

L Arrieta, Martha I.
DG A Profile of
1998A Demographic,
FL Occupational , and
Health-Related

497

A PROFILE OF DEMOGRAPHIC,
OCCUPATIONAL, AND HEALTH-RELATED
CHARACTERISTICS OF THE
MIGRANT AND SETTLED (SEASONAL)
HIRED FARMWORKER POPULATION
OF FLORIDA

1998

Martha I. Arrieta, M.D.; MPH
Frances J. Walker, MSPH^{**}
Thomas J. Mason, Ph.D.^{***}

- * *Visiting Assistant Professor*
Department of Epidemiology and Biostatistics, USF College of Public Health
- ** *Fellow*
National Immunization Program, Centers for Disease Control and Prevention
- *** *Professor and Chairman*
Department of Epidemiology and Biostatistics, USF College of Public Health

The funding provided by the University of South Florida Health Education and Training Centers, and the Department of Epidemiology and Biostatistics, USF College of Public Health, made it possible to conduct the data analysis, writing and production of this report.

ACKNOWLEDGMENTS

The production of the present report was possible because of the collaboration of several individuals and institutions. The authors gratefully acknowledge:

The U.S. Department of Labor, for providing the Florida NAWS data on which the report is based. In particular, Mr. Richard Mines and Ms. Ruth Samardick as facilitators of the data analysis process.

The Health Education and Training Centers (HETC) and the Area Health Education Center (AHEC), USF College of Medicine, for providing funds to conduct the data analysis and writing of the report. In particular, Gloria Vales, RN, BSN; and Cynthia S. Selleck, ARNP, DSN; for their encouragement and support through the analysis and writing process.

Ms. Beatriz Boccalandro, who conducted the analysis of the data.

Aguirre International, for providing information related to the design, conduction and analysis of the NAWS data. In particular, Ms. Susan Gabbard, Mr. Jorge Nakamoto, and Ms. Anne Steirman.

Lynette Phillips, MSPH, for her excellent work in formatting the report for publication.

And ...

The 2,872 Florida Farmworkers who provided the data presented in the report, as well as *their employers* who allowed survey staff to contact these workers

SECTION I: INTRODUCTION

Migrant and settled (seasonal) farmworkers (MSFW) are an occupationally defined segment of the agricultural workforce, and their patterns of residence, employment and mobility correspond closely to the needs and demands of the crop production sector. MSFW are essential to filling critical short-term agricultural tasks.¹⁻³ They actively contribute to the economies of the communities where they live and work and have been characterized by the National Advisory Council on Migrant Health as "members of America's working poor."⁴

MSFW are a unique population, with characteristics that differ from other U.S. workers. First, since their work is temporary, their employment history is characterized by multiple employers and periods of unemployment. Second, their work responds to the labor-intensive seasonal peaks of the agricultural industry and often requires the farm worker to follow the crop seasons in order to maintain employment. Third, MSFW tend to have relatively low education and low socioeconomic status, and many are members of ethnic minorities. Fourth, many farmworkers are foreign born and often experience language difficulties and legal residency problems. Finally, the families of the MSFW are often immersed in the occupational environment, with several members of a family, including children, working in agriculture. In addition, since many of these families live in close proximity to the fields, they are regularly subject to exposures and risks that are specific to agriculture. Furthermore, farmworker families who migrate also experience disruptions in the continuity of education, housing, and health care.^{2, 4}

Information on the size, demographic composition, and general characteristics of the MSFW population is scarce. This data is essential to determine the needs of MSFW, to better structure services aimed at this group, and to efficiently allocate resources to provide for their multiple needs. In particular, health professionals, charged with providing services to MSFW, have stressed the need for accurate information on the farmworker

population when planning health care services and anticipating future needs. Migrant and Community Health Centers would benefit from a better definition of the characteristics of the population for whom they provide services.^{4, 5}

Florida is estimated to host the fourth largest population of MSFW and their dependents in the United States. In addition, along with Texas and California, it is considered a "home-base" state for migrant farmworkers.⁶ The present report summarizes data pertaining to the MSFW population in Florida, and aims at providing the following:

- A profile of selected demographic, occupational and health-related characteristics of the MSFW population in Florida, with an emphasis on information which will be useful in the planning and provision of health services to Florida's farmworkers.
- Information specific to the two subgroups of workers: migrant and settled (seasonal) farmworkers, wherever possible.
- Highlights of the similarities and differences between Florida's MSFW and the national farmworker population.

Our intention in writing the present report is to provide information that will be useful to health care providers who tend to the health care needs of Florida's farmworker population. We believe that our presentation and discussion of the demographic, occupational and health-related characteristics of MSFW who work and reside in the state throughout the year, should also prove useful to the many individuals and diverse organizations interested in advancing the status of farmworkers not only in Florida, but nationwide.

Database

The information presented in this report was gathered in the framework of the National Agricultural Workers Survey (NAWS), during the period October 1988 - July 1995. In Section II, we provide a detailed description of the NAWS survey methodology and the selection of the Florida sample that provided the basis for the present report.

Pertinent definitions

No consensus exists on a single definition of migrant and seasonal farmworkers, yet there are three common themes in existing definitions. Workers are employed in **agriculture**, their employment is on a **temporary** as opposed to year-round basis (the term "seasonal" is used as a synonym for "temporary" in this context) and **some workers travel in pursuit of agricultural work**, while others do not. Discrepancies exist in the definitions of "temporary", the distance and/or conditions that qualify as "travel", and finally, the activities that can be considered "agricultural".

Definitions Used by the NAWS.

The NAWS is designed to gather information on a nationally representative sample of field workers employed in crop agriculture (i.e. cash grains, field crops, fruits and vegetables, nursery products, etc.). The population sampled by the NAWS consists of all field laborers working in perishable crops, including workers performing "seasonal" services but who are employed year round. The NAWS does not interview farmworkers employed in livestock or poultry production.⁷⁻¹⁰

In the NAWS, the distinction between migrant and settled farmworkers is made on the basis of the farmworker's self-reported mobility during the calendar year preceding the date of the interview. **Migrant farmworkers** are those who traveled more than 75 miles to obtain or look for a job in U.S. agriculture. The definition does not require migrants to cross specific geographic boundaries, nor does it require that the farmworker spend the night away from home. Yet it is unlikely that workers who travel this distance do not change residencies, at least temporarily. **Settled farmworkers** are those who did not travel the required 75 miles during the year preceding the interview.²

Definitions Used by the Migrant Health Program.

The Migrant Health Program was established in 1962 to provide health care services to migrant and seasonal farmworkers.¹¹ The data presented in this report aims to characterize the segment of the temporary agricultural workforce that would seek health services under the provisions of the Migrant Health Program. Therefore, it is necessary to understand if the

farmworker population sampled by the NAWS is an accurate reflection of the population of MSFW seeking services at Migrant and Community Health Centers under the provisions of the Public Health Service Act.

When allocating resources for the provision of health services to MSFW, Congress set forth pertinent definitions. Section 329 of the Public Health Service Act (as amended in 1993) reads: "the term **migratory agricultural worker** means an individual whose principal employment is in agriculture on a seasonal basis, who has been so employed within the last twenty-four months, and who establishes for the purpose of such employment a temporary abode." The term **seasonal agricultural worker** means "an individual whose principal employment is in agriculture on a seasonal basis and who is not a migratory agricultural worker."¹²

Within the Public Health Service Act (PHSA), **agriculture** is defined to include: "(a) the cultivation and tillage of the soil, (b) the production, cultivation, growing, and harvesting of any commodity grown on, in, or as an adjunct to or part of a commodity grown in, or on, the land, and (c) any practice (including preparation and processing for market and delivery to storage or to market or to carriers for transportation to market) performed by a farmer or on a farm incident to or in conjunction with an activity described in subparagraph (b))."¹³

Interface Between the Population of Workers Sampled by the NAWS and the Population of Farmworkers Seeking Services at Migrant and Community Health Centers

Due to the disparate definitions of "eligible" farmworkers, not all workers eligible for services at Migrant and Community Health Centers are accounted for within the NAWS inclusion criteria. For example, the NAWS definition strictly samples fieldworkers, excluding packinghouse workers (unless packing is done in the field) and workers involved in the processing and delivery of crops. Thus, while under the PHSA provisions packinghouse workers are eligible to subsidized health care, these workers are not represented in the NAWS survey.

The 1992 Census of Agriculture¹⁴ provides information which can be used to indirectly evaluate what proportion of the MSFW population of Florida as defined under the PHSA is sampled in the NAWS. The Census of Agriculture reveals that temporary workers ^(Note 1) employed in the production of vegetables & melons (44%), fruits and nuts (24%) and horticulture specialties (22%) make up 90% of the hired temporary workforce in Florida. Thus the NAWS sampling frame would theoretically include at least 90% of temporary workers actively employed in agricultural fieldwork in Florida.

Of note, the NAWS samples employed farmworkers, whereas under the PHSA, health services to migrant and seasonal farmworkers are provided regardless of current employment status, as long as the subject worked in agriculture any time in the preceding 24 months. Since the data was gathered in the framework of the NAWS, the present report provides information related only to individuals actively engaged in temporary agricultural work. However, to the extent that a majority of interviewed farmworkers report periods of unemployment,¹⁰ there is reason to believe that this data is applicable to workers who were unemployed at the time of the interview, but are still actively seeking work in agriculture.

Health Centers are expected to provide services to farmworkers even if they have not been active in agricultural work for as long as two years. It is possible that this subset of farmworkers differs in demographic and health related characteristics from employed farmworkers. No information is provided in the present report regarding the subset of farmworkers who are not either actively employed in agriculture or actively seeking agricultural jobs.

Migrant and Settled (Seasonal) Farmworkers: Definitions used in the present report.

In presenting the data derived from the NAWS, we will adhere to the definitions and terms used to characterize the NAWS sample (i.e. employment in perishable crop agriculture as qualifying agricultural activity, and the 75-mile travel rule differentiating migrant and settled farmworkers).

Note 1. "Temporary" equates having worked less than 150 days for the employer providing the census information

We consider that the definitions of "migrant" and "settled" by the 75-mile travel rule probably capture the concepts of "migratory" and "seasonal" agricultural worker put forward in Section 329 of the Public Health Service Act. Throughout the present report, we consider the term "settled" equivalent to "seasonal" in that both terms refer to workers who do not travel more than 75 miles in pursuit of agricultural work. The term "settled" may be useful in making a distinction between "seasonal" meaning "temporary" and "seasonal" meaning "not traveling". Because of the seasonal demands of agricultural work, both migrant and settled farmworkers are temporary (seasonal) workers.

Topics Covered

This report is divided into seven sections. Section I, the Introduction, explains the goals of the report and presents a number of terms used to define the MSFW population. Section II explains the National Agricultural Workers Survey (NAWS) upon which this report is based. It describes in detail how the Florida sample was selected. Comments are provided regarding the generalizability of the survey results.

The demographic characteristics of the Florida farmworkers who participated in the NAWS survey are presented in Section III. The section examines migrant/settled status, age, gender, ethnicity, language, permanent residence, education, and income. The household composition of interviewed Florida farmworkers is described in Section IV. Section V outlines the occupational profile of MSFW, including patterns of employment, types of crops worked, types of tasks done, and workers' patterns of residence and migration.

Section VI summarizes the limited data currently available from the NAWS concerning health-related characteristics of Florida's farmworkers. The final part, Section VII, highlights some implications of the findings reported and incorporates a discussion of the limitations of the data presented.

References

1. Public Health Service Act. Section 329, Part D, Title III.
2. Gabbard S, Mines R, Boccalandro B. *Migrant Farmworkers: Pursuing Security in an Unstable Labor Market*. Washington, DC: U.S. Department of Labor, 1994.

3. Oliveira VJ, Effland ABW, Runyan JL, Hamm S. Hired Farm Labor Use on Fruit, Vegetable, and Horticultural Specialty Farms. Washington, DC: US Department of Agriculture, 1993.
4. National Advisory Council on Migrant Health. 1993 Recommendations of the National Advisory Council on Migrant Health. Rockville, MD: Bureau of Primary Health Care, 1993.
5. National Migrant Resource Program I. Migrant and Seasonal Farmworker Health Objectives for the Year 2000. Austin, TX: National Migrant Resource Program, Inc., 1990.
6. Migrant Health Program. An Atlas of State Profiles which Estimate Number of Migrant and Seasonal Farmworkers and Members of their Families. Rockville, MD: U.S. Department of Health and Human Services, 1990.
7. Rosenberg HR, Gabbard SM, Alderete E, Mines R. California Findings from the National Agricultural Workers Survey. Washington DC: U.S. Department of Labor, 1993.
8. Mines R. Findings from the National Agricultural Workers Survey (NAWS) 1989. Washington DC: US Department of Labor, 1991.
9. Mines R, Gabbard S, Boccalandro B. Findings from the National Agricultural Workers Survey (NAWS) 1990. Washington DC: U.S. Department of Labor, 1991.
10. Mines R. Personal communication, 1998.
11. Dailey CY. 1992 Migrant Health Centers Referral Directory. Austin, TX: U.S. Department of Health & Human Services, 1992.
12. Public Health Service Act. U.S.C.A. 254b(a)(2), (3) (West 1991 & Supp. 1993).
13. Public Health Service Act. U.S.C.A. 254b(a)(4) (West 1991 & Supp. 1993).
14. U.S. Department of Commerce. 1992 Census of Agriculture, Florida State and County Data. Washington DC, 1994.

