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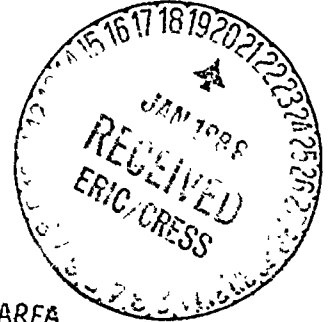
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ABSTRACT

Interviews with 160 solo individuals and 293 family members revealed demographic characteristics, health care status and needs, and income and spending patterns of migrant farmworkers in the Oak Orchard Community Health Center (New York) service area during 1983. Findings showed that the migrant population was estimated at 1,089 workers and dependents. Family households were 60% of Mexican American origin and 73% of Mexican American migrant households had more than four members. Families spent approximately 5 months in the area. The solo population was distributed among Afro American (34%), Jamaican (34%), Puerto Rican (19%), and other (13%) ethnic groups. Almost half of solo migrants were married and had families in their home state/country. All respondents perceived their own health as good and 34% of family respondents thought their families were in excellent health. However, 33% of solo and about 50% of family respondents reported at least one health problem. The leading health conditions were back and musculoskeletal problems. The Hispanic population made the greatest use of available health services while 33% of solo respondents did not know where they would go for needed medical care. Migrant farmworkers accounted for \$4.03 million being pumped into the local Oak Orchard area economy. (NEC)

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MIGRANT FARMWORKERS IN THE OAK ORCHARD HEALTH SERVICE AREA

A DESCRIPTIVE PROFILE
AND
ASSESSMENT OF HEALTH CARE
NEEDS AND ECONOMIC IMPACT

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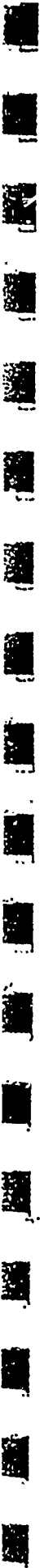
This study of a transient population has depended on the assistance of many people who know the migrant workers. Our sincerest thanks go to the administrators, teachers, and outreach workers of the Migrant Tutorial Program in Brockport, Brockport Child Care, and the Oak Orchard Community Health Center who graciously lent their time and advice during the survey. We are particularly indebted to Matthew Galleli, Sister Beverly Baker, Nancy Siembor, Laurie Kors, Brigitte Groth, Arlene Nellist, Joanne Melfi; Andres Fernandez and Caroline Braddock..

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Richard Morales with skill and perseverance supervised the collection of the interviews. Coding was performed conscientiously and patiently by Sharon Wabnick.

Last but not least we appreciate the cooperation of the employers, and we thank the many migrants for giving their spare time to disclose the vital information for this study.



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I. SUMMARY

Components of the Study

Estimation of the size of the migrant population

This part of the study required an estimate of the number of migrants who live in family units vs. those who live in single member households.

Survey of the migrant population

The survey was to provide the Health Center with a statistical description of the migrant population. Three general topics were addressed:

1. Demographic characteristics. These included age, sex, education, ethnicity, as well as information on the means of transportation, rate of return to the area and employment.
2. Health care. An assessment of self-perceived health status and need for health care; knowledge and use of local health services; satisfaction with local health services.
3. Income and spending. Information on seasonal earnings and spending in order to assess the economic impact of migrants on the Oak Orchard area.

Medical records review

The records review outlines the reasons for which migrants seek care at the Health Center and describes the characteristics of the visits.

Open-ended interviews with women

These interviews were planned in order to qualify the findings of the survey as well as to assess the attitudes of women towards health care for themselves and their children. While the information gained through these interviews is not representative for the migrant family population as a whole, it illustrates some of the issues which health care providers face in designing health care delivery policies.

SUMMARY OF FINDINGS

A. Size of the Population

The size of the migrant population for the 1983 season was estimated at 1089 worker and their dependents. This number can be divided into 538 individuals living in family households of two or more members, and 551 migrants living in single member households.

B. Characteristics of the Migrant Population

The migrant work force is ethnically and demographically heterogeneous. The need for health care and the use of local health services varies among different segments of the population.

1. Family population

- The greatest proportion (60%) of family households is of Mexican American ethnic origin; 27% are of Afro American, 13% are of Haitian, Jamaican, Puerto Rican, or other heritage.
- Mexican American households tend to be larger in size; only 27% of Mexican American households consist of fewer than four members, but 67% of Afro American households fall into this category.
- Families spend approximately five months of the year in the Oak Orchard area.
- The vast majority (95%) of the families have their own means of transportation.

2. Solo population

- Close to half of those migrants who lived in single member households were married and had families in their home state.
- The solo population is distributed among Afro American (34%), Jamaican (34%), Puerto Rican (19%), and other (13%) ethnic groups.
- Migrants working in processing plants stay in the Oak Orchard area twice as long (5 months) as other solo workers (10 weeks).
- Two thirds of the Afro American workers have their own means of transportation; only one-third of Jamaican and Puerto Rican workers have their own vehicles.

C. Self-Perceived Health Status and Need for Health Care

Family as well as solo respondents in the survey tended to perceive their own health as good. The health of family members (for the most part children) was considered to be even better: 34% of family respondents thought that their families were in excellent health.

1. Health problems

Despite this positive assessment of their health, one-third of the solo respondents and about one-half of the family respondents had at least one health problem. The leading health condition, which affected one-fifth to one-fourth of the migrants, were back and musculoskeletal problems.

- Women were more likely than men to be affected by a health problem.
- Among solo workers a greater proportion of Afro Americans (54%) than of any other ethnic group was suffering from some health problem.

2. Health care needs

Family respondents generally perceived a greater need than solo workers for various health services, such as general medical, visual, and dental care. Among solo respondents, Afro American workers consistently reported the greatest need for health care.

- Both types of respondents (family and solo) reported a strong need for dental care. In both groups, the need for dental care was greatest among Afro Americans.
- Family respondents were more likely than solo respondents to report a need for optometric care.
- More Afro American workers than members of any other ethnic group (solo as well as family respondents) felt in need of general medical care.

D. Use of Local Health Services

85% of the families had used health services in New York. Almost all of these families had received health care at the Oak Orchard facilities. Less than half (46%) of the solo individuals had used health services in New York. Of those who had, 79% had gone to the Health Center for care.

During 1983 the Health Center served 466 individuals, or 46% of the estimated population.

1. Visits from Hispanic migrants to the Health Center

The Hispanic population (for the most part Mexican American families) made the greatest use of the available health services. Hispanic individuals accounted for 90% of pediatric, 67% of dental, and 82% of adult visits in 1983. This disproportionate use of health services is attributable to several causes:

- Hispanic migrants stay in the Oak Orchard area for a longer period of time (~5 months) than non-Hispanic workers (~10 weeks) and therefore are more likely to need health services some time during the season.
- The services of the Health Center are generally more accessible to the Hispanic families. The Brockport facility is conveniently located within the area of greatest Hispanic family concentration. Albion is somewhat farther to the west, but the vast majority of Hispanic families have their own means of transportation. Therefore the somewhat greater distance does not constitute a serious barrier to using the Albion center.

2. Visits from Non-Hispanic migrants

Only 17% of all visits to the Health Center came from non-Hispanic individuals. The largest proportion of non-Hispanic visits were for dental care; one out of three dental visits was by a non-Hispanic migrant. The relatively low overall utilization of health services is to an extent the result of several characteristics of the non-Hispanic work force:

- Non-Hispanic migrants (for the most part solo individuals) spend a short intense season in the Oak Orchard area and are not likely to seek medical care except in emergency cases.

- The geographic distribution of non-Hispanic workers is scattered, resulting in longer trips to health care facilities for most of the workers. Most Jamaican and one out of three Afro American workers, however, have no transportation of their own.
- With the notable exception of Afro American workers, non-Hispanic migrants had reported less need for health care than Hispanic respondents.*

Despite these characteristics of the non-Hispanic work force, which explain to some extent their limited utilization of the Health Center, the survey indicated that the health care needs of the Afro American segment of this population are not adequately met. Afro Americans had reported similar or greater needs for health care than Hispanic respondents. Yet, whereas Hispanic migrants sought the health care that they needed, Afro Americans were less likely to do so, as the low use of the Health Center by non-Hispanic patients indicates.

3. Knowledge of local health services

Solo workers: One-third of solo respondents said they did not know where they would go for medical care in case they should need it. Of the family respondents only 10% did not know where to go for health care. Solo individuals were also less likely to know of more than one health care provider: only half of those who could name one facility knew of a second provider. Although the majority of those who knew where to go for care cited an Oak Orchard facility, almost as many said they would go to a hospital. This segment of the population perceives its health care needs mostly as emergency care needs.

There were differences within the Hispanic population, too, in that Puerto Rican workers were less likely to feel a need for medical care than any other ethnic group. The greatest self-perceived needs for health care and also the greatest use of services among Hispanics came from Mexican American migrants.

Families: Family respondents generally showed a greater awareness available health services than solo individuals. The vast majority (90%) knew where they would go for health care. This was for the most part one of the Health Centers. Only 18% said they would go to a hospital if they should need medical care. Over two-thirds of the family respondents knew of a second provider, usually a hospital or another Oak Orchard facility.

E. Reasons for Which Migrants Seek Care

The reasons for which migrants sought care were assessed through evaluation of the medical records of the Health Center.

- Children under sixteen years old came to the Health Center primarily for symptoms of an acute medical condition, such as upper respiratory infections and otitis media.
- Children under three years of age averaged 3.2 encounters with the Health Center in 1983; for children between three and sixteen years old the average was 1.8 encounters.
- 10% of all visits from those migrants at least sixteen years old were for general medical exams and prenatal exams.
- The two most frequent symptoms for which migrants (≥ 16 years) sought care were skin rashes and back problems.
- Migrants at least sixteen years old had an average of 1.7 encounters with the Health Center in 1983.

Some reasons for which migrants did not seek care were discovered during the Health Center's outreach effort. These health problems were symptoms of the teeth and gums and vision dysfunctions.

F. The Economic Impact of Migrant Farmworkers on the Oak Orchard Area

The direct economic impact of migrant workers on the Oak Orchard area consists of their own spending during the season and of the expenditures from federal grants to agencies which serve migrants.

1. Migrants' own spending

Families tended to spend a greater percentage (85%) of their seasonal earnings in the Oak Orchard area than did solo individuals (50%).

