 or more	10%	2%	1%	1% <sup>(a)</sup>	1%	1%	<sup>(b)</sup>	1% <sup>(a)</sup>	<1% <sup>(a)</sup>
Primary crop at current farm job: Field	12%	16%	16%	17%	13%	10%	13%	14%	10%
Primary crop at current farm job: Fruit or nut	28%	37%	35%	34%	41%	32%	41%	38%	40%
Primary crop at current farm job: Horticulture	18%	16%	20%	23%	22%	19%	22%	24%	23%
Primary crop at current farm job: Vegetable	35%	25%	23%	24%	21%	37%	20%	20%	24%
Primary crop at current farm job: Miscellaneous/multiple	6%	6%	5%	3%	3%	3%	4% <sup>(a)</sup>	3%	1% <sup>(a)</sup>
Primary crop at current farm job: Other	0%	0%	0%	0%	0%	0%	0%	0%	<sup>(b)</sup>

**Appendix D: Data on National Demographic and Employment Characteristics**

<b>Characteristic</b>	<b>Fiscal Years 1989-1991</b>	<b>Fiscal Years 1998-2000</b>	<b>Fiscal Years 2007-2009</b>	<b>Fiscal Years 2010-2012</b>	<b>Fiscal Years 2013-2014</b>	<b>Fiscal Years 2015-2016</b>	<b>Fiscal Years 2017-2018</b>	<b>Fiscal Years 2019-2020</b>	<b>Fiscal Years 2021-2022</b>
Primary task at current farm job: Pre-harvest	20%	20%	27%	34%	26%	30%	23%	28%	27%
Primary task at current farm job: Harvest	41%	29%	27%	22%	23%	17%	24%	20%	26%
Primary task at current farm job: Post-harvest	13%	10%	18%	17%	18%	25%	19%	21%	16%
Primary task at current farm job: Technical (e.g., equipment operator)	18%	23%	25%	27%	33%	29%	34%	31%	31%
Primary task at current farm job: Supervisor	1%	(b)	<1%	(b)	(b)	(b)	(b)	0%	0%
Primary task at current farm job: Other	7%	18%	3%	0%	0%	0%	0%	0%	0%
Current farm employer provides health insurance or pays for health care for a non-work-related injury or illness [D24]: No	no data	79%	72%	70%	78%	71%	59%	61%	57%
Current farm employer provides health insurance or pays for health care for a non-work-related injury or illness [D24]: Yes	no data	7%	18%	19%	14%	18%	32%	28%	28%
Current farm employer provides health insurance or pays for health care for a non-work-related injury or illness [D24]: Don't know	no data	14%	11%	11%	9%	11%	8%	11%	16%
Current farm employer provides health insurance or pays for health care for a work-related injury or illness [D22]: No	38%	22%	10%	14%	13%	9%	4%	12%	9%
Current farm employer provides health insurance or pays for health care for a work-related injury or illness [D22]: Yes	46%	64%	74%	69%	70%	76%	89%	79%	76%

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Characteristic	Fiscal Years 1989-1991	Fiscal Years 1998-2000	Fiscal Years 2007-2009	Fiscal Years 2010-2012	Fiscal Years 2013-2014	Fiscal Years 2015-2016	Fiscal Years 2017-2018	Fiscal Years 2019-2020	Fiscal Years 2021-2022
Current farm employer provides health insurance or pays for health care for a work-related injury or illness [D22]: Don't know	16%	14%	16%	17%	18%	14%	8%	9%	15%
Workers' Compensation coverage at current farm job [D23]: No	66%	40%	19%	18%	21%	16%	5%	8%	9%
Workers' Compensation coverage at current farm job [D23]: Yes	24%	38%	60%	60%	51%	62%	85%	79%	72%
Workers' Compensation coverage at current farm job [D23]: Don't know	9%	22%	21%	22%	28%	22%	10%	13%	19%
Unemployment Insurance coverage at current farm job: No	38%	55%	49%	53%	50%	52%	41%	50%	48%
Unemployment Insurance coverage at current farm job: Yes	51%	37%	48%	44%	46%	43%	55%	45%	45%
Unemployment Insurance coverage at current farm job: Don't know	10%	8%	3%	3%	3%	5%	4%	5%	7%
Mode of transportation to work: Drive a car	46%	34%	56%	55%	59%	58%	69%	73%	71%
Mode of transportation to work: Walk	7%	8%	8%	8%	7%	7%	6%	9%	8%
Mode of transportation to work: Public transportation (bus, train, etc.)	<1%	1%	(b)	(b)	<1% <sup>(a)</sup>	<1% <sup>(a)</sup>	(b)	(b)	<1% <sup>(a)</sup>
Mode of transportation to work: Labor bus, truck, van	15%	17%	4%	6%	6%	6% <sup>(a)</sup>	4%	2%	2% <sup>(a)</sup>
Mode of transportation to work: 'Raitero'	no data	no data	18%	21%	13%	15%	10%	7%	8%
Mode of transportation to work: Ride with others (share ride)	29%	36%	13%	9%	14%	13%	10%	8%	10%