SECTION II: THE NATIONAL AGRICULTURAL WORKERS SURVEY (NAWS)

The data for this study is a subset of Florida-specific data from the National Agricultural Workers Survey (NAWS). The NAWS is a national survey of perishable crop field workers that has been commissioned by the Department of Labor (DOL), and it is designed to collect data on a nationally representative sample of farmworkers. The NAWS sampling methodology is specifically targeted to finding all types of farmworkers in crop agriculture, and it constitutes an innovative approach to survey a non-standard, hard-to-reach population, such as the population of temporary agricultural workers. As of the 1989 fiscal year, the survey has been conducted annually 1, 2

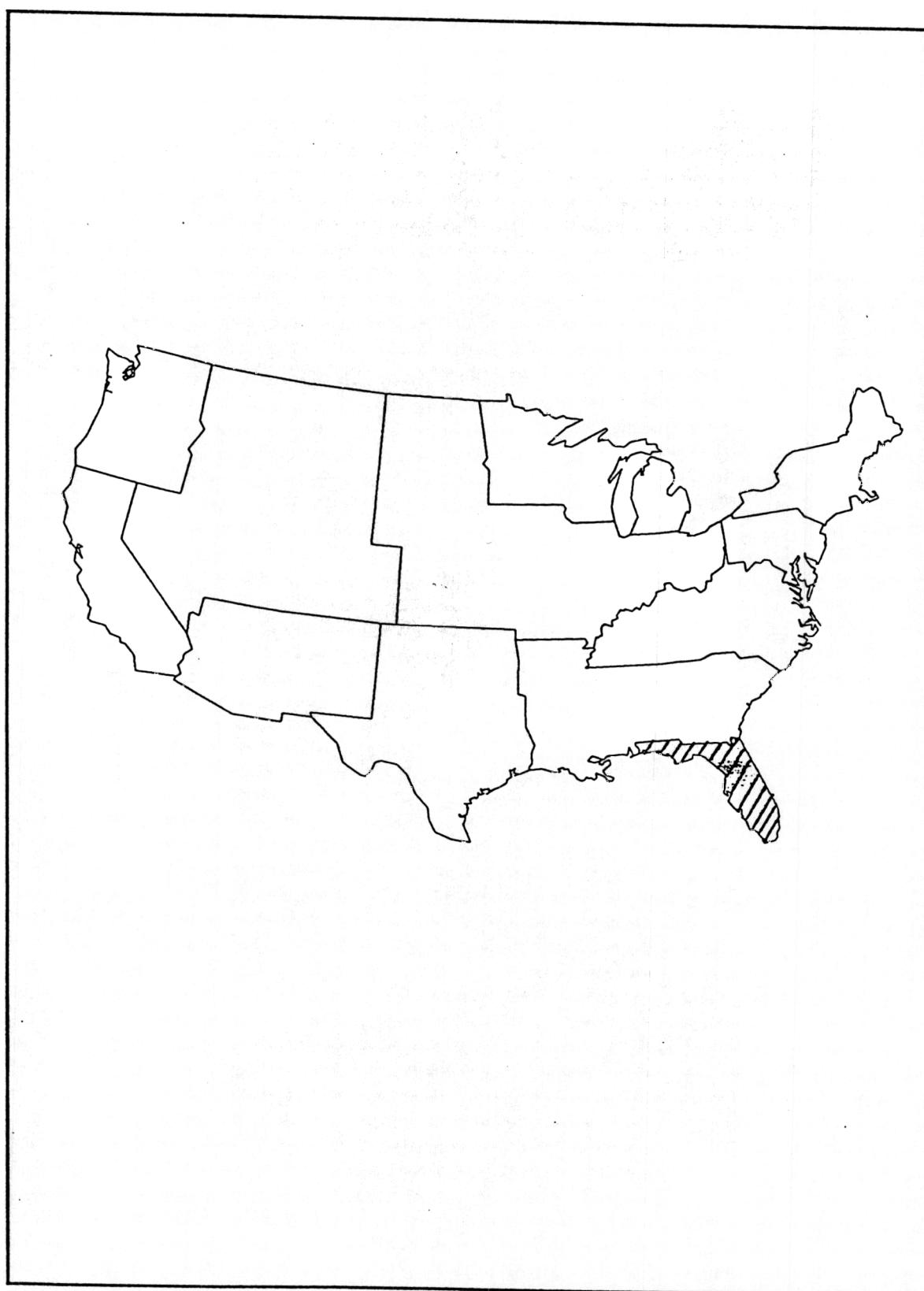
Several reports have been produced based in the information gathered by the NAWS. A list of the reports is provided in Appendix I.

NAWS: Survey Sampling Methodology

"Site area sampling", a multi-stage cluster sampling strategy, is utilized in the NAWS to obtain a nationally representative sample of seasonal agricultural workers to interview, while minimizing travel costs. First, a sample of approximately 72 counties in 25 states is selected to represent 12 agricultural regions in the U.S.1, 3, 4 (Fig 1). California and Florida constitute their own distinct agricultural regions, thus it is possible to produce state-specific estimates for either California or Florida.

In order to reflect the seasonal fluctuations in the agricultural work force, data are collected in a quarterly format. Three 6 to 10 week interviewing

Figure 1. Agricultural Regions



cycles are conducted, starting in February, June and October every year. (There were 4 rounds of interviews conducted during fiscal year 1989.) From approximately a third to half of the counties are selected for each interviewing cycle. The likelihood of selection varies directly with the size of the county's seasonal agricultural payroll. The number of interviews is proportional to the amount of SAS activity during that time of year, as reported in the Farm Labor Survey of the United States Department of Agriculture/National Agricultural Statistics Service (Farm Labor Survey USDA/NASS).^{1, 4, 5}

Once the sample of counties has been selected, a list of SAS employers for each county is compiled from several sources, including the Bureau of Labor Statistics, the Agricultural Soil and Conservation Service, Farm Labor Contractor registries, Agricultural Commissioner's pesticide registrations, unemployment insurance files, and the state's Department of Industrial Relations. The next sampling stage involves drawing a random sample of SAS employers for each selected county.²⁻⁵

NAWS: Selection of the Study Sample

The selection of farmworkers to interview is accomplished in the final stage of the sampling design. The randomly selected employers in each county are contacted by the NAWS Regional Coordinators who explain the survey's purpose and request access to the farmworkers. Once agricultural employers agree to allow interviewers to contact workers, NAWS interviewers visit the farms and explain the survey to the workers. Interviews are scheduled with a random sample of the workers. The actual interviews are conducted in the worker's home or in another location of their choice.³⁻⁵

To participate in the NAWS, the farm worker must be employed at the time of the interview. Consequently, the NAWS is representative of the *hired* farm labor force.

NAWS: Overview of Information Obtained

The personal interviews, conducted in 5 different languages, contain queries designed to elicit demographic information, a detailed history of the previous year's employment, legal status, education, employment history, residence and migrancy, and income and benefits. A few questions inquire about health needs and health services.^{2, 5}

NAWS: Florida Sample

The sample for Florida is part of a national sample. The counties chosen for inclusion were selected using probability sampling based on the intensity of agricultural labor in the county. The Florida counties included in the sample are: Charlotte, Dade, Flagler, Highlands, Hillsborough, Indian River, Manatee, Martin, Palm Beach, Polk, St. Lucie, and Volusia (Fig 2). Table 1 presents a detail of Florida counties selected by the NAWS, and the number of NAWS cycles when interviews were conducted in each county, by fiscal year.

Table 1. Number of NAWS interview cycles by county, by fiscal year.
NAWS 1989-1995

County	1989	1990	1991	1992	1993	1994	1995
Charlotte	2	1	1	0	0	0	0
Dade	4	3	3	3	1	1	0
Flagler	0	0	1	0	0	0	0
Highlands	0	0	0	0	0	0	2
Hillsborough	0	3	3	3	1	1	0
Indian River	3	2	3	3	2	0	0
Manatee	0	2	3	3	1	0	1
Martin	4	2	2	3	0	1	0
Palm Beach	0	3	3	3	3	3	3
Polk	0	3	3	3	1	1	2
St. Lucie	3	2	3	3	0	0	1
Volusia	3	0	1	2	0	0	0

A Profile of Florida's Migrant & Settled Farmworker Population

Figure 2. Counties included in the Florida NAWS sample



Sample size

NAWS sampled 16,270 farm workers nationally in the interval starting Fiscal Year 1989 and ending Fiscal Year 1995. The corresponding calendar time spans from the fall of 1988 through the summer of 1995. Within this interval, a subset of 2,872 interviews were conducted with individuals who were either working in Florida at the time of the interview or had worked in Florida within the year preceding the interview. The aggregate 2,872 workers constitute the sample for the analysis reported in this document.

Representativeness of the NAWS sample

A key issue in interpreting the data presented in this report is how representative the NAWS sample is of its target population: workers in crop agriculture. In addition, because of our focus on the population served by Community and Migrant Health centers, we would also like to evaluate how representative the NAWS sample is of the population of MSFW as defined in the PHSA.

The multi-stage cluster sampling scheme used by the NAWS will generate a random sample of perishable crop workers at the national and regional level, provided that accurate sampling frames are generated at each sampling stage. The first sampling frame in the NAWS are U.S. counties, and the sampling probabilities assigned to each county are proportional to the intensity of agricultural labor used in each county, as reported in the Farm Labor Survey USDA/NASS. At this stage, the possible limitation is the accuracy of the Farm Labor Survey in portraying the intensity of the agricultural labor in U.S. counties.

Once the counties are selected, the next sampling frame consists of a list of agricultural employers for each county. The sampling accuracy at this stage relies on two factors: the completeness of the list of employers, and the extent of participation in the study by those employers selected. The response rate for employers selected by the NAWS has been estimated to

range from 60 to 80%.¹ There is no information in regard to the characteristics of participating employers as compared to non-participating employers.

At the final sampling stage, a random sample of farmworkers is selected from each work-site. At this stage, sampling accuracy is affected by the extent of non-participation. Participation rates for workers have been estimated at over 90%.¹ However, no information is available on the characteristics of farmworkers who choose to participate in the study as compared to those who choose not to participate.

Although no formal evaluation of the representativeness of the NAWS sample is possible given the lack of information on the several factors which impact the generalizability of study results, the key issue seems to be non-participation by employers. Once the workers are contacted, they seem to be willing to participate in the study. The lack of legal residency/work status does not seem to act as a deterrent for participation. Nationally, over 50% of foreign born workers identify themselves as "undocumented".¹

References

1. Mines R. Personal Communication, 1998.
2. Mines R, Gabbard S, Steirman A. *A Profile of U.S. Farm Workers*. Washington DC: U.S. Department of Labor, 1997.
3. Mines R. Findings from the National Agricultural Workers Survey (NAWS) 1989. Washington DC: US Department of Labor, 1991.
4. Rosenberg HR, Gabbard SM, Alderete E, Mines R. California Findings from the National Agricultural Workers Survey. Washington DC: U.S. Department of Labor, 1993.
5. Mines R, Gabbard S, Boccalandro B. Findings from the National Agricultural Workers Survey (NAWS) 1990. Washington DC: U.S. Department of Labor, 1991.

SECTION III: DEMOGRAPHIC CHARACTERISTICS

Migrant and settled (seasonal) farmworkers

Roughly two thirds of Florida farmworkers (68%) travel over 75 miles in pursuit of agricultural work, and accordingly they qualify as "migrant farmworkers". Approximately one third of Florida farmworkers (32%) do not travel more than 75 miles in pursuit of agricultural work, and so they are considered "settled" (seasonal) farmworkers (Table 2).

Table 2. Florida hired farm work force, by type of worker, NAWS, 1989 – 1995

TYPE OF WORKER	Percent
Migrant	68%
Settled	32%
TOTAL	100%
No. in sample	2,726

Information on type of farmworker was missing for 146 workers in the sample.