- On the whole, migrants spent an estimated \$1.2 million in the Oak Orchard area in 1983. These constitute 58% of their total seasonal earnings.

- County sales tax revenues from these expenditures were over \$17,000.

2. Expenditures from grant monies

Four funded service programs for migrant farmworkers resulted in employment and expenditures in the Oak Orchard area. The total funding for these four programs was \$667,432 in 1983.*

Overall Economic Impact

Using the multiplier concept, it was determined that the total 1983 economic impact of migrant wages could be valued at \$2,910,754. The economic impact of direct grant monies totalled \$1,114,611 in 1983. Combined, then, migrant farmworkers accounted for \$4.03 million being pumped into the local Oak Orchard area economy.

*Does not include services that are indirectly funded as part of the mandate of agencies such as the State Department of Labor and the Department of Social Services.

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II. INTRODUCTION

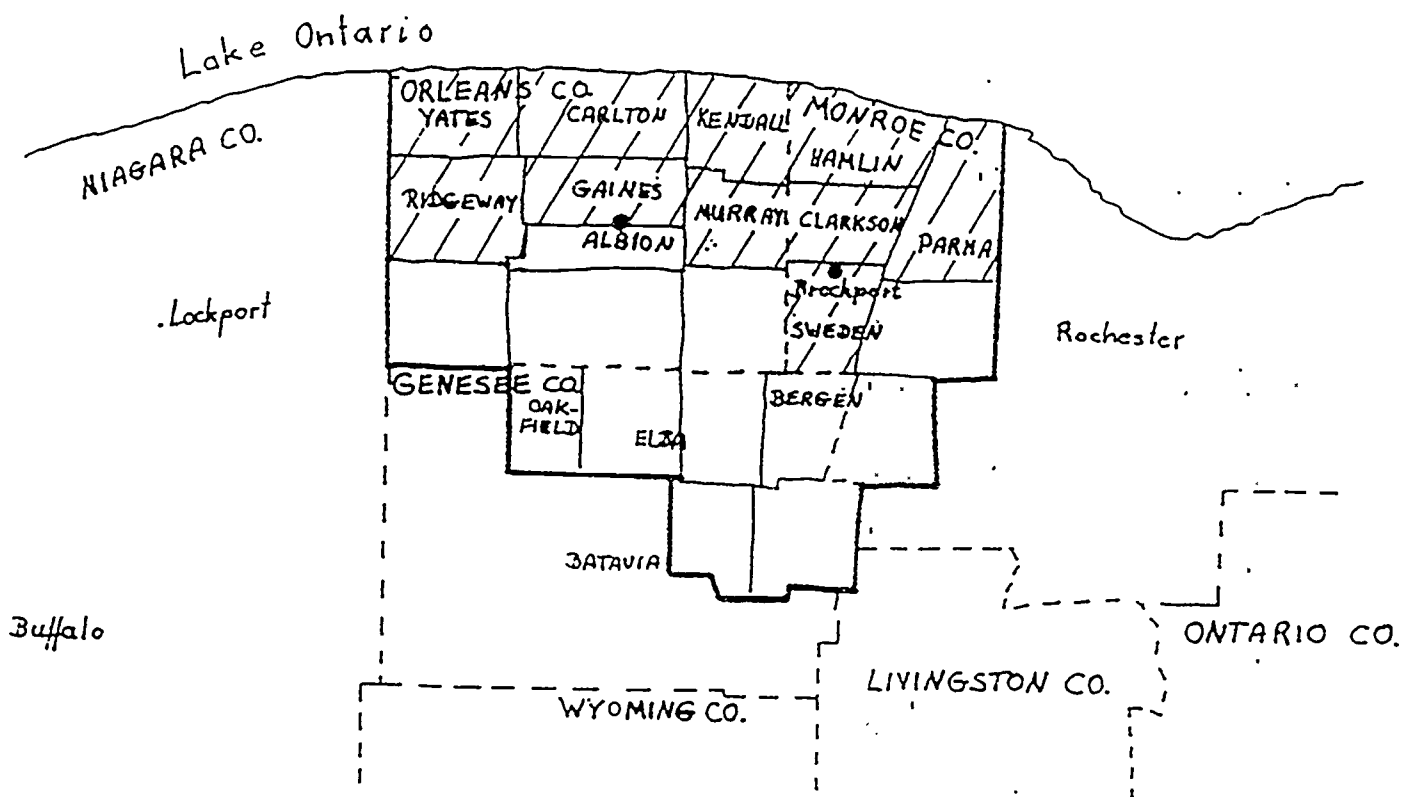
Though divided by the county line, the northern parts of Orleans and Monroe Counties may well be described as one continuous agricultural area which produces fruits and vegetables. The most important crops that depend on migrant labor are apples and cabbages. Migrants also work on pears, cucumbers and tomatoes. A greater variety of crops was grown ten years ago. However, most processing companies have left the area, eliminating the markets for such crops as tomatoes and broccoli. Today, to our knowledge, there is only one grower of tomatoes left in an area that used to be dominated by this vegetable. With the elimination of several crops, the need for migrant labor also declined. Additional jobs were eliminated with the introduction of harvesting machinery, such as the bean harvester and the tree shaker.

The important crops that have remained, however, are likely to continue to be stable components of this agricultural economy. Apple orchards, in particular, represent a permanent capital investment that is not likely to be quickly replaced with another crop. Most of the apple harvest is table fruit and has to be picked by hand, a job that is performed by migrants. The cultivation and harvest of cabbage, too, remains labor intensive.

The labor performed on fruit vs. vegetables in the Oak Orchard Area is roughly divided along ethnic lines. Hence, most of the fruit harvest is done by Afro American and Jamaican men, whereas Mexican Americans and a small number of Puerto Ricans work primarily on vegetables. There is some overlap in this pattern, mostly because a number of employers grow vegetables as well as fruit. Those workers who come to the Oak Orchard area solely for the short (10 weeks) apple harvest, come almost exclusively as single individuals. Many of them, however, leave families in their home state. In this study these workers are therefore called "solo" individuals. There is no single concentration of fruit orchards in this area, and solo workers are employed throughout this

Description of the Study Area

The entire service area of the Oak Orchard Community Health Center comprises all of Orleans County and parts of Monroe and Genesee Counties. Migrant farmworkers, however, are employed only in parts of this area. In this study the area in which migrants live and work shall be called the Oak Orchard Area.



Service Area Boundaries
(entire service area of the Health Center)

County Lines

Oak Orchard Area
(area in which migrants live and work)

Health Center facilities
(Brockport, Albion)

region.

Mexican-American workers, by contrast, not only bring their families with them for the season; they stay for a much longer period of time (~5 months) and are concentrated in one geographic area. This is the County Line area, which extends approximately seven miles to the west and five miles to the east of the Monroe-Orleans county line. The Brockport facility, which offers pediatric services, is located within this area of family concentration.

In former years a sizeable group of migrant workers lived in camps in Northern Genesee County during the summer months. Today, however, these workers are brought in daily from camps in Wyoming, Livingston, and Niagara Counties. These workers are not included in this study. The only migrant workers who are actually quartered in Genesee County today are contract workers from Puerto Rico who are employed in two processing plants in Oakfield and Bergen.

For the first time this past season a sizeable group of Haitian migrants -- including women and children -- worked in the Oak Orchard area. Unfortunately, no interpreter was available in time so that these workers could not be included in the study. Very little is known about the health care habits and needs of these people. It is also quite impossible to predict how prominently they will figure within the migrant workforce in the future. We visited the Haitian camp with the outreach nurse from the Health Center and a translator towards the end of the season, and the difficulties which these workers face in obtaining health care were obvious: language problems, lack of transportation, and complete unfamiliarity with the geography. It can only be recommended that the Health Center continue its emphasis on outreach services to this part of the population.

The definition of a migrant worker used in this study is that of the true inter-state migrant, that is, a person who has entered New York State within the last 12 months to work in agriculture, and who lives for the purposes of his employment at a temporary address.

III. PROCEDURES & METHODS

Procedures and Methods

Early on in the study the research group participated in an orientation session at the BOCES Geneseo Migrant Center. Dr. Gloria Mattera, Director of the Center, conducted the orientation and continued to fulfill an advisory role to the project.

Upon consultation with several growers and with agents of the Cooperative Extension, it was decided to apprise the agricultural community of the project through the Cooperative Extension and through individual letters to growers. In each county the Cooperative Extension office either published a description of the project in its Newsletter or mailed such a description to each grower individually.

Several weeks before interviewing in a particular camp, we contacted the operator of the camp with a personal letter and a follow-up telephone call. The purpose of the study was then explained again and a convenient time to interview in the camp was arranged. With the exception of one grower, no one refused entry into his camp, and it is fair to say that cooperation from the growers was excellent.

Survey instrument

A questionnaire was developed which focused on the health care needs and the income and spending patterns of migrants while they live in this area of New York State. The information collected with this survey instrument was to provide a descriptive profile of the migrant population from the perspective of health care delivery. Several questions regarding health services utilization were adapted from local surveys conducted by the Department of Social and Preventive Medicine. Other questions were selected from the instrument employed in a 1978 study of migrant farmworkers in Wisconsin.

The questionnaire was translated into Spanish. It was reviewed and revised independently by several bilingual Hispanics until a translation was agreed upon which would be meaningful to Mexicans and Puerto Ricans, the two principal Hispanic ethnic groups in the study area.

The average family interview took 48 minutes to conduct. Some interviews, however, lasted less than half an hour while others took two hours. For solo individuals the average interview took 30 minutes to conduct.

A copy of the questionnaire is included in the appendix.

Interviewers

Early on in the project, Richard Morales, Assistant Director of the School of Human Services at the Rochester Institute of Technology, was recruited to assist in the development of the questionnaire and the hiring of experienced adult interviewers. Mr. Morales has several years of experience interviewing and studying migrant workers.

In July, five interviewers were recruited by Mr. Morales, two of whom were bilingual and all of whom had interviewed previously. They were trained under the supervision of Dr. Robert O'Shea, Department of Social and Preventive Medicine; Dr. O'Shea had also directed the development of the survey instrument. The instrument was pretested twice by the interview staff before actual interviewing began in August.

Two additional interviewers who knew the Oak Orchard area well were recruited in September to collect interviews in small off-camps housing units.