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Characteristic	Fiscal Years 1989-1991	Fiscal Years 1998-2000	Fiscal Years 2007-2009	Fiscal Years 2010-2012	Fiscal Years 2013-2014	Fiscal Years 2015-2016	Fiscal Years 2017-2018	Fiscal Years 2019-2020	Fiscal Years 2021-2022
Mode of transportation to work: Other	4%	4%	1%	1% <sup>(a)</sup>	1% <sup>(a)</sup>	1%	1% <sup>(a)</sup>	1% <sup>(a)</sup>	<1% <sup>(a)</sup>
Pay a fee for rides to work: No	80%	50%	27%	28%	37%	32%	38%	30%	26%
Pay a fee for rides to work: Yes, a fee	20%	45%	38%	31%	29%	28%	22%	33%	31%
Pay a fee for rides to work: Yes, just for gas	no data	5%	35%	41%	34%	39%	40%	37%	43%
Share of crop workers who have health insurance, taking into account all provider sources, including the respondent's employer, self-insurance, the government, the spouse's employer, etc. [A21a]: No	no data	76%	66%	68%	65%	53%	43%	52%	48%
Share of crop workers who have health insurance, taking into account all provider sources, including the respondent's employer, self-insurance, the government, the spouse's employer, etc. [A21a]: Yes	no data	24%	33%	31%	35%	47%	56%	48%	52%
Share of crop workers who have health insurance, taking into account all provider sources, including the respondent's employer, self-insurance, the government, the spouse's employer, etc. [A21a]: Don't know	no data	1% <sup>(a)</sup>	1%	1% <sup>(a)</sup>	<1% <sup>(a)</sup>	1% <sup>(a)</sup>	1% <sup>(a)</sup>	<sup>(b)</sup>	<sup>(b)</sup>
Share who held a non-farm job in the last 12 months	31%	15%	19%	28%	25%	24%	31%	22%	17%



**Appendix D: Data on National Demographic and Employment Characteristics**

<b>Characteristic</b>	<b>Fiscal Years 1989-1991</b>	<b>Fiscal Years 1998-2000</b>	<b>Fiscal Years 2007-2009</b>	<b>Fiscal Years 2010-2012</b>	<b>Fiscal Years 2013-2014</b>	<b>Fiscal Years 2015-2016</b>	<b>Fiscal Years 2017-2018</b>	<b>Fiscal Years 2019-2020</b>	<b>Fiscal Years 2021-2022</b>
Average number of non-farm work weeks last 12 months	22	24	26	26	25	25	25	24	27
Plans to continue working in agriculture: Less than 1 year	9%	7%	3%	2%	3%	4%	5%	4%	3%
Plans to continue working in agriculture: 1-3 years	12%	18%	16%	13%	12%	12%	10%	11%	13%
Plans to continue working in agriculture: 4-5 years	7%	5%	5%	3%	4%	4%	4%	5%	6%
Plans to continue working in agriculture: More than 5 years	4%	5%	9%	3%	2%	2%	3%	3% <sup>(a)</sup>	4%
Plans to continue working in agriculture: Over five years and as long as able to do the work	65%	56%	64%	76%	76%	74%	78%	76%	72%
Plans to continue working in agriculture: Other	4%	9%	4%	3%	2%	3%	1% <sup>(a)</sup>	<sup>(b)</sup>	<sup>(b)</sup>
Could find a non-farm job within a month: No	28%	37%	33%	51%	47%	43%	33%	32%	43%
Could find a non-farm job within a month: Yes	51%	39%	44%	32%	36%	45%	58%	57%	53%
Could find a non-farm job within a month: Don't know	20%	24%	23%	17%	17%	12%	10%	11%	4% <sup>(a)</sup>

\*Table 2 illustrates weighted data on crop workers from the Employment and Training Administration's National Agricultural Workers Survey, Public Data, Fiscal Years (FY) 1989-2022.

\*\*Values greater than 14 for number of hours worked per day were set to missing.

<sup>a</sup> Estimates should be interpreted with caution because they have relative standard errors between 31 and 50 percent.

<sup>b</sup> Estimates are suppressed because they are based on fewer than four observations or have relative standard errors greater than 50 percent.