Gender and age distribution

Florida's farmworker population is predominantly male (Figure 3) and young (87% of the interviewed workers were between 13 and 45 years of age). Overall, the age distribution of hired farmworkers is heavily weighted towards the younger age groups: the average age in this sample of farmworkers was 31 years, half of all the participants were below 27 years of age (median), and the single age most frequently encountered (mode) was twenty years. Yet the range of ages was very

wide: the youngest farmworkers interviewed were 13 years old, and the oldest study participant was 85 at the time of the interview (Table 3). It is worth noting that the NAWS does not sample farmworkers who are younger than 14 years of age ^{Note 1}.

Figure 3. Gender of Florida farmworkers, NAWS, 1989 – 1995

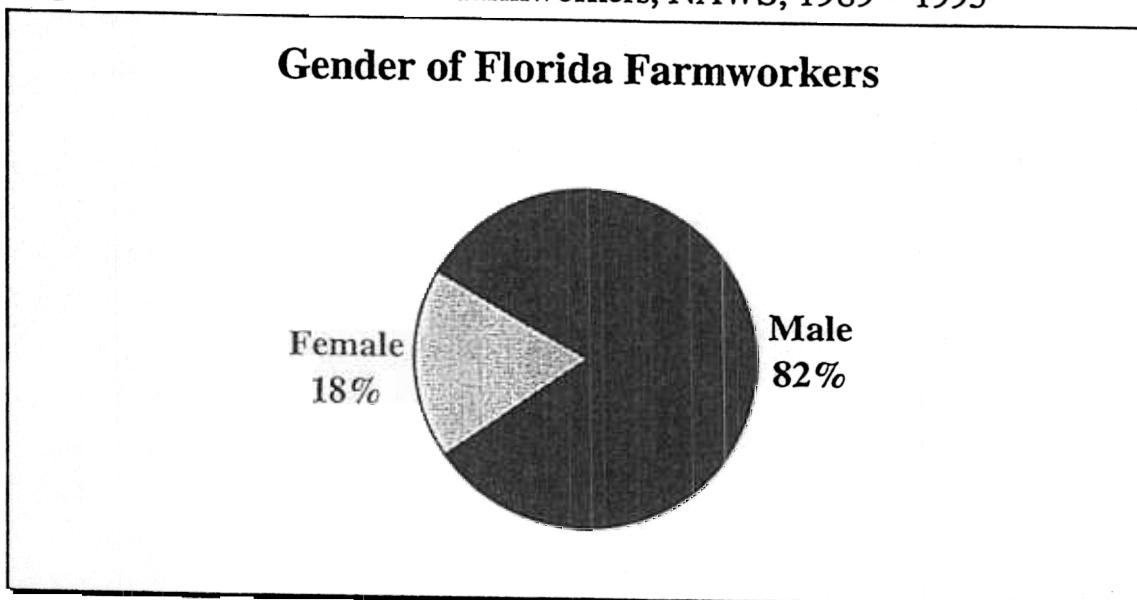


Table 3. Age of hired Florida farmworkers, NAWS, 1989 – 1995

	ALL FARMWORKERS	MIGRANT	SETTLED
Mean	30.7	29.3	33.7
Median	27	26	30
Mode	20	20	22
Range	13-85	13-85	13-75
Number in sample	2,798	1,470	1,184

Information on age was missing for 74 farmworkers in the sample.

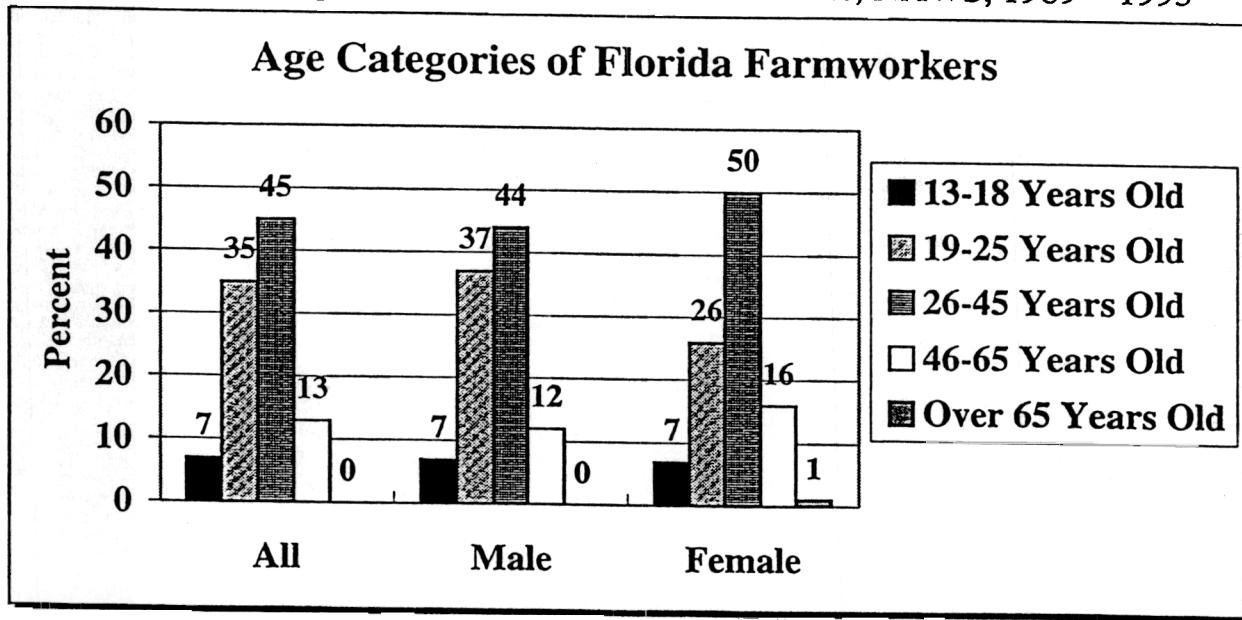
Information on age by type of worker (migrant vs. settled) was missing for 218 workers in the sample.

Note 1: Very few (less than 0.4%) of the workers said they were less than 14 years of age despite instructions to the interviewers to exclude such workers from the sample. ¹

As a group, settled farmworkers appear to be older than migrant farmworkers. The average age for settled workers is 34 years, while that of migrant workers is 29. Half of the settled farmworkers in the sample were below 30 years of age (median), while half of the migrant workers were below age 26. The single age most often reported by migrant farmworkers was twenty years (mode), while the single age most often reported by settled farmworkers was twenty-two years (Table 3).

Seven percent of Florida's farmworkers are children between thirteen^(Note 2) and eighteen years of age. That percentage is consistent across gender subgroups. The majority of farmworkers are between 19 and 45 years old, and that pattern is also consistent across gender subgroups. Yet, as a group farmworker women appear somewhat older than farmworker men. Fifty percent of female farmworkers were 26-45 years of age, while only 44% of farmworker men were between 26-45 years of age. In contrast, 37% of farmworker men were 19-25 years of age, and only 26% of farmworker women were between 19 to 25 years of age. While 13% farmworkers overall are between 46 and 65 years of age, 16% percent of farmworker women are in the 46 to 65 years age range. One percent of female farmworkers is over 65 years of age (Figure 4).

Figure 4. Age categories of hired Florida farmworkers, NAWS, 1989–1995



Information on age was missing for 74 farmworkers in the sample.

Information on age and gender was missing for 77 workers in the sample.

Note 2: Although the NAWS does not sample farmworkers who are younger than 14 years of age, a few farmworkers interviewed in the Florida sample reported they were 13 years old.²

Ethnicity, language, place of residence

The great majority of hired farmworkers in Florida is of Hispanic descent (86%). Non-Hispanic blacks (which include Haitians) constitute 9% of the sample, and the remaining 5% are non-Hispanic white, Asian and others (Table 4). Non-Hispanic blacks and whites constitute a greater percentage of the female farmworker population (19%) than the male population (8%).

Table 4. Percentage ethnic composition of hired Florida farmworkers, by gender, NAWS, 1989 – 1995

ETHNICITY	ALL FARMWORKERS	MALE	FEMALE
Hispanic	86%	89%	79%
Non-Hispanic Black	9%	7%	14%
Non-Hispanic White	2%	1%	5%
Asian	1%	1%	1%
Other	2%	2%	1%
TOTAL	100%	100%	100%
No. in sample	2,840	2,169	671

Information on ethnicity was missing for 32 subjects in the sample.

The great majority of farmworkers (83%) consider Spanish as their primary language (Table 5). Only 19% report that they speak English well, and only 14% consider that they can read English well. The ability to speak and read English is greater for farmworkers over age 26 (Table 6), yet at most about a quarter (26%) of farmworkers feel proficient at speaking English. Only 9% of hired Florida farmworkers consider English their primary language. Creole is the primary language for 6% of farmworkers (Table 5).

Over half (58%) of farmworkers reported Florida or another state within the United States as their place of permanent residency. In addition, 5% of farmworkers consider Puerto Rico their place of permanent residency. Only 37% of farmworkers report their residency outside the United States (Table 7).

Table 5. Primary language of hired Florida farmworkers, NAWS, 1989 – 1995

PRIMARY LANGUAGE	PERCENT
Spanish	83%
English	9%
Creole	6%
Other	2%
TOTAL	100%
Number in sample	2,829

Information on primary language was missing for 43 subjects in the sample.

Table 6. English ability of hired Florida farmworkers, NAWS, 1989 – 1995

ENGLISH ABILITY	ALL	AGED 25 & UNDER	AGED 26 & OVER
Speak English Well	19%	12%	26%
Read English Well	14%	9%	19%
Number in sample	2,862	1,044	1,818

Information on English ability was missing for 10 subjects in the sample.

Table 7. Reported place of permanent residency, NAWS 1992 – 1995

PERMANENT RESIDENCE	ALL
Florida	42%
Mexico	32%
Other U.S.	16%
Puerto Rico	5%
Caribbean/Central America	5%
TOTAL	100%
No. in sample	924

Education

A sizable proportion of farmworkers (41%) reported between 8-11 years of schooling, and the proportion was higher among farmworkers less than 25 years of age (52%). Overall, only 35% of the interviewed farmworkers reported less than eight years of schooling, while 24% reported 12 or more years of school attendance (Table 8). ^(Note 3)

Table 8. Reported years of schooling, NAWS, 1989 – 1995

YEARS OF SCHOOLING	ALL	AGED 25 & UNDER	AGED 26 & OVER
0-3	27%	17%	34%
4-7	8%	7%	9%
8-11	41%	52%	34%
12 & over	24%	24%	23%
TOTAL	100%	100%	100%
Number in sample	2,790	1,060	1,730

Information on years of schooling was missing for 82 subjects in the sample.

Income

Individual yearly earnings from farm work are low (Table 9). Because the NAWS collects income data by income categories rather than absolute numbers, the NAWS definition of poverty only approximates the income levels used to define individual poverty by the U.S. Bureau of the Census. During the period of 1992-95 when NAWS collected data on individual income, the definition of the poverty threshold changed. For the calendar years 1992 and 1993, farmworkers whose annual income was less than \$5,000 were considered to live in poverty. For 1994 and 1995, the poverty threshold was defined by NAWS as less than \$7,500. Accordingly, it can be estimated that between 44% and 67% of the Florida farmworkers interviewed ^(Note 4) would be classified as living in poverty. ^(Note 5)

Note 3: NAWS did not distinguish between years of education received in the United States and years of education received in other countries.

Note 4: Because the data presented in Table 9 corresponds to the aggregate of workers interviewed in a period from 1992 through 1995 and the threshold to define poverty changed within that period, the 44% figure represents the percentage of workers living below the poverty threshold using the 1992-1993 definition of poverty, and the 67% figure represents the percentage of workers living below the poverty threshold using the 1994-1995 definition of poverty.

Table 9. Individual income from agriculture, NAWS, 1992 - 1995

ANNUAL INDIVIDUAL INCOME FROM FARM WORK	ALL
Under \$500	9%
\$500 - \$999	3%
\$1,000 - \$2,499	13%
\$2,500 - \$4,999	19%
\$5,000 - \$7,499	23%
\$7,500 - \$9,999	14%
\$10,000 - \$12,499	9%
\$12,500 & over	10%
TOTAL	100%
Number in sample	715

Information on annual personal farm work income was missing for 209 subjects in the sample.

When total household income and household composition are evaluated to classify farmworker's poverty status, 66% of farmworkers are living at or below the poverty threshold. A greater percentage of migrant farmworkers (73%) live at or below the poverty threshold as compared to seasonal farmworkers (54%) (Table 10). Gender makes no appreciable difference in poverty status.

Table 10. Poverty status, NAWS, 1989 – 1995

HOUSEHOLD POVERTY STATUS	ALL	MIGRANT	SETTLED	MALE	FEMALE
Living above poverty threshold	34%	27%	46%	33%	35%
Living at or below poverty threshold	66%	73%	54%	67%	65%
TOTAL	100%	100%	100%	100%	100%
Number in sample	2,212	1,153	929	1,650	562

Information on household poverty status was missing for 660 subjects in the sample.