Estimating the Size of the Migrant Population

The majority of the migrant population in Monroe, Orleans and Genesee Counties lives in migrant camps with capacities of five or more living spaces. These camps have to be registered with New York State, and a list of camps was obtained from the Department of Health and Human Services; during the 1983 season 37 camps were operating. Though the list indicates the capacity of each camp, actual occupancy can vary at different point of the season. The total seasonal occupancy for each camp was estimated on the basis of: an actual occupancy count on the day of the interview; the information from camp occupants and operators about workers who had already left the camp or were still expected to arrive; the knowledge of outreach workers who visited the camps at different times of the season.

The medical records of the Health Center, the census forms of the Migrant Student Record Transfer System, and the information from local informants indicated a sizeable group of migrants living outside of registered camps in small housing units that need not be registered. From the 1983 census forms of MSRTS a list of individuals living in this type of small camp was compiled. Additional people were found on a patient list from the Health Center. This combined list was then matched against the interviews that had been conducted in small unregistered housing units. Five people who had been interviewed appeared on neither list. From this it was inferred that there must exist a number of migrant workers outside of any record system available to us. This group was estimated at 20 solo workers plus 30 individuals living in households of two or more members. An approximate total of 200 individuals is estimated to live in housing units that are not required to be registered.

For the interviewing period from August through October a total of 915 workers and their dependents was estimated. Since it was not always possible

to interview at peak season, a seasonal adjustment of 172 workers was to account for those individuals who did not live in the study area at the time that the interviews were conducted. This estimate was based on the aforementioned information from camp operators and occupants and local informants.

The total migrant population during the 1983 season is thus estimated at 1,089 individuals. Included in this estimate are 140 workers from Puerto Rico. All of these men worked in two processing plants in Genesee County. As mentioned earlier, no other migrant workers lived in Genesee, although a large farm in Northern Genesee employed migrants. These workers, however, were brought in for the day from Wyoming, Livingston, and Niagara Counties, where they lived.

The distribution of the migrant population over the three counties is illustrated in table 1 below. The migrant population of each county is based on the sum of the estimated seasonal occupancies of all camps and unregistered housing units in the county.

Table 1. Population Distribution by County -- All of 1983 Season

County	No. Family Households	No. Individuals in Family Households	No. Individuals in Single Households	Total
Orleans	52	249	335	584
Monroe	54	289	76	365
Genesee	-	-	140	140
	106	538	551	1,089

Sampling Frame

Time and budget of the study determined the overall sample size of 250 interviews.

Sample of Family Workers

For the interviewing period the family population reached a size of 498 workers and their dependents. Included in this figure are the estimated 30 individuals living in family units who were not specifically identified. 62 household interviews including 293 individuals were conducted.

At the beginning of the season it had been decided to collect interviews from all camps in which families were expected to live. These were called "mixed" camps. Mixed camps, registered and unregistered, were singled out with the help of agency workers who knew the camps from previous years. 19 registered camps of this type plus 8 small unregistered units were identified. During the interviewing period all registered mixed camps were visited, resulting in 211 interviews. 82 family interviews were collected from 11 small unregistered housing units.

A larger proportion of the family population than had been anticipated lived in small camps that were not required to register. Some growers maintain not one large camp but several small camps which escape the oftentimes tedious regulations to which camps of five or more living spaces are subject. This phenomenon became apparent soon enough in the beginning of the season and, in addition to two camps that had already been sampled, 9 camps were selected according to their geographic location and the ethnicity of their occupants. It was not possible, however, to visit all small camps and an estimated 100 individuals in family units were not interviewed.

Although some mixed camps were visited as often as four times in order to

interview all the families who lived there, 43 family members could not be reached on any of the interviewing nights. On 14 individuals no information was obtained because the heads of household refused to be interviewed. 21 Haitian workers and their families could not be interviewed because a translator was not available in time. 20 individuals were missed for other logistical reasons.

For a tabular description of the population see table 2.

Sample of Solo Workers

Only a fraction of the population of solo workers lives in small unregistered housing units. The sampling design therefore concentrated on registered camps as the sampling unit. Since it was not possible to predict with accuracy the actual camp occupancy, a random sample corresponding to 25% of the maximum camp occupancy was drawn. If this first round of interviewing proved insufficient, we were prepared to continue the random selection of camps until our goal of 150 interviews from solo workers was met. It soon became apparent that it would probably be necessary to visit most of the camps in the study area in order to collect enough interviews. Hence, 31 out of 35 active camps were selected for interviewing, with the sequence in which they were visited being determined by economic considerations.

In one large camp all occupants in every other room were interviewed, resulting in a one-third sample from that camp.

In the two camps that were occupied by contract workers in processing plants, it was only possible to interview on two nights towards the end of the season when many workers had already left. All 24 workers who were present in the camps on those nights were interviewed. These are one-third of all workers who had not yet gone home.

When interviewing stopped at the end of October, 160 interviews had been collected from a population estimated at 417 workers who lived in the study area during the interviewing period. 150 interviews were collected in 31 out of 35 registered camps that were active during that period; 10 interviews came from four small housing units.

58 workers -- mostly Black and Jamaican -- refused to be interviewed; 12 individuals were preoccupied with another activity and were too difficult to interview; 24 workers were not present in the camps on the nights of the interviews; 15 Haitian workers went uninterviewed because no translator was available in time.

For a tabular description of the population see table 2.

For the distribution of the sample between types of camps see table 3.

Table 2. Population Description
(Interviewing Period Only)

	Solo		Family Members	
	#	%	#	%
Interviewed	160	38.4	293	58.8
Refusals	58	14.0	14	2.8
Language Program	15	3.6	28	5.6
Individuals too difficult to interview	12	2.9	—	—
Individuals not present at interviewing time	24	5.8	43	8.6
Individuals not sampled living in camps	105 ^{1/}	25.2	—	—
Individuals not sampled living off-camp	20 ^{2/}	4.8	100	20.0
Other	23	5.5	20	4.0
Total	417	*	498	*

¹—These represent 4 camps (42 individuals) that were skipped entirely. An additional 63 individuals came from 3 camps that were studied in part.

²—These represent an estimated 20 solo individuals - 100 individuals in family households who live in small housing units that are not required to register.

*Percentages do not always add up to 100 because of rounding.

VI. CHARACTERISTICS OF THE
MIGRANT POPULATION

Table 2. Sample from Camps Operating During Interviewing Period

Individual	Solo Camp		Mixed Camp		Total No. People	
	Population	Sampled (%)	Population	Sampled (%)	Population	Sampled (%)
Solo	249	79 (31.7)	168	81 (48.2)	417	160 (38.4)
Family	—	—	498	293 (58.8)	498	293 (58.8)
Total	249	79 (31.7)	666	374 (56.2)	915	453 (49.5)

Demographic Characteristics of the Migrant Population

Demographic characteristics are presented separately for the two groups of migrant workers, those living here with their families and those coming to the area individually. They are referred to as family respondents and solo respondents, respectively (Table 4). When appropriate, information concerning family members is discussed (Table 5).

Marital Status and Household size

The great majority (82%) of the family respondents were married and had their spouses in the camp. The household size in the camp varied between ethnic groups. 65% of the Black families consisted of less than 4 people, whereas only 27% of the Mexican families fell into this category. On the average, the household size while working in the Oak Orchard area was found to be 4.7 individuals. At home base, however, the household size was slightly larger at 5.5 individuals.

Only slightly more than one-third of the solo workers were single. Close to half of them were married, but their families--consisting on the average of 5.2 members--had not come with them to New York.

Sex

One-third of the family respondents and 95% of the solo workers were males. Of the family members 57% were males and 43% were females.

Age

The respondents varied greatly with respect to their age. The range was between 15 and 60 years for the family respondents and similarly, between 16 and 68 years of age for the solo workers. On the average, the family respondent was 32 years old whereas the solo worker was 36 years old. The additional family members ranged in age from one to 54 years old, with the average age being sixteen years old.

Ethnicity and Home State

The majority of the families (60%) were of Mexican ethnic origin; 27% were Afro American. Of the solo respondents 34% were Afro American, 34% were Jamaican, and 19% were Puerto Rican.

Of the Mexican families three-fourths came from Texas with the remaining quarter coming from Florida. On the whole, half of the families came from Texas and half from Florida.

Afro American respondents, family or solo, had their home base in Florida. Since all but six of the Puerto Ricans were contract workers, most of them returned to Puerto Rico after the season. Of the Jamaican workers, however, only half returned to Jamaica. The other half reported Florida as their home state.

The distribution of ethnic groups coincided with the percentages of respondents reporting Spanish or English as the language which they feel most comfortable speaking. 58% of the family respondents (almost all of Mexican American heritage) reported Spanish as their first language; a fourth of the solo respondents felt most comfortable with Spanish.

Education

Very few respondents reported educational attainments beyond high school. The average number of years of education for the family and solo respondents was 7.5 years and 8.4 years respectively. For family members who were at least 18 years old this average was 7.0 years. This low average is mostly the result of the high proportion (78.9%) of Mexican Americans among the family members. On average, Mexican American family members had received only 5.9 years of formal education.

Means of transportation

The means of transportation is an important factor in the access to health services. There were great differences within the migrant population with regard to the source of transportation. Ninety-five percent of the family respondents

traveled to New York in a private vehicle which belonged for the most part to the family.

More than half of the solo workers also traveled to New York in a private vehicle. However, only half of these owned the vehicles in which they traveled, while the other half came in the vehicle of a friend or a crewleader. Workers of Afro American ethnic origin were more likely than Jamaican or Puerto Rican individuals to have their own means of transportation (2/3 vs. 1/3).

The remaining workers traveled to the Oak Orchard area by other modes. These included planes for contract workers who arrived in Florida or New York City from Jamaica or Puerto Rico; they then continued their trip in a bus chartered by their employers. Other workers traveled by public and commercial means.

Years in migrant work

The average number of years that a person had worked as a migrant was similar for both family and solo respondents, 8.8 years and 9.0 years respectively. The generational continuity in migrant status, however, was strongest within the Mexican American ethnic group, both among solo and family respondents. Hence, the relatively high percentage (40%) of family respondents whose parents were migrant workers is largely attributable to respondents of Mexican heritage. Similarly, respondents in the Mexican ethnic group accounted for most of the workers who expected at least some of their children to become migrant workers. On the whole, 37% of the families and only 13% of the solo workers anticipated this possibility.

Table 4

Demographic characteristics of family and individual respondents

	<u>Family Respondents</u>		<u>Individual Respondent</u>	
	=	%	=	%
<u>Marital Status</u>				
Single	7	11.3	58	36.2
Married	51	82.2	70	43.8
Separated	4	6.5	16	10.0
Divorced	-	-	15	9.4
Widowed	-	-	7	.6
Total	62	100.0	160	100.0
<u>Household Size in Camp</u>				
02	10	16.1		
03	16	25.8		
04-05	16	25.8		
06-07	10	16.1		
08-09	5	8.1		
10-11	5	8.1		
Total	62	100.0		
Mean \pm SD		4.7 \pm 2.5		
Median		4.0		
<u>Household Size at Home Base</u>				
01	1	1.6	51	32.1
02-03	19	30.7	31	19.5
04-05	15	24.2	36	22.5
06-07	12	19.4	26	16.4
08-09	8	12.9	6	3.8
10-11	4	6.4	6	3.8
12	3	4.8	3	1.9
Total	62	100.0	159	100.0
Mean \pm SD		5.5 \pm 3.1	3.8 \pm 2.8	
Median		5.0	3.0	

Table 4 (con't.)

	<u>Family Respondent</u>		<u>Individual Respondent</u>	
	=	%*	=	%*
<u>Sex</u>				
Female	40	64.5	8	5.0
Male	<u>22</u>	<u>35.5</u>	<u>152</u>	<u>95.0</u>
Total	62	100.0	160	100.0
<u>Age</u>				
15-20	11	17.8	9	5.6
21-25	11	17.7	23	14.4
26-30	8	12.9	25	15.6
31-35	8	12.9	25	15.6
36-40	7	11.3	24	15.0
41-45	8	12.9	26	16.3
46-50	6	9.7	6	3.8
51-55	2	3.2	13	8.1
56-60	1	1.6	5	3.1
61-65	-	-	3	1.9
66-70	-	-	1	.6
Total	62	100.0	160	100.0
Mean \pm SD		32.2 \pm 11.4		36.2 \pm 11.3
Median		31		35
<u>Ethnic Group</u>				
Mexican-American	37	59.7	13	8.1
Puerto Rican	1	1.6	30	18.8
Afro American	17	27.4	55	34.4
Jamaican	1	1.6	54	33.7
Other	<u>6</u>	<u>9.7</u>	<u>8</u>	<u>5.0</u>
Total	62	100.0	160	100.0

Table 4 (con't.)

	<u>Family Respondent</u>		<u>Individual Respondent</u>	
	=	%	=	%
<u>Home State</u>				
Texas	29	46.8	3	1.9
Florida	29	46.8	89	55.7
Mexico	1	1.6	6	3.7
Puerto Rico	1	1.6	23	14.4
Jamaica	-	-	29	18.1
Other	2	3.2	10	6.3
Total	62	100.0	160	100.0
<u>Language</u>				
English	26	42.0	115	71.9
Spanish	34	54.8	40	25.0
Creole	2	3.2	4	2.5
Other	-	-	1	.6
Total	62	100.0	160	100.0
<u>Years of Education</u>				
5	17	27.5	39	24.4
6-8	22	35.4	38	23.8
9-10	12	19.4	21	13.1
11-12	10	16.1	46	28.7
12	1	1.6	16	10.0
Total	62	100.0	160	100.0
Mean \pm SD		7.5 \pm 3.0		8.4 \pm 3.7
Median		7.0		9.0
<u>Owner of vehicle traveled in</u>				
Own	34	55.7	22	18.8
Family Member's	15	24.6	7	5.9
Friend	7	11.5	24	20.5
Crew Leader	3	4.9	16	13.7
Other	2	3.3	48	41.1
Total	61	100.0	117	100.0

Table 4 (con't.)

	<u>Family Respondents</u>		<u>Individual Respondents</u>	
	=	%	=	%
<u>Years as migrant worker</u>				
01	8	13.3	20	12.7
02-04	10	16.6	38	24.2
05-07	13	21.6	28	17.8
08-10	10	16.7	31	19.8
11-15	10	16.7	13	8.3
16-20	5	8.4	12	7.6
21+	4	6.7	15	9.6
Total	60	100.0	157	100.0
Mean \pm SD		8.8 \pm 6.6		9.0 \pm 8.6
Median		7		7
<u>Were parents migrant workers</u>				
Yes	25	40.3	32	20.3
No	37	59.7	126	79.7
Total	62	100.0	158	100.0
<u>Were grandparents migrant workers</u>				
Yes	16	27.1	11	8.2
No	43	72.9	124	91.8
Total	59	100.0	135	100.0
<u>Any possibility of children becoming migrant workers</u>				
Yes, all of them	4	9.3	4	4.9
Yes, some of them	12	27.9	7	8.5
No, none of them	12	27.9	45	54.9
Hope not	15	24.9	26	31.7
Total	43	100.0	82	100.0

*Percentages may not always add to 100 due to rounding.

Table 5
Demographic Characteristics of Family Members

Relationship to Respondent	=	%
Husband/Wife	50	21.7
Son/Daughter	165	71.4
Nephew/Niece	3	1.3
Father/Mother	2	.9
Brother/Sister	7	3.0
Other	4	1.7
Total	<u>231</u>	<u>100.0</u>
Sex		
Female	100	43.3
Male	131	56.7
Total	<u>231</u>	<u>100.0</u>
Age		
01-05	52	22.4
06-10	36	15.6
11-15	44	19.1
16-20	39	16.9
21-25	19	8.2
26-30	6	2.6
31-35	10	4.3
36-40	9	3.9
41-45	8	3.5
46-50	6	2.6
51-55	2	.9
Total	<u>231</u>	<u>100.0</u>
Mean \pm SD	16.0 \pm 12.5	
Median	13.0	

Years of Education for those \geq 18 years old

≤ 5	26	32.9
6-8	22	27.9
9-10	8	10.1
11-12	23	29.1
Total	<u>79</u>	<u>100.0</u>
Mean \pm SD	7.0 \pm 3.6	
Median	6.0	

Employment in the Oak Orchard Area

The family as well as the solo workers are a quite stable work force for the Oak Orchard area. Two-thirds of the families as well as the solo respondents had worked in this area before. For these, the number of years that they had worked here ranged between one and 23 years for the families, with an average of 6.9 years. For the individual respondents the range was between one and 32 years, with an average of 6.3 years. Half of both groups had worked in this area between one and four years.

Almost all of the family (88.7%) and the solo (91.9%) respondents came directly to the Oak Orchard area from another state; hardly anybody had worked elsewhere in New York before arriving here for the season. Likewise, at the end of the season 84% of the families and 80.7% of the solo workers planned to return straight to their home state.

The length of stay during the season was generally longer for the families than for the solo workers and varied again between counties. On the average, the families in Orleans County stayed for four months as compared to 2.4 months for solo workers. The longest average stay (5.3 months) was reported by families from Monroe County. The solo workers in this county spent about one month less (4.4 months).

The differences in length of stay result for the most part from the different types of crops that family and solo respondents worked on. 67% of the families as compared to only 25% of the solo individuals worked on vegetables. With several crops of vegetables being grown, families generally perform more diverse tasks than fruit pickers and have work for a longer period of time. Of the solo individuals 72% were working in the fruit harvest which lasts about 10 weeks.

Among solo respondents, the contract workers of Genesee County spent the longest time (4.7 months) in the study area.

Table 6.
Employment in the Oak Orchard Area

	<u>Family Respondents</u>		<u>Individual Respondents</u>	
	=		=	
<u>Crop worked on this year</u>				
Fruit	17	28.3	112	71.8
Vegetables	40	66.7	39	25.0
Both	3	5.0	5	3.2
Total	<u>60</u>	<u>100.0</u>	<u>156</u>	<u>100.0</u>
<u>Month Leaving</u>				
Sept.-Oct.	6	11.1	14	8.9
November	46	85.2	138	87.9
December	<u>2</u>	<u>3.7</u>	<u>5</u>	<u>3.2</u>
Total	54	100.0	157	100.0
<u>Month Arriving in the Area</u>				
April	2	3.3	1	.6
May	11	18.0	3	1.9
June	21	34.5	27	17.7
July	11	18.0	22	13.9
August	8	13.1	21	13.3
September	<u>8</u>	<u>13.1</u>	<u>84</u>	<u>53.2</u>
Total	61	100.0	158	100.0

Annual Income - Employment in Home State

The interviewers felt that the most reliable income information was obtained on weekly wages. The least reliable information, it was agreed, was that on annual earnings. Many migrant workers simply did not know their family's annual income; others felt it was "too private" to disclose.

For those solo individuals who answered the question, the average annual family income was \$5,819.67. On the average, 3.4 people depended on this income and 1.5 family members had contributed to it.

The reported family income of the family responded was not much different from that of solo individuals. On the average, 2.4 members contributed to an annual income of \$5,950.98 on which 5.0 people depended.

Table 7. Family Income in 1982.

<u>Family Income</u>	<u>Family Respondent</u> (N=51) %	<u>Solo Individual</u> (N=122) %
less than \$3,000	15.7	21.3
\$ 3,000 - \$ 3,999	11.8	12.3
\$ 4,000 - \$ 4,999	13.7	11.5
\$ 5,000 - \$ 5,999	13.7	19.7
\$ 6,000 - \$ 6,999	15.7	9.8
\$ 7,000 - \$ 7,999	11.8	4.1
\$ 8,000 - \$ 8,999	3.9	7.4
\$ 9,000 - \$ 9,999	5.9	4.1
\$10,000 - \$10,999	2.0	1.6
\$11,000 - \$11,999	0	2.5
\$12,000 - \$12,999	3.9	.8
\$13,000 - \$13,999	0	.8
\$14,000 - \$14,999	2.0	1.6
\$15,000 - \$15,999	0	1.6
more than \$16,000	0	.8
	100.0	100.0
Mean	\$5,950.98	\$5,819.67
Median	\$4,642.34	\$5,248.73

Families spent an average of seven months of the last year in their home state. About half (56%) of the family respondents worked during that time. On the average, they reported to be working at least part-time for 5.6 months in their home state during the last year. 64.7% of those who worked in their home state were employed in agriculture.