Information on household poverty status by type of worker was missing for 790 subjects in the sample.

Information on household poverty status by gender was missing for 660 subjects in the sample.

Note 5: Table 9 presents income categories based on individual earnings exclusively from farm work. Some farmworkers do non-farm work in addition, thus increasing their total individual income. The proportion of farmworkers in the Southeast region who also engage in non-farm work has been estimated at 24%.³ Therefore, the overwhelming majority of farmworkers (76%) depend on agriculture as their only source of income.

Florida hired farmworkers' characteristics as compared with those reported for farmworkers nationwide**Demographics**

- While 68% of farmworkers in Florida are migrant workers, only 47.4% of farmworkers nationwide travel in pursuit of agricultural work.¹
- The gender distribution of Florida hired farmworkers (82% male, 18% female) is very similar to that of farmworkers nationwide (80% male, 20% female).³
- The age distribution of Florida's farmworkers is slightly shifted towards the younger age groups, when compared to farmworkers across the U.S. Forty-eight percent of farmworkers in Florida are younger than 26 years of age. Nationally, 37.5% of farmworkers are younger than 25^(Note 6) years.³
- 86% of Florida's farmworkers identified themselves as Hispanic, the corresponding number for the national sample was 78%.³

Language

- While only 65% of farmworkers nationwide consider Spanish their primary language, Spanish is the primary language for 83% of Florida's farmworkers.⁴
- 40% of farmworkers nationally report they speak English well.⁴ The corresponding figure for Florida is 19%.
- While 36% of farmworkers in the national sample reported that they read English well, only 14% of Florida's farmworkers reported that they could read English well.⁴

Note 6: The range of ages being compared do not exactly overlap.

Education

The proportion of farmworkers reporting less than twelve or more years of education is very similar for Florida (76%) and the nation (75%).⁴

Income

- 66% of Florida's farmworker households are living at or below the poverty threshold. Nationally, 61% of farmworkers live below the poverty line.³

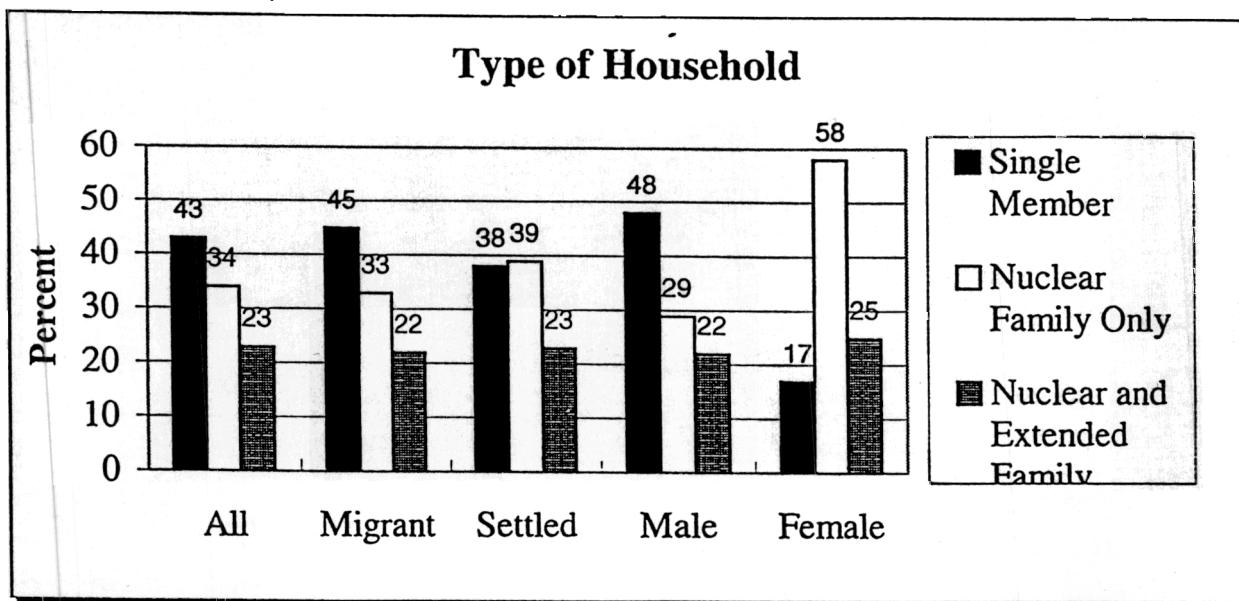
References

1. Mines R. Personal Communication, 1998.
2. Boccalandro B. Personal communication, 1998.
3. Mines R, Gabbard S, Steirman A. A Profile of U.S. Farm Workers. Washington DC: U.S. Department of Labor, 1997.
4. Mines R, Gabbard S, Boccalandro B. Findings from the National Agricultural Workers Survey (NAWS) 1990. Washington DC: U.S. Department of Labor, 1991.

SECTION IV: HOUSEHOLD COMPOSITION

Close to half (43%) of hired Florida farmworkers reported their household as composed of one member. Fifty seven percent of farmworkers reported households composed of two or more members ^(Note 1). The proportion of single member households^(Note 2) was greater for migrant (45%) than settled (38%) workers. Close to half (48%) male farmworkers and only 17% of females report living in a single member household (Figure 5).

Figure 5. Household composition by type of worker and by gender,
NAWS, 1989 – 1995



Overall, 34% of Florida's farmworkers described their family group as composed of either a couple with no children, a single parent with children, or a couple with children. Their household composition is categorized as "nuclear family only".

Note 1: Members of a farmworker household do not necessarily reside with the farmworker at the worksite. Some members of a farmworker household may reside outside of the United States

Note 2: Farmworkers were considered "single" if they did not live with and shared income with family members. They may have shared living quarters with others.

The percentage of farmworkers living in "nuclear family only" households is higher among settled farmworkers (39%). Twenty three percent of farmworker families include both the nuclear family group and relatives or non-family members. These households are classified as "nuclear and extended family". The proportion of "nuclear and extended family" households does not differ between migrant and settled farmworkers, but it is slightly higher among female farmworkers.

In the NAWS, farmworkers are asked to describe their family composition including both family members residing in the U.S. and family members living abroad. When all members are included, farmworker families average three members, and range in size from 2 to 13 members. If family members living outside the U.S. are excluded, the average number of family members becomes slightly lower than 3 (2.85), and the range becomes 1 to 13 (Table 11).

Table 11. Households composed of families; NAWS, 1989 - 1995

	Number of household members	Number of household members living in the U.S. at the time of the interview
Mean	2.98	2.85
Median	3	2
Mode	2	1
Range	2 - 13	1 - 13
Number in sample	1,025	1,025

Farmworker children

Overall, 39% of the farmworkers sampled had children. The proportion of farmworkers with children was higher for settled (46%) than for migrant (36%) workers. Two thirds of farmworker women had children, while only one third of farmworker men had children (Figure 6).

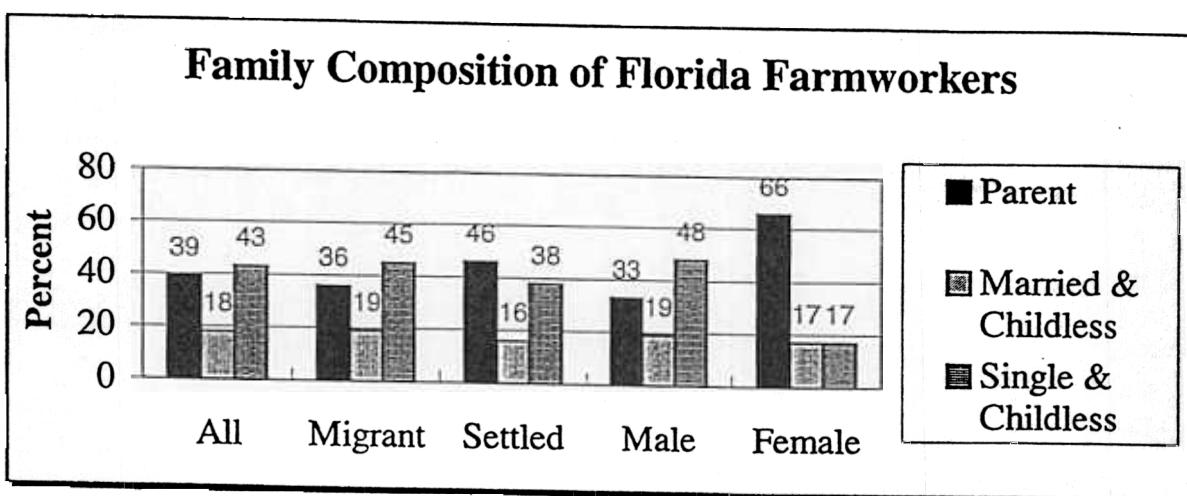
Figure 6. Farmworkers and dependents, NAWS, 1989 – 1995

Table 12 represents the mean and range of children 0 - 14 years of age in farmworker households. The numbers presented are based on the total sample, which includes households composed of single individuals as well as households that are composed of "nuclear" or "nuclear and extended" families ^{Note 3}.

Table 12. Number of children 0-14 years of age in farmworker households

NUMBER OF CHILDREN 0-14 YEARS OLD	ALL	MIGRANT	SETTLED	MALE	FEMALE
Mean	0.47	0.35	0.72	0.33	1.12
Range	0-8	0-6	0-8	0-8	0-8
Number in sample	2,872	1,500	1,226	2,196	676

Information on number of children 0-14 in household by type of worker was missing for 146 subjects in the sample

Figures 7 and 8 depict the information presented in Table 12 in a more readily understandable format. There are five children 0-14 years of age for every 10 farmworkers. The ratio of children to farmworkers is higher for settled (7 children 0-14 years of age per 10 settled farmworkers) than for migrant farmworkers (4

Note 3: At the national level, it has been estimated that only 55% of farmworker children are living in the U.S. at any given time¹.

children per 10 migrant farm workers). While there are roughly 3 farmworker children for every 10 male farmworkers, there are 11 children 0-14 years of age for every 10 female farmworkers.

Figure 7. Average number of children 0-14 years of age in farmworker households by type of farmworker, NAWS 1989 - 1995