Half of all solo respondents had spent more than eight months of the past year in their home state. The vast majority (92%) of these workers had worked at least part of this time. On the average, they had been employed for seven months; for three-fourths of those who had had a job, it had been in agriculture. Most of those who had not worked in their home state during the past year were Puerto Rican workers.

Table 8. Ethnic Group by Worked in Home State During Past Year

<u>Ethnic Group</u>	<u>Yes</u>		<u>No</u>	
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Mexican American	11	84.5	2	15.4
Puerto Rican	10	37.7	18	64.3
Afro American	48	92.3	4	7.7
Jamaican	52	96.3	2	3.7
Other	6	75.0	2	25.0
Total % "yes."	- 81.9%			
Total % "no"	- 18.1%			

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V. SELF-PERCEIVED HEALTH CARE
NEEDS AND UTILIZATION OF
LOCAL HEALTH SERVICES

Migrants' Self-Perceived Needs for Health Care and Use of Services

The respondents are grouped into two categories: (1) solo individuals, who were asked and who answered questions about themselves; and (2) family respondents, who reported both about their own health and health care and also about some of the health experiences of the household members with whom they were living in the camps. The data, then, consist of self-reports (by the solo individuals and by family respondents when talking about themselves), and of proxy reports when family respondents were giving information about family members -- their spouses, children or any other relatives living with them. To preserve these distinctions, in the following discussion all three sets of data will be presented under headings of Solo Individuals, Family Respondents, and Family Members. When appropriate, the findings of cross-tabular analyses are interspersed in the text. These data are summarized in table 9.

The health portion of the interview sought information on the migrants' current health status and perceived needs for various kinds of health care, their use of preventive health care, their knowledge of local health services, and their actual use of and satisfaction with local services.

Self-perceived health status and current needs for care

Several general and specific questions were designed to identify how migrants viewed their health and health problems. Respondents were first asked a widely-used global question:

Q17. "In general, would you say your own health is excellent, good, fair, or poor?"*

	Solo Individuals (N=158)	Family Respondents (N=62)	Family Members (N=223)
Excellent	29%	23%	34%
Good	46	47	52
Fair	22	23	8
Poor	3	8	6

*Figures in tables are in percent; numbers in parentheses = base. Percentages do not always add up to 100 because of rounding.

Family as well as solo respondents tended to perceive their own health as good. Less than ten percent thought they were in poor health. The health of family members, a group which contains many children and adolescents, seems to be the most robust.

On the other hand, one-third to about one-half admitted to having particular problems that had been bothering them, often for long periods of time.

Q18. "Do you have any health problems that have been bothering you?"

	Solo Individuals (N=155)	Family Respondents (N=62)	Family Members (N=221)
Yes	39%	48%	30%
No	61	52	70

As expected, a greater proportion of women than men had some kind of health problem: 55% of the female family respondents as compared to 36% of the male respondents reported at least one health problem.

Among solo workers a greater proportion of Afro Americans than of any other ethnic group was suffering from some health problem. As will be shown, Afro American workers in general felt a greater need for various types of health care than the members of other ethnic groups (table 9).

The reported problems ranged over a long list of symptoms and conditions; the open-ended question received answers that were categorized under 45 different headings (cf. appendix A). The single leading health problem, which affected one-fifth to one-fourth of the migrants, was back/musculoskeletal problems. More than half of those with any problems said the conditions had been suffered for a year or more.

Although there exist these various chronic and shorter-run problems, few migrants were prevented by illness from going about their daily business; particularly the solo individuals were unlikely to lose any time over an illness.

Q20. "Was there any time over the last two weeks when you could not go about your normal activities for most or all of a day because of an illness, accident, or injury?"

	Solo Individuals (N=157)	Family Respondents (N=62)	Family Members (N=223)
Yes	9%	21%	17%
No	91	79	83

"What exactly was the problem?"

	(N=14)	(N=13)	(N=38)
Accident/injury	21%	15%	7%
Cold	43	23	56
Other	36	62	37

"How long did the problem last?"

Mean # of days	7.9	4.2	3.2
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Among those who were kept by illness from their normal activities sometime during the previous two weeks, large proportions were down with colds.

The average illness duration for family respondents and members were short (4.2 vs. 3.2 days), but for solo individuals the mean length was over a week.

The varying severity of these recent illness can also be assessed by what the migrants did for their problems. Half of the 13 sick solo individuals took a prescribed medicine and a third of all groups saw a physician, suggesting that migrants have to become quite ill before they lose any time over a health problem.

	Solo Individuals (N=13)	Family Respondents (N=13)	Family Members (N=48)
Took prescribed medicine	46%	38%	14%
Took OTC medication	15	15	22
Went to hospital ER	15	0	0
Consulted a physician	38	38	34
Went to bed, rested	15	38	10
Hospitalized	0	0	0
Did nothing	15	15	20

multiple responses possible

Self-perceived needs for health care were probed directly in questions 19, 29, and 31. One-fifth of solo individuals and family members, and one-third of family respondents said they needed medical care now. Need for a vision check was expressed by similar percentages. Greater proportions of all three groups identified a need for dental care: half of the solo individuals, two-thirds of the family respondents, and one-third of the family members.

Those migrants who felt they needed care for their teeth or their eyes were asked in an open-ended question what kept them from going to a dentist or an optometrist (Q29b, 31b). In the answers procrastination and lack of personal priority accounted for about half of the reasons. Very few mentioned money, but a quarter said they had no time to go. There was also some unawareness of where to go for care, particularly among solo individuals.

Q19. "Do you think you need medical care now?"

	Solo Individuals (N=157)	Family Respondents (N=61)	Family Members (N=217)
Yes	22%	33%	21%
No	78	67	79

Q29. "Do you think you need dental care now?"

Yes	47%	69%	35% *
No	53	31	65

Q31. "Have you been having any problems with your eyes which make you think that maybe you should have your eyes checked by a doctor?"*

Yes	24%	37%	14%
No	76	63	86

*Individuals \geq 12 years of age.

Within this overall pattern, there were marked differences among ethnic groups in their need for health care. As mentioned before, Afro Americans reported the greatest need for care. Thus, 39% of the Afro American workers felt that they needed medical care at the moment as compared to only 11% of the Jamaican, 67% of the Puerto Rican, and 15% of the Mexican American workers.

Similarly, the highest proportion of those who needed a visual problems checked (35%) and of those who needed dental care (72%) was Afro American.

Level of Preventive Health Care

There was a wide range in the use of preventive health services among migrants. 50% of the family respondents had received a physical check-up during the past year. 29%, however, said they had never received such a check-up.

The relatively high proportion (57%) of solo workers who had had a physical exam within the last year is misleading. Contract workers from Puerto Rico and Jamaica are required to have a health check-up as part of the procedures for entering the mainland United States. Thus, three-fourths of both Puerto Rican and Jamaican workers reported physical exams during the past year. These respondents largely accounted for the relatively high proportion of solo workers who had received a check-up within the last year. 20% of the solo respondents had never had a physical exam when they were not sick and on the whole, at least 40% of the migrants may be classified as symptomatic users of health care.

Q27. "Did you ever have a physical exam or check-up when you were not sick?"

	Solo Individuals (N=158)	Family Respondents (N=62)
Never	20%	29%
Within last year	57	50
Within 1-2 years	7	10
More than 2 years ago	16	11

Although almost half of all respondents had been to a dentist within the past year, these visits were rarely for check-ups. Most of the time (73%) migrants went to the dentist for treatment. "Treatment," according to our field experience, usually meant an extraction.

Q28. "Did you ever go to a dentist?"

	Solo Individuals (N=134)	Family Respondents (N=49)
Never	20%	29%
Within last year	57	50
Within 1-2 years	7	10
More than 2 years ago	16	11

"Was this for a check-up or did you have some kind of problem?"

Check-up	25%	16%
Treatment	73	82
Both	2	2

The medical records of the Health Center also indicated that migrants usually do not seek dental care until a tooth needs to be extracted; 52% of the dental visit at the Health Center in 1983 included an extraction.

Reasons for Visit

	(N=177 Responses)	
	#	%
Toothache	64	36
Broken tooth	3	2
Loose tooth	3	2
Fillings/caries	14	8
Swollen, bleeding gums	6	3
Check-up, x-rays	60	34
Cleaning	25	14
Other	2	1
Total	177	100

These reasons for dental visits reflect the largely symptomatic use of dental services among migrants.

According to the survey, for the greater proportion of each ethnic group the last dental visit had been for treatment, not preventive care. Afro American respondents, in fact, almost exclusively (85%) sought treatment at their last dental visit.

Vision check-ups are part of the routine medical exams which contract workers receive before they come to New York to work. Some contract workers, however, considered visual checks as part of their general physical exam and

did not report them again separately. Thus, migrants reported fewer vision checks within the last year than they had reported physical exams. 37% of the solo respondents and only 18% of the family respondents had received an examination of their vision during the past year.

Q30. "Did you ever have your vision checked by a doctor?"

	Solo Individual (N=159)	Family Respondent (N=62)
Never	34%	42%
Within last year	37	29
Within 1-2 years	9	13
More than 2 years ago	20	16

Knowledge and Use of Local Health Services

There were strong differences between solo and family respondents in their knowledge and use of local health services. Almost all of the families, but not quite half of the solo individuals, had received health care in New York State.

Q23. "Have you (or anyone in your family) ever used health services in New York State?"

	Solo Individuals (N=159)	Family Respondents (N=62)
Yes	46%	85%
No	54	15
<u>Health Services Used:*</u>		
<u>Health Center at</u>		
Brockport	64%	70%
Albion	19	57
<u>Hospital in</u>		
Brockport	3	21
Albion	8	11
Rochester	1	2
Batavia	3	0
Other	7	6

(cont'd)

Health Services Used: (cont'd)

	Solo Individual (N=74)	Family Respondent (N=62)
Private MD in		
Brockport	0%	4%
Albion	4	6
Rochester	1	2
Medina	1	4
Batavia	3	0
Oakfield	3	0
Other	3	6
Other Provider	0	2

*Multiple responses possible

Of the various providers which migrants had used, the Health Center was by far the most frequently mentioned. But families, in particular, had also received care at hospitals. Few migrants had consulted private physicians.

Among solo respondents, Jamaican workers were the least likely to have used health services in New York. Jamaican (and Puerto Rican) workers had also expressed the least need for health care and had reported the fewest health problems.

Virtually all (93%) of the family respondents and 79% of the solo workers had received medical care at the Health Center. The majority of the solo respondents had used the Brockport facility whereas family respondents reported using both the Brockport and the Albion sites.

Q24. "Have you ever received health care at the Clinic (Health Center)?"

	Solo Individuals (N=60)	Family Respondents (N=55)
Yes	79%	93%
No	21	7
at: Albion	22%	26%
Brockport	75	33
Both	3	41

Answers to a specific open-ended question regarding likes and dislikes about the care they had received were general and vague, e.g. "liked everything," or "o.k., no complaints." About one-third of solo individuals and family respondents specified "good medical service"; one-third of family respondents cited "friendliness" and "doctor" or "nurse."

The few negative replies of family respondents were often about the appointment system and office hours. Only ten solo workers named any dislikes and these were spread over a number of different complaints; two migrants felt the clinic was understaffed or that not enough time had been spent with them; two missed having the van that in previous years provided transportation to the Health Center.

The greater use of health services among families corresponded with a greater awareness of local health services. Only 10% of the family respondents but one-third of the solo individuals did not know where they would go for medical care if they should need it.

Q22i. "If you (or anyone in your family) got sick while you are working here, where would you go for health care?"

	Solo Individuals (N=159)	Family Respondents (N=62)
<u>First Choice:</u>		
"Clinic," Brockport	20%	26%
Albion	15	37
Hospital, specific town	16	16
don't know where	7	2
Private physician	3	5
Don't know -- town nearby	12	2
Don't know where I would go	21	8
Other	7	5

	Solo Individuals (N=124)	Family Respondents (N=57)
<u>Second Choice:</u>		
"Clinic," Brockport	7%	14%
" " Albion	9	16
Hospital	16	35
Private physician	7	5
Don't know -- town nearby	6	2
Don't know where else I would go	52	28
Other	2	0

Even the two-thirds of solo workers who were able to name a provider showed less awareness of available health care facilities than did family respondents. Among solo workers who did know where they would seek care, most (35% of all solo workers) named either the Brockport or Albion Health Center, but a substantial number (23%) would go to a hospital. In contrast, nearly two-thirds of family respondents said they would go to the Health Center and only 18% named a hospital as a first choice.

Families were also more likely than solo workers to have a second choice for medical care. Half of the solo respondents could only think of one place to go for health care, whereas almost three-fourths of the family respondents cited a second choice. This second provider, in almost equal proportions, was either another Oak Orchard facility or a hospital.

Very few migrants, solo as well as family, would resort to private physicians for health care.

Solo individuals were not only less informed of local health services, in general they also faced greater obstacles in obtaining health care. Whereas 84% of the family respondents would drive (or be driven) to a health care facility in the family car, only 19% of the solo respondents had this option.

More likely, solo individuals had to depend on friends, crewleaders, or employers for transport.

Q22a. "How would you get there?" (to health care facility)*

	Solo Individuals (N=159)	Family Respondents (N=62)
Own car/family member	19%	84%
Crewleader takes me	26	5
Friend	28	11
Grower	14	3
Taxi; pay someone	3	5
Company transport	16	0
Other	2	6
Don't know	5	2

*Multiple responses possible

Among solo respondents, Jamaican and Puerto Rican workers were the least likely to have their own source of transportation. These workers (for the most part contract workers) often live in crews where no one has his own car. For Puerto Rican contract workers company transportation was available. Among Afro American workers two out of three had their own source of transportation.

Table 9.

Family RespondentsAny Health Problems by Sex

	Female	Male	Total
Yes	55%	36%	48%
No	45	64	52

Solo Individuals

	Mexican American (N=13)	Puerto Rican (N=30)	Afro American (N=54)	Jamaican (N=50)	Total ^{1/} N=155
<u>Any health problem</u>	%	%	%	%	% ^{2/}
Yes	30.8	23.3	53.7	36.0	38.7
No	69.2	76.7	46.3	64.0	61.3
<u>Need medical care</u>					
Yes	15.4	6.7	38.9	11.3	21.5
No	84.6	93.3	61.1	88.7	78.5
<u>Any vision problem</u>					
Yes	15.4	30.0	35.2	14.8	24.5
No	84.6	70.0	64.8	85.2	75.5
<u>Need dental care</u>					
Yes	53.8	24.1	72.2	31.5	46.8
No	46.2	75.9	27.8	68.5	53.2
<u>Last physical exam</u>					
Never	30.8	20.0	21.8	13.0	20.6
Within 12 months	23.1	70.0	41.8	75.9	56.3
More than 12 mo. ago	46.2	10.0	36.4	11.1	23.1
<u>Last dental visit</u>					
Never	46.2	40.0	18.2	9.3	22.3
Within 12 months	30.8	40.0	34.5	50.0	40.7
More than 12 mo. ago	23.1	20.0	47.3	40.7	37.0
<u>Type of dental visit</u>					
Check-up	28.6	39.1	12.8	26.0	24.6
Treatment	71.4	52.2	85.1	74.0	73.2
Both	0	8.7	2.1	0	2.2

^{1/} Includes eight members of various "other" ethnic groups.

^{2/} Percentages do not always add up to 100 because of rounding.

Table 9 (cont'd).

	Mexican American (N=13)	Puerto Rican (N=30)	Afro American (N=54)	Jamaican (N=50)	Total (N=155)
<u>Used health services in New York</u>					
Yes	38.5	53.3	57.4	33.3	46.5
No	61.5	46.7	42.6	66.7	53.5
<u>Ever used Oak Orchard</u>					
Yes	71.4	68.8	80.6	83.3	78.9
No	28.6	31.3	19.4	16.7	21.1
<u>Used dentist in this area</u>					
Yes	28.6	56.5	41.3	24.0	37.6
No	71.4	43.5	58.7	76.0	62.4

MEDICAL RECORDS REVIEW

It was the purpose of the records review to outline the reasons for which migrants seek care at the Oak Orchard Community Health Center and to assess the characteristics of the workload at the Health Center. Data were collected from all encounter records of 1983. A total of 910 encounters took place with 466 patients. The data were analyzed on the basis of these encounters. The following discussion, therefore, draws a profile of the encounters, rather than individuals.

A data form was employed which itemized patient background information, reason for visit, physician's diagnoses, and disposition of visit. All medical data were classified and coded according to the Reason for Visit Classification for Ambulatory Care (RVC).

In the RVC all patient complaints -- expressed in the patient's own words -- are grouped into eight categories, those of

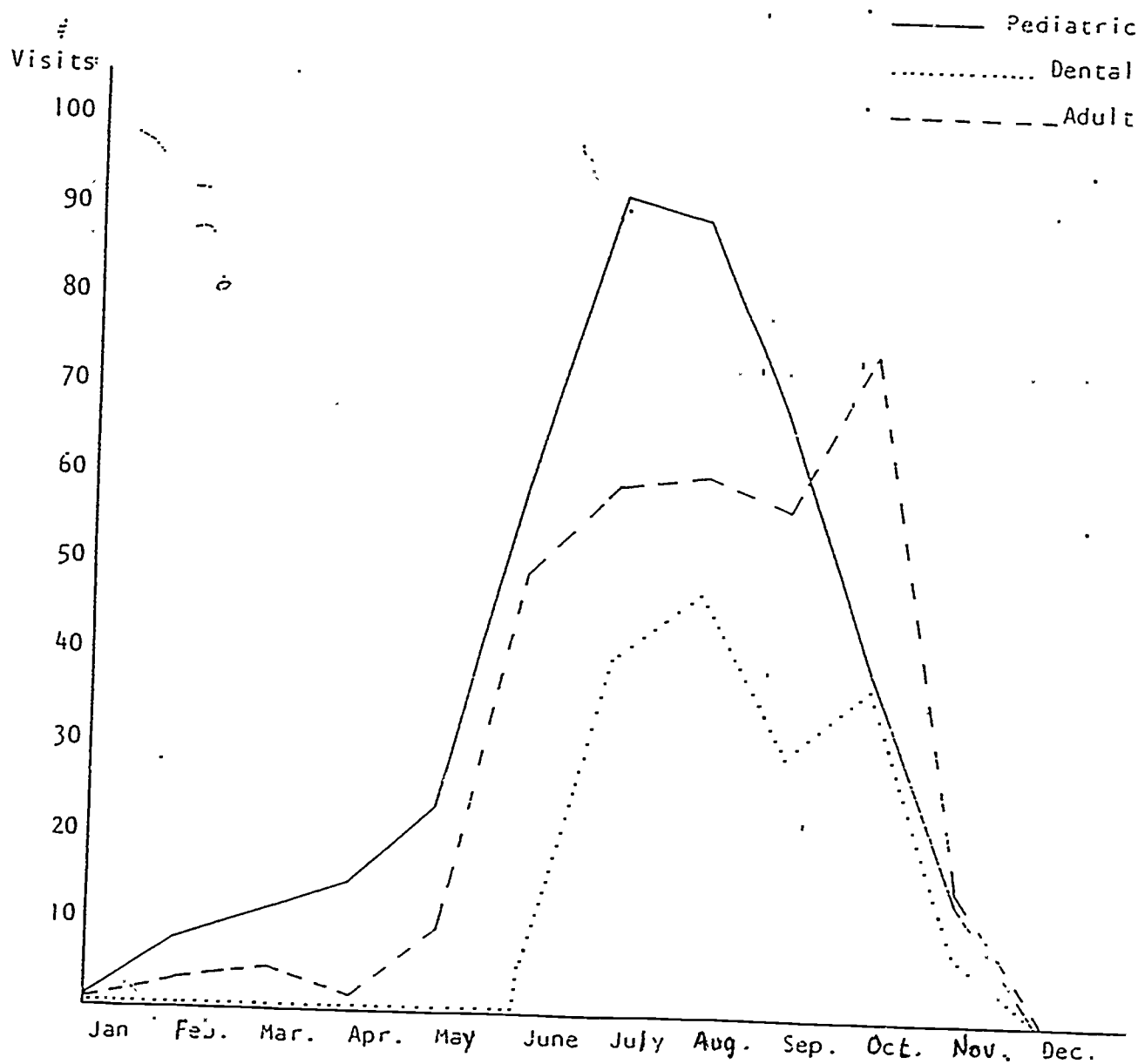
- symptoms
- diseases
- diagnoses, screening, prevention
- treatments
- injuries and adverse effects
- test results
- administrative services
- other (includes blanks, problems and complaints not elsewhere classified)

Physician's diagnoses in the medical records review were coded according to this same classification, principally in the "disease" category.