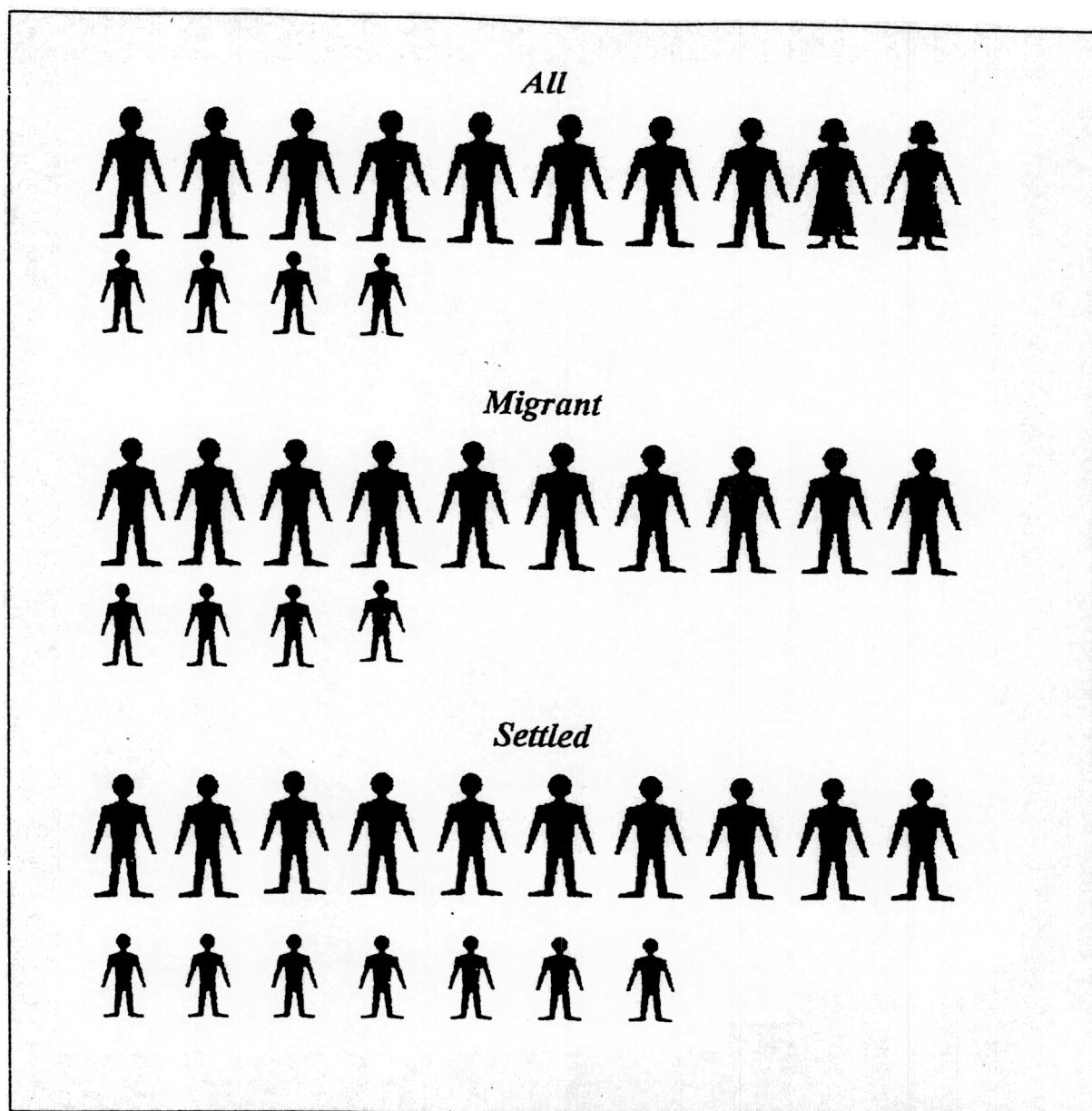
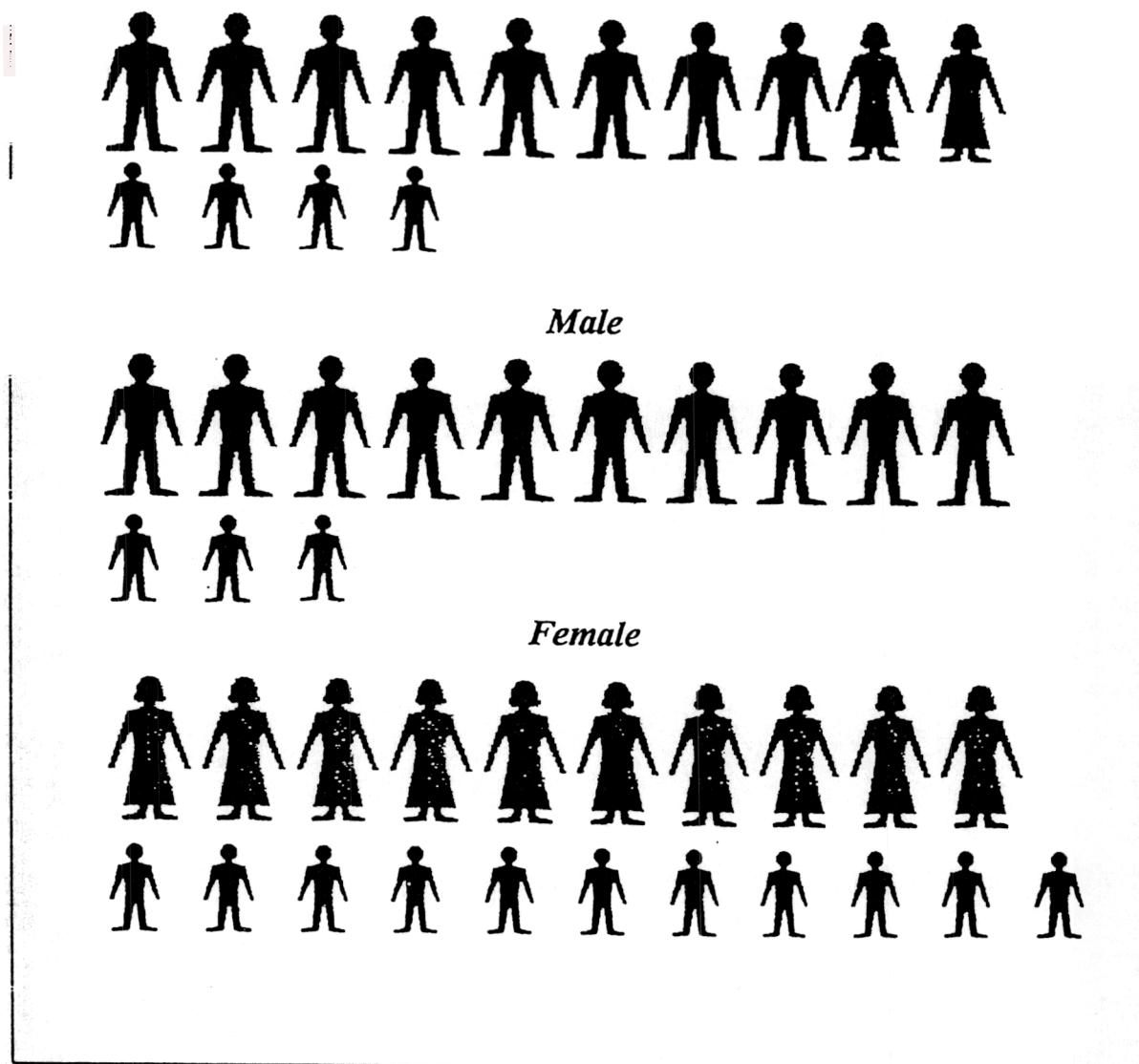


Figure 8. Average number of children 0-14 years of age in farmworker households by gender of farmworker, NAWS 1989- 1995



Reference

Mines R. Personal Communication , 1998

SECTION V: OCCUPATIONAL PROFILE

Patterns of employment

One of the characteristics of migrant and settled farmworkers (MSFW) is that they work on a temporary basis, often for several employers in the course of a year, and therefore do not usually have work in agriculture for all 12 months of the year. This does not mean that MSFW do not want to work full-time. The 1990 NAWS found that 74% of seasonal agricultural service (SAS) workers were willing to work more if the SAS work was available. Moreover, the report found that 72% of these farmworkers intended to remain in seasonal agricultural work for the next five years.¹

Florida's settled farmworkers average 9.3 months of farm work in a year, while Florida's migrant farmworkers average 7.9 months of farm work annually. Yet, half of settled farmworkers work at least 10 months per year (median), and half of migrant farmworkers work at least 7 months in a year. In addition, the single length of farm work most often encountered (mode) was 12 months for settled farmworkers and 10 months for migrant farmworkers (Table 13).

Table 13. Number of months devoted to U.S. agricultural work - Settled and Migrant Florida Hired Farmworkers, NAWS 1989 - 1995

NUMBER OF MONTHS	SETTLED	MIGRANT
Mean	9.3	7.6
Median	10	7
Mode	12	10
Range	0-12	0-12
Number in Sample	1,226	1,500

Information on number of months devoted to U.S. agricultural work by type of worker was missing for 146 subjects.

Type of Crops Worked

Both migrant and settled farmworkers are involved mainly in the production of vegetables, horticulture and fruits and nuts (Table 13), yet the proportion of settled farmworkers involved in horticulture (31%) is much greater than the proportion of migrant farmworkers (12%) working in horticulture. Migrant farmworkers are relatively more involved in the production of vegetables and fruits and nuts than settled farmworkers. In addition, migrant farmworkers are more involved in the production of field crops than settled farmworkers.

Table 14. Percent of Settled and Migrant Farmworkers who work specific types of crops (anywhere in U.S. during a one year time frame), NAWS; 1989 - 1995.

TYPE OF CROP	% SETTLED	% MIGRANT
Vegetables	46%	62%
Horticulture	31%	12%
Fruits and Nuts	27%	59%
Field Crops	5%	25%
Other	8%	8%
No. in sample	1226	1500

Information on specific types of crops worked by type of worker was missing for 146 subjects in the sample.

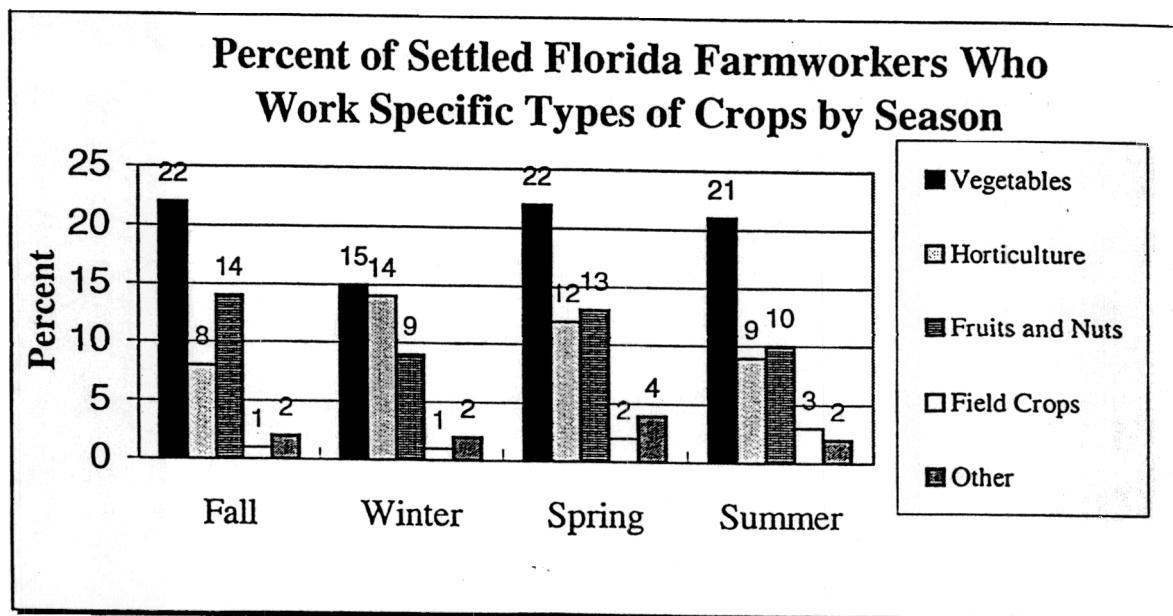
"Other" category consists of cases where farmworker works in more than one crop in one day.

Farmworkers who work in more than one crop per season are counted more than once.

The seasonal involvement of settled and migrant farmworkers who work in the production of vegetables, fruits, nuts and field crops corresponds to the need for extra farm labor in Florida during labor-intensive peaks such as planting and harvesting.^{2, 3} Settled farmworkers exhibit a relatively stable pattern of involvement in crop production throughout spring, summer and fall: close to a quarter (21% to 22%) of settled farmworkers work in vegetables, between 10% and 14% work in fruits and nuts, and 10% to 14% work in horticulture (Figure 8). During the winter season, the relative involvement of settled farmworkers in vegetable, fruit and nut production drops, and their involvement in horticultural work rises. The percentage of settled farmworkers participating in field crop

production remains low throughout the seasons, with a maximum of 3% involvement during the summer months.

Figure 9. Settled Florida Hired Farmworkers by type of crop by season. NAWS, 1989 – 1995

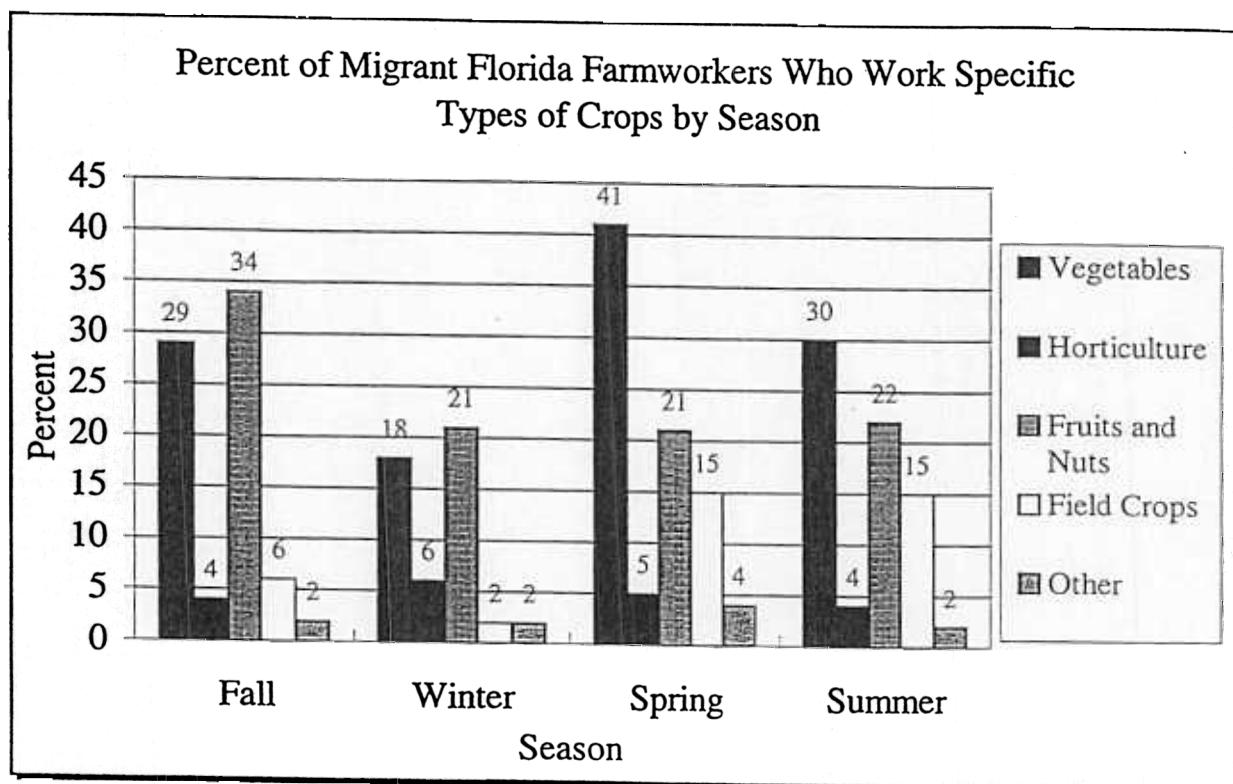


Sample: 1,226 settled farmworkers.