Seasonal Distribution of Encounters

Although records for the entire year were examined, 87% of all encounters took place during the migrant season, from June through October. With 45% of all encounters, pediatric services were in strongest demand. Pediatric encounters came to a sharp peak in July and August, which is partially attributable to an outbreak of diarrhea at that time among infants.

Figure 1. Class of Encounter by Month



Number of Encounters per Individual

The number of encounters per person varied according to age group. As shown in table 10, children under three years were seen at an average of 3.2 encounters for the year. Children between three and sixteen years averaged 1.8 encounters, and individuals aged 16 years and older showed an average of 1.7 encounters. Again, the encounter rate for infants is probably somewhat higher for the 1983 season than in other years as a result of the diarrhea.

Table 10. Number of Encounters by Age Group

Encounters	Age Group					
	< 3 yrs.		3 to 15 yrs.		≥ 16 yrs.	
#	#	%	#	%	#	%
One	20	37.7	66	53.7	194	65.8
Two	11	20.8	29	23.6	54	18.3
Three	4	7.5	19	15.4	19	6.4
Four	6	11.3	5	4.1	14	4.7
Five - Eight	9	17.0	4	3.3	12	4.1
Nine - Thirteen	3	5.0	0	0	2	.7
> Thirteen	0	0	0	0	0	0
Total						
Individuals	53	100.0	123	100.0	295	100.0*
Encounters	170		224		516	
Mean	3.2		1.8		1.7	

*Percentages do not always add up to 100 because of rounding.

On the whole, the Hispanic population made the greatest use of the various services provided by the Health Center. As illustrated in table 12, 83% of all visits in 1983 came from Hispanic patients.

Table 12. Class of visit by ethnicity.
(Does not include outreach encounters)

Class of Visit	Hispanic		Non-Hispanic		Total
	#	%	#	%	#
Pediatric	310	90.1	34	9.9	344
Dental	106	67.1	52	32.9	158
Adult*	158	81.9	35	18.1	192
Total	574		121		694
Total % Hispanic	= 82.7				
Total % Non-Hispanic	= 17.4				

*includes optometry

As was pointed out before, since the majority of the family population in the Oak Orchard Area is of Hispanic heritage, the largest proportion of pediatric visits is expected to come from this ethnic group. However, the adult population is fairly evenly divided between Hispanic and non-Hispanic people so that the almost exclusive (83%) utilization of services by Hispanic individuals seems disproportionate. Although this is true to an extent, it is important to remember the differences between the Hispanic and non-Hispanic population. These are differences in family size, length of stay, and means of transportation. Hispanic families not only constitute the largest proportion of the family population, these families individually comprise more people; 67% of the non-Hispanic families in the survey consisted of fewer than four members whereas only 27% of the Hispanic families fell into this category. Furthermore, with most families working on vegetables, they stay in the area for approximately five months. Consequently, there is a greater opportunity for using health services as well as a greater need for them, not

only among the lower age groups but also for adult Hispanic workers. In addition, most of the Hispanic families have their own source of transportation, which makes health care more accessible for them.

Non-Hispanic adult workers, for the most part Black and Jamaican solo individuals, come here for an intense 10-week apple harvest. With much of their annual income depending on this period of employment, these workers are not likely to take the time off to see a doctor unless it is absolutely necessary. Since large proportions of the solo population depend upon others for rides, health services are generally less accessible to them. On the other hand, solo individuals as well as family adult respondents reported a wide range of health problems, and many workers felt that their health problems were not met. There is a clear need for health care among adults. In serving the needs of these people, however, the differences within the population outlined above have to be taken into consideration.

For dental care the distribution between Hispanic and non-Hispanic encounters was somewhat less skewed, with Hispanics accounting for two-thirds of all visits.

Adult visits at the general/family practices, located in Albion and in Brockport, were 82% Hispanic. Since almost all visits (93%) at Albion were with Hispanic patients, non-Hispanic adult patients were served almost exclusively at the Brockport facility.

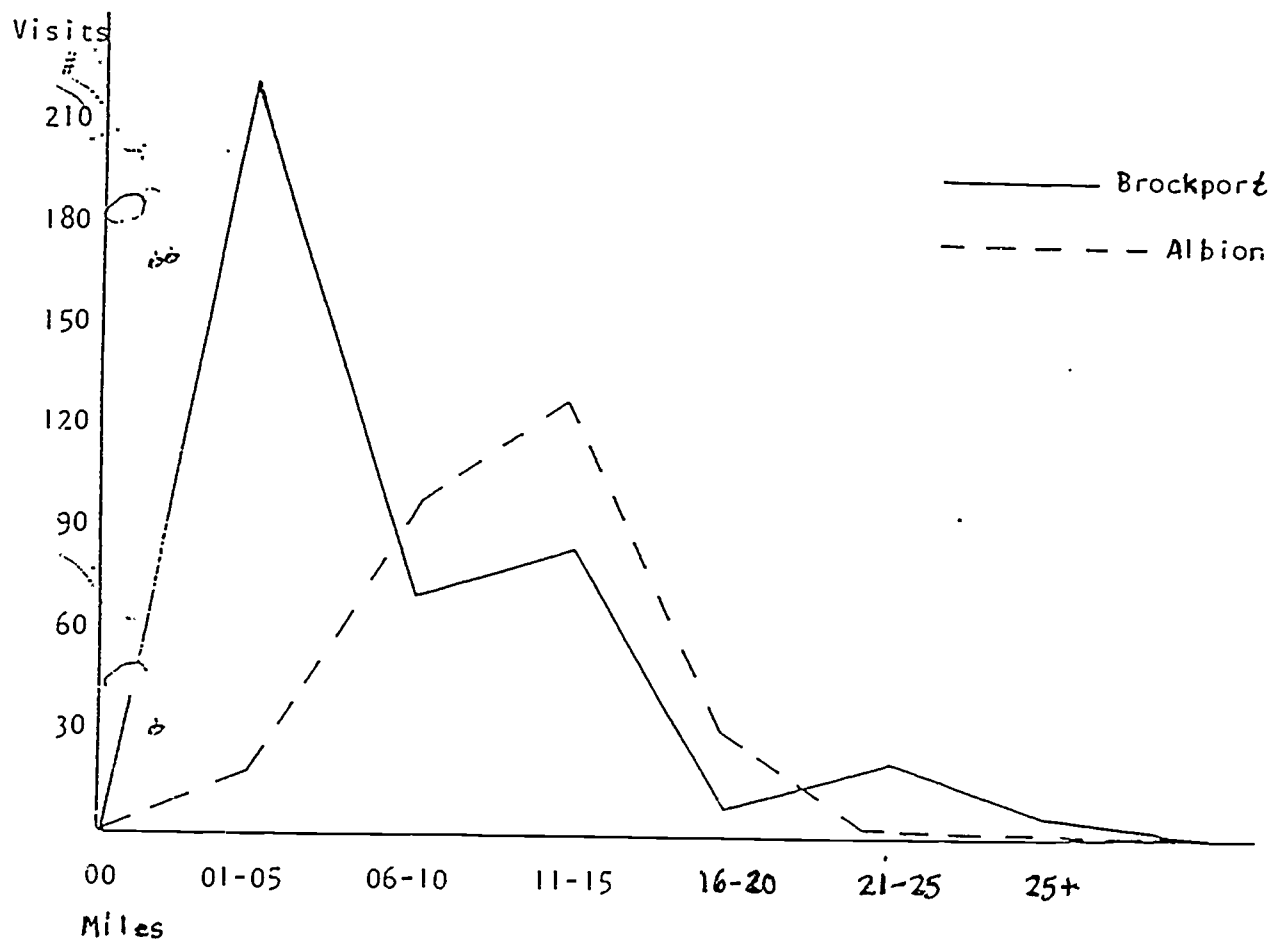
Table 13. Place of visit by ethnicity.

Place of Visit	Hispanic		Non-Hispanic		Total
	#	%	#	%	
Brockport	320	75.5	104	24.5	424
Albion	252	93.3	18	6.6	270
Total	572		122		694

The workload at the Albion Center is fairly evenly distributed between children and adults: 143 visits were for pediatric care and 127 were with adults using the general/family practice. As mentioned before, the visits to Albion were almost exclusively by Hispanic patients.

The average distance traveled to Albion was eleven miles, with 90% of all visits falling within the range of six to twenty miles. As seen in Figure 2, the distribution to Brockport was much more variable and was highly skewed towards short distances.

Figure 2. Distance traveled to providers (All visits - 1983)



Reasons for Which Migrants Seek Care

The twenty most common complaints and reasons for visit are listed in table 16 in order of overall frequency. The totals are then broken down into complaints mentioned during actual visits and during outreach encounters.

The twenty most frequent diagnoses are grouped according to the same criteria in table 17. Diagnoses reached during outreach encounters should be viewed as preliminary since staff time and equipment did not permit examinations as thorough and conclusive as they could have been during an office visit.

The range of reasons for which migrants seek care was greater for the individuals at least 16 years old than for the group under 16 years of age. Within the older age group, the twenty most frequent complaints accounted for only 38% of all complaints. For those under 16 years of age, however, the twenty most frequent reasons for visit accounted for 66% of all complaints. In this latter category, the symptoms of an acute medical condition were the most frequent complaints; fever and cough accounted for a fifth of all visits.

In the older age group, most visits were for general medical exams and prenatal exams, which together, accounted for 10% of all visits. The two most frequent symptoms for which migrants sought care were back problems and skin rashes. These accounted for 7.5% of all visits. The frequency with which these health problems were mentioned by the respondents in the health interview survey also suggests that these conditions are more common within the general migrant population than the medical records indicate.

Other studies* have claimed that muscular, orthopedic and skin problems are clearly work related. Particularly with regard to skin conditions, however, it is not clear to what extent they are caused by the conditions of work, that is, by exposure to chemicals. Out of twelve visits (patients ≥ 16 years of

*Slesinger, McElroy, Bleiweis

Table 16.