*"Other" category consists of cases where farmworker works in more than one crop in one day.
Farmworkers who work in more than one crop per season are counted more than once.*

Florida's migrant farmworkers also exhibit a changing pattern of employment throughout the seasons (Fig. 10). There is a consistently high level of involvement in the production of vegetables, fruits and nuts, but the relative magnitude of participation in these crops changes, with a maximum level of work devoted to vegetables in the spring and summer, and to fruits and nuts in the fall and winter. While migrant farmworkers' involvement in horticulture remains fairly stable across the seasons, their work in the production of field crops peaks during the spring and summer months.

Figure 10. Migrant Florida Hired Farmworkers by type of crop by season
NAWS, 1989 - 1995



Sample: 1,500 migrant farmworkers.

"Other" category consists of cases where farmworker works in more than one crop in one day.

Migrant farmworkers who work in more than one crop per season are counted more than once.

Types of Agricultural Tasks

Both migrant and settled farmworkers are mainly involved in harvest and pre-harvest tasks, yet settled farmworkers appear to participate more in pre-harvest tasks, while migrant farmworkers are more frequently employed in harvest tasks (Table 15). Settled farmworkers seem to have greater participation in semi-skilled tasks, and in supervisory work.

Table 15. Percent of Settled and Migrant Florida Farmworkers who work specific types of tasks, NAWS, 1989 – 1995

TYPE OF TASK	% SETTLED	% MIGRANT
Harvest	50%	86%
Pre-Harvest	45%	38%
Semi-Skilled	21%	17%
Post-Harvest	16%	17%
Supervisory	2%	1%
Number in Sample	1226	1500

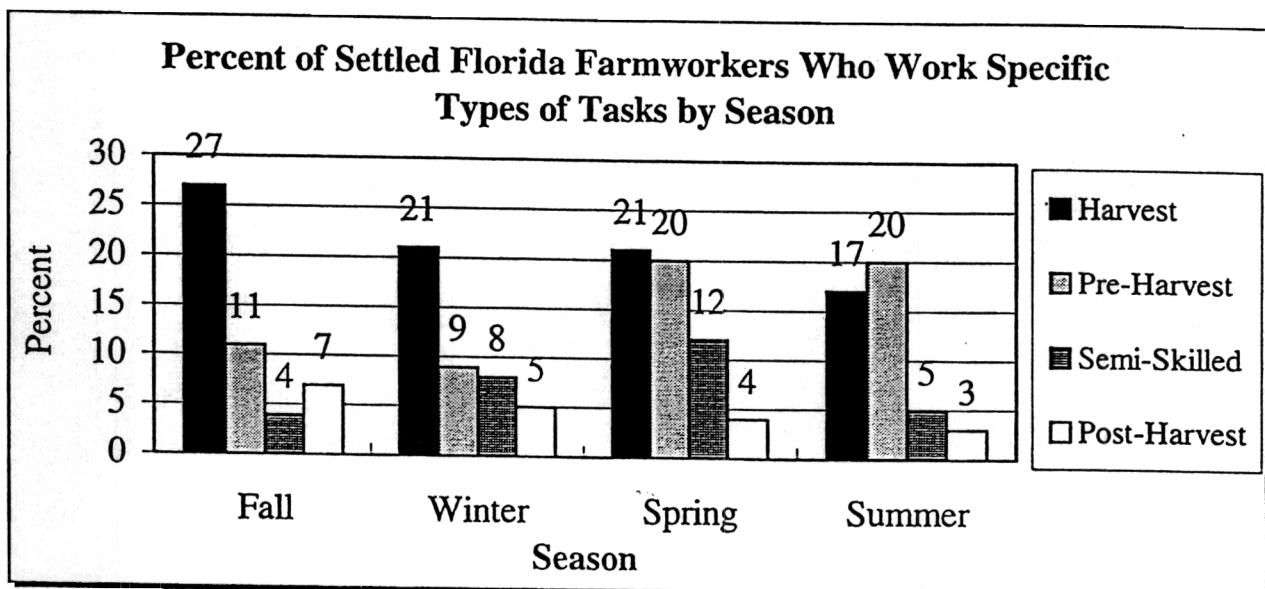
Information on tasks worked per type of worker was missing for 146 subjects.

Percentage total is greater than 100% because farmworkers who work in more than one task are counted more than once.

The relative involvement of settled farmworkers in harvest tasks is greater in fall and lowest in summer (Figure 11). One fifth (20%) of settled farmworkers participate in pre-harvest tasks during the spring and summer months. The proportion of settled workers in pre-harvest tasks drops in the fall and winter. The relative involvement of settled farmworkers in semi-skilled tasks rises in the winter and spring months. The greatest relative involvement of settled farmworkers in post-harvest tasks occurs in the fall, but remains low throughout the year.

Roughly half or more of Florida migrant workers are involved in harvest tasks during the spring, summer and fall months, and 35% of them do harvest work during the winter (Figure 12). Migrant workers relative participation in pre-harvest tasks is highest in the spring and drops throughout the summer, fall and winter months. Migrant farmworkers' relative participation in semi-skilled and post-harvest tasks remains low throughout the seasons.

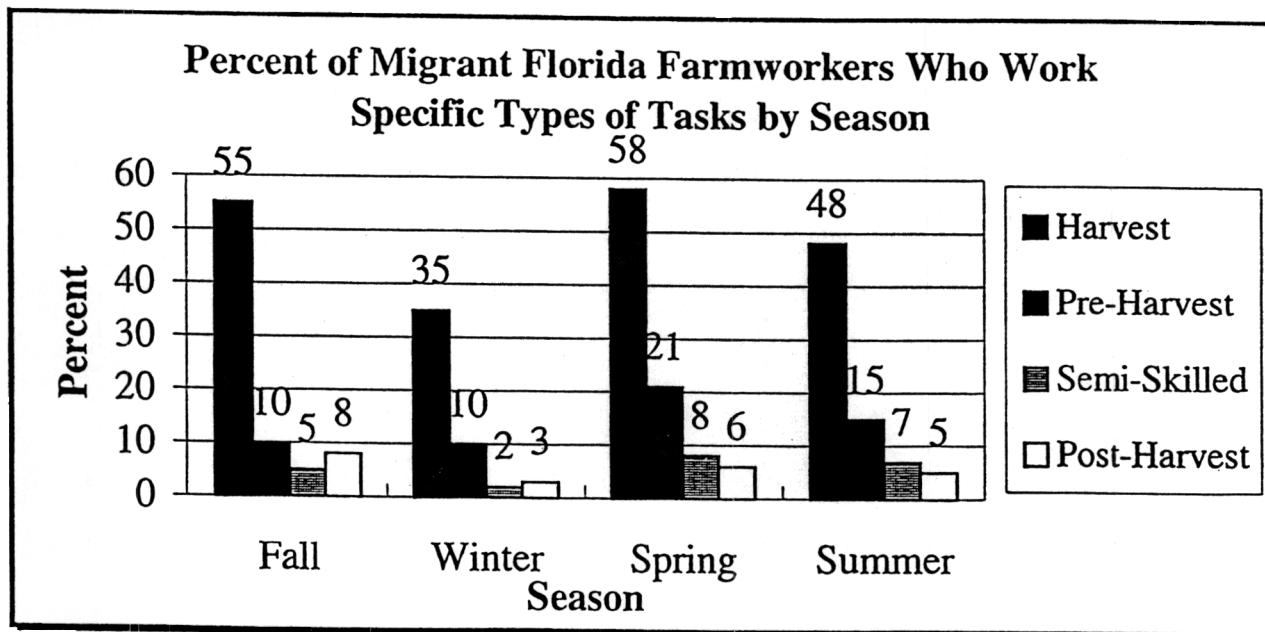
Figure 11. Settled Florida Hired Farmworkers by type of task by season, NAWS, 1989 – 1995



Sample: 1,226 settled farmworkers.

Farmworkers who work at several tasks may be counted more than once.

Figure 12. Migrant Florida Hired Farmworkers by type of task by season. NAWS, 1989- 1995

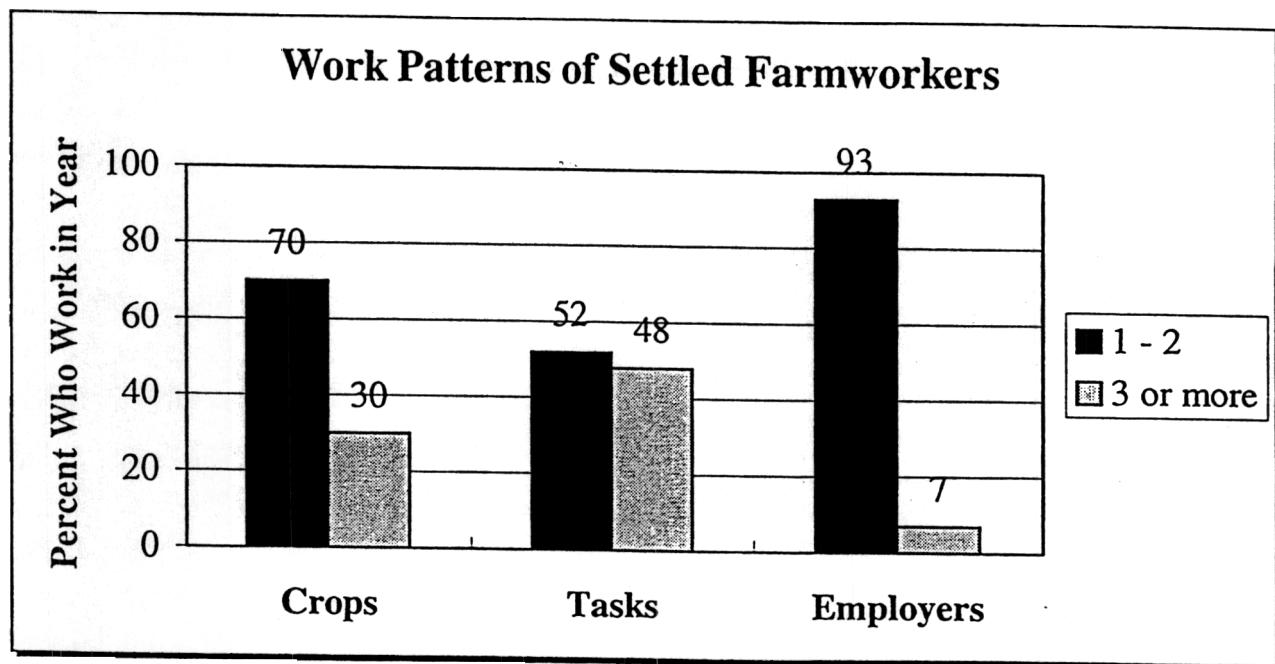


Sample: 1,500 migrant farmworkers.

Work patterns

Settled farmworkers exhibit relatively stable patterns of employment. Seventy percent of settled farmworkers work one or two crops, 52% do between one and two tasks, and 93% have worked for one or two employers in a year (Figure 13). In contrast, only 28% of migrant farmworkers work one or two crops. The majority of migrant farmworkers work three or more crops. Only 29% do one to two tasks, while 71% of migrant workers perform three or more tasks. Unlike settled farmworkers, only 68% of migrant farmworkers work for one to two employers per year,^(Note 1) 32% report three or more employers in a year (Figure 14).

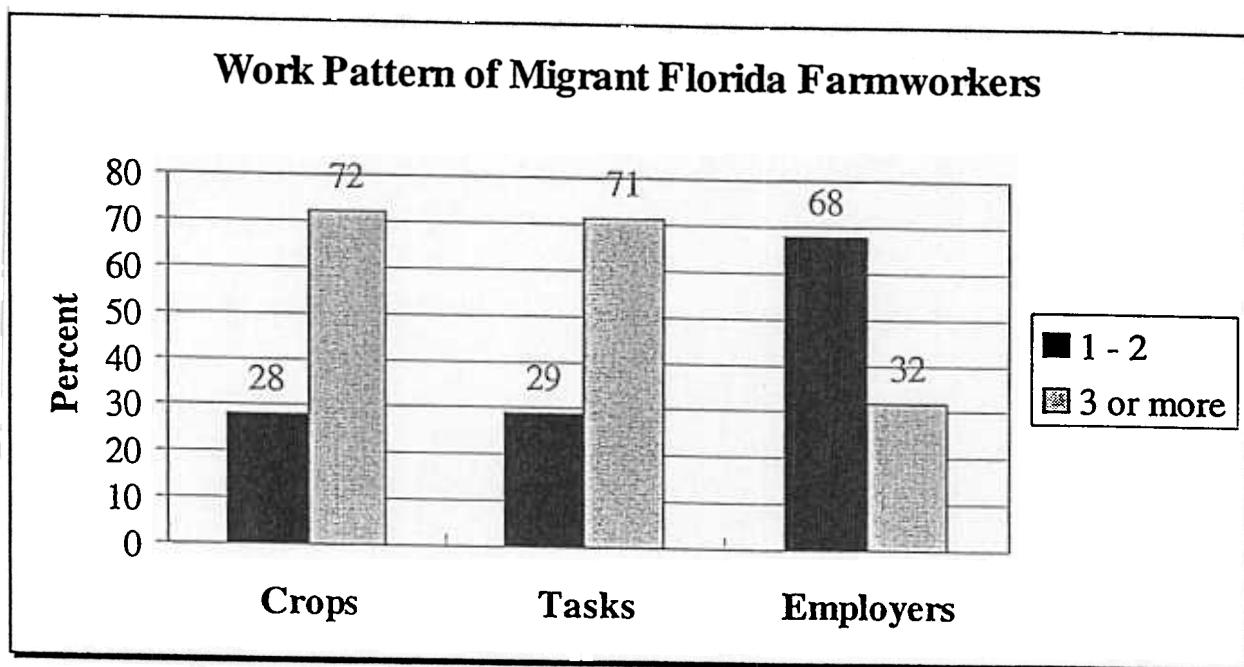
Figure 13. Work pattern of Settled Florida Farmworkers. NAWS, 1988 - 1995



Information on number of months devoted to U.S. agricultural work was missing for 146 subjects.

Note 1: Both migrant and settled farmworkers may work for labor contractors. Thus, they may consider the labor contractor their employer, yet they will be doing work for several different agricultural employers (farm owners/operators)

Figure 14. Work pattern of Migrant Florida Farmworkers. NAWS, 1988 - 1995



Sample: 1,500 migrant farmworkers

Patterns of residence and migration

Settled farmworkers spend an average of 11.5 months in Florida throughout the year. While the range of length of residence in Florida for settled farmworkers was between 0 and 12 months, at least half of settled workers (median) reported living in Florida for 11 or more months. The response most frequently given (mode) was 11 months (Table 16).

Migrant farmworkers spent on average 6.3 months in Florida. The range of responses regarding length of residence in Florida was between 0 and 12 months, yet half of the sample of migrant farmworkers (median) reported living in Florida for at least six months and that was also the response most frequently given (mode) (Table 16).

Table 16. Number of months spent in Florida - Settled and Migrant Florida Hired Farmworkers, NAWS, 1989 – 1995.

MONTHS IN FLORIDA	SETTLED	MIGRANT
Mean	11.5	6.3
Median	11	6
Mode	11	6
Range	0-12	0-12
Number in Sample	1,226	1,500

Information on number of months spent in Florida by type of worker was missing for 146 subjects.

Only 24% of migrant farmworkers limit their travel within Florida. The majority of migrant farmworkers (76%) travel both within and outside Florida. Georgia (22%), North Carolina (15%), Kentucky (10%) and New Jersey (15%) were the most frequent places cited for work outside of Florida. Although the majority of migrant farmworkers travel unaccompanied (71%), a sizable proportion (29%) travels with at least one member of their family.

Unemployment

The majority of farmworkers report having worked for at least 10 months in the year previous to the interview. The proportion of farmworkers working for at least ten months (unemployed for less than 59 days) was higher among migrant (76%) than among settled (67%) farmworkers. Similar proportions of settled and migrant farmworkers (25% and 22% respectively) reported having been out of agricultural work for two to five months. Only 8% of settled farmworkers and 2% of migrant farmworkers report unemployment periods greater than five months.

References

1. Mines R, Gabbard S, Boccalandro B. Findings from the National Agricultural Workers Survey (NAWS) 1990. Washington DC: U.S. Department of Labor, 1991.
2. Gabbard S, Mines R, Boccalandro B. Migrant Farmworkers: Pursuing Security in an Unstable Labor Market. Washington, DC: U.S. Department of Labor, 1994.
3. Oliveira VJ, Effland ABW, Runyan JL, Hamm S. Hired Farm Labor Use on Fruit, Vegetable, and Horticultural Specialty Farms. Washington, DC: US Department of Agriculture, 1993.

SECTION VI: HEALTH-RELATED CHARACTERISTICS

The NAWS incorporates some questions related to health care needs and health care resources used by farmworkers. Starting in 1989, questions were asked regarding employer-provided health insurance, and employer-provided pay for days lost due to work-related injuries. Starting in 1992, a set of questions related to the need for medical assistance while working in the United States, the source of health care and perceived access to health care were incorporated in the survey.

Access to health care

Only 24% of surveyed farmworkers reported having needed medical assistance in the two years previous to the survey. The number is consistent with the fact that the majority of farmworkers are young and male ("healthy worker effect").¹ The NAWS does not ask about medical assistance needed by members of a farmworker household other than the person responding to the interview. Thus, the 24% figure does not reflect the medical needs of farmworker dependents, particularly female partners of farmworkers in their child-bearing years; neither does it reflect the health needs of older members of a farmworker household who may not be actively employed.

When asked about their perceived access to health care, 61% of farmworkers reported that it was easy to get the medical assistance they needed. However, a sizable 39% of farmworkers considered that it was difficult to get medical assistance when needed.

When asked about sources of medical assistance available to farmworkers, the single most frequently cited source of medical assistance was the emergency room/hospital, mentioned by 27% of the respondents. Roughly a third (34%) of the sample mentioned either a Community Health Center, a Migrant Clinic or a Public Health Department as their main source of health care. Table 17 details the sources of medical care mentioned by farmworkers. Of note, 9% of farmworkers reported that they had no source of medical assistance available to them.

Table 17. Sources of medical assistance in the United States, NAWS 1992-1995

SOURCE OF MEDICAL ASSISTANCE	ALL FLORIDA FARMWORKERS
Emergency Room/Hospital	27%
Community Health Center	13%
Migrant Clinic	13%
Private Physician	13%
Public Health Department	8%
I Go to My Country	5%
Other	12%
None	9%
TOTAL	100%
No. in sample	813

Information on source of medical assistance was missing for 111 workers in the sample

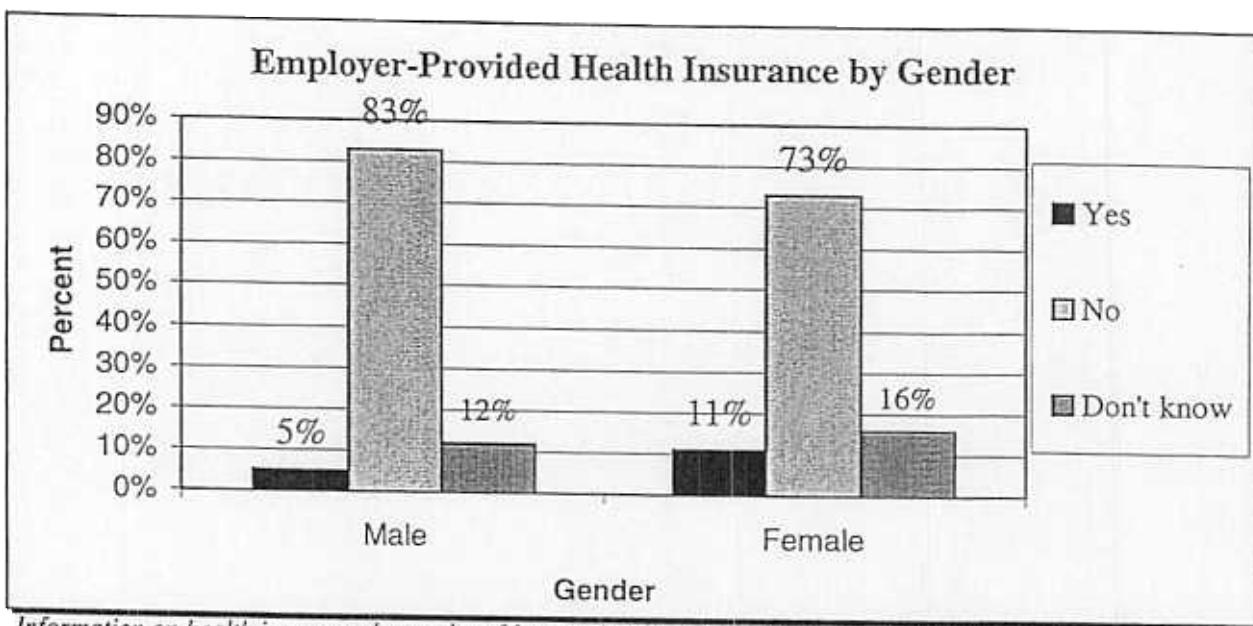
Employer-provided health insurance

Overall, only 6% of the participants reported that they had employer-provided health insurance. The great majority of farmworkers reported that they did not have health insurance (81%) or that they did not know whether their employer provided health insurance (13%). While 12% of settled farmworkers had health insurance provided by their employers, only 3% of migrant farmworkers reported that their employers provided health insurance (Table 18). More women (11%) than men (5%) had employer-provided health insurance (Fig 15).

Table 18. Employer-Provided Health Insurance by Type of Farmworker, NAWS 1989-1995

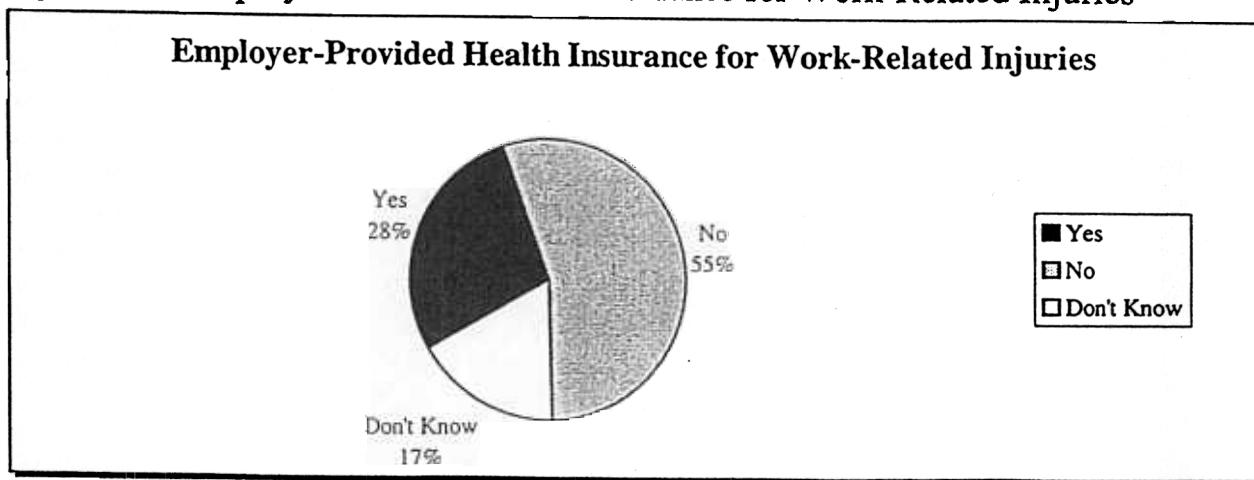
COVERED?	ALL	MIGRANT	SETTLED
No	81%	85%	73%
Yes	6%	3%	12%
Don't know	13%	12%	15%

Information on health insurance was missing for 27 persons in the sample and on health insurance by type of worker for 171 persons.

Figure 15. Employer-Provided Health Insurance by Gender, NAWS 1989-1995

Coverage for work-related injuries

Twenty-eight percent of respondents reported some kind of employer-provided pay for health care to treat injuries or sicknesses related to farm work. Fifty-five percent of farmworkers reported that employers would not pay for health care if injured in the job, and 17% did not know whether their employer would pay for health care in case of a work-related injury (Figure 16).

Figure 16: Employer-Provided Health Insurance for Work-Related Injuries

Payment for days of work lost due to work-related injuries

Only thirty one percent of farmworkers receive some kind of payment for days of work lost due to work-related injuries (Figure 17). More settled (39%) than migrant (27%) farmworkers get some payment for days of work lost due to injury in the job. Farmworker women receive payment more often than men (Table 19).

Figure 17. Employer-Provided Payment of Days Lost Due to Work-Related Injuries, NAWS, 1989 - 1995

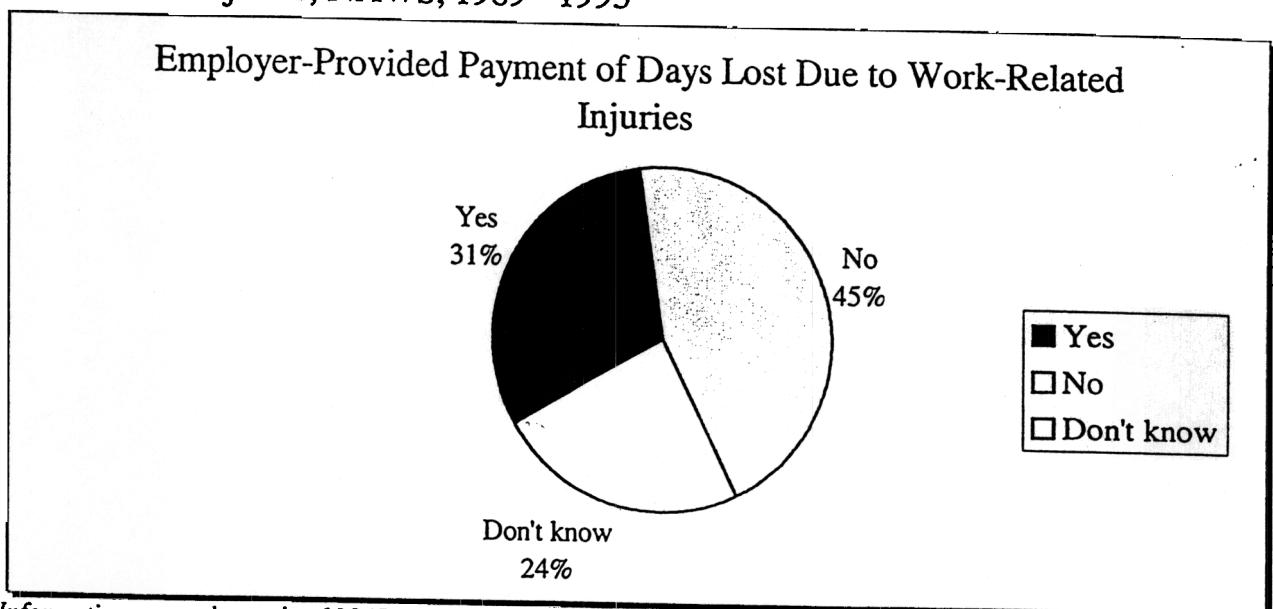


Table 19. Employer-Provided Payment of Days Lost due to Work-Related Injuries by Type of Worker and Gender, NAWS; 1989 - 1995

COVERED?	MIGRANT	SETTLED	MALE	FEMALE
No	48%	38%	46%	40%
Yes	27%	39%	30%	35%
Don't know	25%	23%	24%	25%

Information on employer-provided payment of days lost due to work-related injuries by type of worker was missing for 171 subjects and information by gender missing for 27 subjects.

Reference

- 1 Last JM. A Dictionary of Epidemiology. New York: Oxford University Press, 1995.

SECTION VII: HIGHLIGHTS OF FINDINGS

One of the main objectives of the present study was to provide a demographic picture of Florida's migrant and settled farmworkers to be used by health care professionals serving farmworkers in the state of Florida. Several of the findings reported have direct implications for health care service providers:

- **The majority (68%) of Florida's farmworkers are migrant as opposed to settled farmworkers.**

The percentage of the farmworker population that migrates in pursuit of agricultural work is much higher in Florida than the national farmworker population (47.4% migrant).¹ Close to a third (29%) of migrant farmworkers travel with family members. The provision of health care to a transient population presents special challenges such as ensuring consistency and continuity of care, appropriate follow-up for the treatment of acute or chronic conditions, and the need for good record-keeping as well as capacity for data transfer between clinics. In addition, there is a need for standardized eligibility between state Medicaid plans and portability of benefits for migrant workers. ²⁻⁴

- **Florida's farmworkers are young (42% under 26 years) and mostly male (82%).**

Young male adults have specific health care needs. In addition to medical services related to infectious diseases, and in particular sexually transmitted diseases, the young male farmworkers are prone to acute or chronic occupationally related diseases such as contact dermatitis and pesticide poisoning. Accidents in the workplace or elsewhere are also of special concern.

In addition, young male farmworkers would benefit from health promotion activities related to injury prevention, alcohol or drug abuse prevention,

prevention of domestic violence or other mental health services. Because these workers may not seek health promotion services, special outreach efforts need to be conducted to reach them. The health promotion/protection activities related to this group of workers represent a formidable challenge to health services providers, which are funded mainly for the provision of episodic medical services.

- **The majority of Florida's female farmworkers are of childbearing age and 66% have at least one child.**

Farmworker women require prenatal, obstetrical and gynecologic services, and their children require well-child care, as well as pediatric services. There is a need for counseling services for special problems like teenage pregnancy and family violence. In addition to health care, farmworker women require safe childcare for their children and other family support services.

Farmworker women have stressed the need for educational programs aimed at teenage children concerning AIDS, drug abuse, and other issues.^{3, 5}

- **Most (86%) of Florida's farmworkers are Hispanic.**

A majority (83%) consider Spanish as their primary language. Thus bilingual and culturally sensitive communication is essential in the provision of services. Not only is there a need to recruit multilingual, multicultural health care providers, but also there should be language training for current staff.^{2, 4}

- **A large proportion of Florida's farmworkers (86%) has less than 12 years of schooling.**

Thirty-five percent of the Florida farmworkers did not complete eight years of school. Many farmworkers may have some difficulty reading and writing even in their native language. Educational materials geared at farmworkers must be easy to read and understand. Furthermore, because 86% of farmworkers can not read English well, it is important that health-related

materials be bilingual or trilingual (including Creole), and culturally sensitive.²

- **Most (66%) of Florida's migrant and settled farmworkers live at or below the poverty level.**

This means this population is less likely to be able to afford private health care, prescriptions, special dietary regimens, or other requirements of good medical or dental health care. Few can afford to lose a day's wages to seek medical care and they often lack transportation to health care clinics. Even if they qualify for health care assistance programs, they may not apply due to complicated income documentation requirements or misunderstanding legal status requirements. The problem is even worse for migrants who may move before assistance is approved, and are required to restart the application process.^{2, 4, 6}

- **Only 6% of migrant and settled farmworkers in Florida have employer-provided health insurance,**

and only 28% reported that their employers would pay for medical treatment of a work-related injury. Roughly a third (31%) of farmworkers receive some employer-provided payment for workdays lost due to work-related injuries.

Agriculture has been characterized as the second most dangerous occupation in the U.S. Florida's farmworkers, as farmworkers nationwide, are at risk of occupationally related health injuries and exposures.^{3, 6} Efforts should focus on the promotion of safety in the workplace, and the provision of compensation for work related injuries.

Conclusions

At least half of Florida's migrant farmworkers spend six months living and working in the State. At least half of Florida's settled farmworkers spend eleven months in Florida. They constitute a versatile workforce willing to

shift tasks as required to meet the seasonal, labor intensive peaks in crop production, which in turn makes up 81% of the state's farm cash receipts.⁷

The present report outlines important demographic, occupational and health-related characteristics of Florida's temporary (migrant and settled) agricultural workforce. The information provided relates only to hired farmworkers, yet it offers a glimpse of farmworker families as described by the interviewed worker.

"Farmworkers are a diverse population... In the absence of adequate information, farmworker health care services planning, delivery and evaluation is necessarily based on weak generalizations and assumptions about farmworker health care needs. Such generalizations and assumptions provide little guidance in the prioritization of needs and in resource allocation".² Although the information contained in the present report is a small fraction of the information needed on the farmworker population, it advances our understanding of Florida's hired farmworkers, and should provide a resource to health care providers who tend to the health care needs of Florida's farmworker population.

References

1. Mines R. Personal Communication, 1998.
2. National Advisory Council on Migrant Health. 1993 Recommendations of the National Advisory Council on Migrant Health. Rockville, MD: Bureau of Primary Health Care, 1993.
3. National Migrant Resource Program I. Migrant and Seasonal Farmworker Health Objectives for the Year 2000. Austin, TX: National Migrant Resource Program, Inc., 1990.
4. Migrant Clinicians Network. Blueprint for Migrant Health: Health Care Delivery for the Year 2000. Migrant Clinicians Network Monograph Series 1992.
5. Wilk VA. Farmworker Women Speak Out. Washington, DC: Farmworker Justice Fund, Inc., 1994.
6. National Advisory Council on Migrant Health. Losing Ground: The Condition of Farmworkers in America. Bethesda, MD: DHHS/Health Resources and Services Administration, 1995.
7. Florida Agricultural Statistics Service. Farm Cash Receipts and Expenditures - 1996. Orlando, FL, 1997.

RECEIVED JAN 5



December 30, 1998

Ms. Roberta Ryder
Executive Director
National Center for Farmworker Health
1515 Capitol of Texas Hwy.S., Suite 220
Austin, TX.78746

Dear Ms. Ryder:

We are pleased to present you with the report "A PROFILE OF DEMOGRAPHIC, OCCUPATIONAL, AND HEALTH-RELATED CHARACTERISTICS OF THE MIGRANT AND SETTLED (SEASONAL) HIRED FARMWORKER POPULATION OF FLORIDA".

The report aims at providing basic information on the characteristics of migrant and settled farmworkers (MSFW) who live and work in Florida, with an emphasis on data useful to evaluate their health care needs. The report was written based on information gathered by the National Agricultural Workers Survey (U.S. Department of Labor), and it is the first of its kind to detail the specific characteristics of Florida's MSFW population. The report's focus on health-related information makes it unique in the nation.

The report provides:

- ✓ Detailed demographic characteristics of Florida farmworkers, and a description of the composition of farmworker households (Sections III and IV)
- ✓ An outline of the occupational profile of MSFW, including worker's patterns of residence and migration (Section V)
- ✓ An outline of sources of health care used by farmworkers, and their access to employer-provided health insurance, as well as data related to coverage for occupational injuries (Section VI)
- ✓ Highlights of findings, as they relate to the provision of health care services to Florida's MSFW (Section VII)
- ✓ A discussion of the limitations of the data presented (Addenda)

The report was written with funding provided by the University of South Florida Health Education and Training Centers (HETC), and the Department of Epidemiology and Biostatistics, USF College of Public Health. It is being distributed, free of charge, to Migrant and Community Health Centers in Florida, as well as community-based and state/national level organizations serving farmworkers. The report's main objective is to provide data useful to determine the health needs of MSFW, which in turn can be used both to substantiate the need for funding allocation and to guide the distribution of resources in the provision of health care.

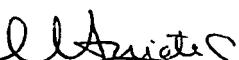
Department of Epidemiology and Biostatistics, College of Public Health

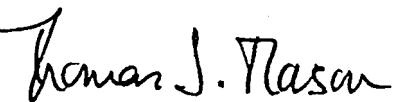
University of South Florida • 13201 Bruce B. Downs Boulevard • MDC 56 • Tampa, Florida 33612-3805
(813) 974-4860 • Fax (813) 974-4719 • SUNCOM 574-4860

The University of South Florida is an Affirmative Action/Equal Access/Equal Opportunity Institution

We are aware that the data presented in this report is only a fraction of the data needed on the farmworker population. Yet, it enhances our understanding of Florida's farmworkers, and should prove useful not only to health care professionals, but to the many individuals and diverse organizations interested in advancing the status of farmworkers in Florida and nationwide. We look forward to continue working with you in support of Florida's farmworkers.

Sincerely,


Martha I. Arrieta, MD, MPH
Visiting Assistant Professor


Thomas J. Mason, Ph.D.
Chairman

PS:

Should you need any further information related to the present report, or to our research activities in the area of farmworker health, please contact:

Martha I. Arrieta, MD, MPH
Visiting Assistant Professor
Department of Epidemiology and Biostatistics
USF College of Public Health
marrieta@hsc.usf.edu
Phone: (334) 639-8199
Fax: (334) 633-4698
820 Pine Run Road
Mobile, AL 36695

Thomas J. Mason, Ph.D.
Chairman
Department of Epidemiology and Biostatistics
USF College of Public Health
tmason@com1.med.usf.edu
Phone: (813) 974-6675
13201 Bruce B. Downs Blvd, MDC 56
Tampa, FL 33612