TWENTY MOST FREQUENT COMPLAINTS AND REASONS FOR VISIT

Complaint/Reason for Visit	Actual Visits				Outreach		Total	
	≥16 yrs.		<16 yrs.		All Age Groups		#	%
	#	%	#	%	#	%		
	(N=336)		(N=450)	(N=260)		(N=1046)		
1. General Medical Exam	17	5.1	29	6.4	96	36.9	142	13.6
2. Fever	1	.3	53	11.8	8	3.1	62	5.9
3. Well Baby Exam	0	0	37	8.2	10	3.8	47	4.5
4. Cough	3	.9	35	7.8	6	2.3	44	4.2
5. Diarrhea	2	.6	26	5.8	1	.4	29	2.8
6. Skin rash	12	3.6	15	3.3	2	.8	29	2.8
7. Symptoms of Throat	10	3.0	15	3.3	2	.8	27	2.6
8. Vomitting	3	.9	18	4.0	2	.8	23	2.2
9. Back Symptoms	13	3.9	0	0	9	3.5	22	2.1
10. Headache	12	3.6	5	1.1	5	1.9	22	2.1
11. School Physical	0	0	0	0	21	8.1	21	2.0
12. Cold	5	1.5	11	2.4	4	1.5	20	1.9
13. Earache	7	2.1	10	2.2	2	.8	19	1.8
14. Blood Pressure Check	11	3.3	0	0	8	3.1	19	1.8
15. Nasal Congestion	3	.9	13	2.9	2	.8	18	1.7
16. Otitis Media	4	1.2	13	2.9	0	0	17	1.6
17. Prenatal Exam	15	4.5	0	0	2	.4	17	1.6
18. Symptoms of the Ear, NOS*	0	0	15	3.3	0	0	15	1.4
19. Symptoms of the Teeth & Gums	1	.3	0	0	13	5.0	14	1.3
20. Stomach pain	7	2.1	3	.7	4	1.5	14	1.3
	126	37.8	298	66.1	197	75.5	621	59.2

*Mostly babies pulling their ear lobes.

Methods

Time and the available staff allowed for interviews with eight women. The selection of these informants was based on information provided by outreach workers and on our own experience from conducting the survey. Since most of the family population in the study area is of Hispanic heritage, with Afro Americans as the second largest group, we selected five Hispanic and two Black women and one Caucasian woman. These informants ranged in age from 16 years to about 50 and had children aged 6 months to over 20 years. The sample included representatives from the more remote areas of Orleans County as well as from Monroe County and the County Line area. We selected from large and moderate sized camps as well as from small, unregistered housing units. One woman was interviewed in Spanish. All other Hispanic women were bilingual and were interviewed in English.

One of the women was in New York State for the first time this season. All other women had come to this area for between 2 and 30 years. One woman and her family had settled out of the migrant stream in this area a number of years ago.

The interviewer contacted each informant in person to explain the purpose of the interviews and to arrange for an appointment. All women were interviewed in their homes. The interviewer brought a small gift of food to the appointments; no other kind of "payment" was made. Two interviews took place over the weekend, all others were conducted during the week in the afternoon.

The Health Center ("Clinic")

All women with whom we spoke had been to the Health Center for care either for themselves or for their children. The women were appreciative of the availability of this health service and mentioned in particular that in their home states health care was generally more expensive. Health services utilized in other states included farmworker clinics, hospitals, mobile clinics, and also clinics run by Planned Parenthood and La Raza Unida; two families had received health care from a private physician. Some women mentioned farmworker clinics in Texas and Virginia where they had been treated free of charge or for less than five dollars. In general, however, clinic fees per visit were reported at \$10-20 which was considered quite expensive. Because of the lower costs here, according to some women, many migrants wait to get their health problems met until they come on the season.

When asked where, they thought, migrants would go for health care if the clinic did not exist, some women suggested hospital emergency rooms while others emphatically maintained that they would not go to a doctor at all anymore. The case of S. illustrates both positions.

S. lives on a small camp in a remote part of Orleans County, she has no transportation of her own, and she is unfamiliar with the area. She told that her 2 year old son had got sick earlier during the season and that he did not seem to get any better. She took her son to the doctor only when the other woman living on the same camp told her of an inexpensive clinic for migrants. When asked what she would have done if she had not found out about the clinic, she said she would have waited for the child to get better. If it had got really bad, she said she would have taken him to a hospital. However, she could not describe what "really bad" might be nor where she would find a hospital.

off from work, making the clinic visit far more expensive than the three dollar fee for service. For those women who did not work outside the house, however, clinic hours and the appointment system seemed to make no difference.

From a previous season one woman remembered having had to wait for several hours at the clinic until the doctor saw her child even though the child had a fever. The wait was this long, she explained, because she did not have an appointment. It wasn't easy for her to make an appointment, she said, since she had no phone. Two other women, however, whose children had come down with diarrhea this season, reported excellent attention from the clinic. There was no wait and they were encouraged to call or come to the Health Center any time when they noticed a change in the child's condition. One woman said she took her baby to the clinic every day for almost two weeks.

In spite of the criticisms, most women felt that health services were good in this area. Social services in general, according to some women, were better here than in their home states. "They take very good care of us here," said one woman. She especially appreciated that clinic outreach workers had repeatedly come to check on her infant son who had been ill with diarrhea this season. Two other women for whom the outreach worker had provided some services said that "it was very nice of him" to come to their house "since he really didn't have to do that."

By contrast, one woman felt that too much was being done by service agencies in general. Some of her friends, she reported, felt that if they needed anything they would go out and get it. "Some agencies," she said "seem to think that migrants can't do anything for themselves." Also, she and some of her friends found it rude that an outreach worker would interrupt them during dinnertime and expect to be welcome.

in infancy for pneumonia, subject to high fevers, and likely to need a heart operation).

Colds and ear infections were the most frequent problems reported. Infants in the 9-18 months age group suffer from chronic ear infections. One mother said her son becomes sick anytime there is a change in the weather. Another felt that the day care center might contribute to her child's problems with infectious diseases, especially diarrhea.

Summer diarrhea affects a number of infants and toddlers of migrant families. For example, in 1983 one informant's two year-old son and one year-old daughter were both hospitalized for diarrhea, illustrating the caution shown after the death of an infant in the migrant community from dehydration due to diarrhea.

Other problems mentioned were head lice, apparently contracted at the day care center, an abdominal hernia in a ten year-old, for which an operation was being arranged; and the child with the heart murmur mentioned above.

It is interesting that no mothers complained about children's dental problems, normally a serious problem in migrant children. One child of four showed us her unusually white and regular teeth with great pride, and we suspect that this is the product of good clinical care either in New York or in Florida.

Children's Nutrition

Infants of migrant families are usually breast-fed for only a short period of four to six weeks or are put on formula right after birth. The transition to cow's milk occurs between eight and fourteen months.

Attitudes toward breast-feeding varied among respondents. Several favored breast-feeding for as long as possible but found it impossible to maintain

off from work to take their child to the clinic. In hospitals, as well, service has varied. One woman who stayed with her hospitalized infant resented having to sleep in a chair. Others cite misunderstandings at Emergency Rooms.

The kinds of complaints voiced were mostly logistic ones, rather than poor communication or incompetency. These migrants do not perceive their children's health care to be inadequate or discriminatory. There was no mention of language barriers for the families interviewed, although several knew other families who required interpreters.

The most serious problem in obtaining health care is simply the lack of telephones in the homes. Sometimes it is necessary to drive some distance to find a phone. The ambiguous and unpredictable role of outreach workers is another problem. Some families seem to wait until they are contacted, for example in treating one child's head lice. In this case, the family was never contacted and, apparently, the problem has not been treated and the child cannot return to the day care center.

According to the mothers interviewed, their children are getting appropriate immunizations on schedule, with good coordination of records between the states. Those who enter the day care centers here in New York receive a full check-up. One 16 year-old mother with two small children did not understand the concept of a check-up when asked; her children do not go to the day care center.

The effect of the father's residence status on a child's eligibility to receive health care concerned one of the families and may be a problem for other migrants. Although the mother is an American citizen, red tape concerning the father's status was a source of worry.

One woman said it was embarrassing to have a male interpreter or male physician; having a female physician at the Clinic helps out it is not enough to prompt a woman to go for regular exams.

Family Planning

Most of the women interviewed had their first child (or children) when they were still adolescents, in two cases at ages 15 and 16, without much spacing between children. They also cite other cases of friends and relatives who have their first children at age 13 and by the age of 15 or 16 have several children each. It is fairly clear that these women come to family planning services to regulate or postpone further pregnancies; and in several cases it is more the husband than the wife who wishes to delay further pregnancies until the family is better off financially. Careful timing of each pregnancy so that birth occurs in the home state in the off-season seems to be a goal of some of the couples interviewed. One couple stated they plan ultimately to have five children (at present, they have one).

Several of the women interviewed go to Planned Parenthood in their home states and are currently using oral contraceptives. One woman had difficulty with an I.U.D. that caused pain. She then used oral contraceptives for several months but found them inconvenient and difficult to remember to take. She currently uses no form of contraception and suspects that the I.U.D. might have made her sterile.

Obstetric care

The women interviewed recognize a variety of alternatives in management of pregnancy and birth. The Hispanic women, especially disagree among themselves regarding the value of hospital births and regular prenatal visits. One woman stated that many women in the camp do not go to a doctor during their

she looks much older than her actual age.

Another woman can work only part-time because her arthritis is so severe. At 38 years of age, she feels "generally worn down," her whole body aches, she has problems with (intestinal) gas, and in short she feels like "one big pain."

The third woman mentioned problems with bronchitis. She has had bronchial asthma since childhood. She is also chronically depressed.

A problem noted by the interviewers but not mentioned by informants* was that of obesity. All of the women were overweight, even the adolescents, some 20 to 30 pounds, one probably 100 pounds over normal weight.

Effect of migrant lifestyle on children

Three informants expressed opinions about the migrant lifestyle. Two felt that moving around was not good for children; "they don't know where they belong." One woman noted that there were not enough children in the camp for her child to make friends and have playmates. In one home, the teenage girls themselves affirmed that they would much rather be in Florida with their friends.

An opposite opinion was expressed by one woman that her child has adjusted well to traveling and sleeps easily in the car. But she hopes they can settle in one place when it is time for the child to start school.

* With the exception of one individual who mentioned briefly that she was dieting and had managed to lose 10 pounds.

Earnings in the Oak Orchard Area

The income of farmworkers can fluctuate greatly at different points of the season. The vagaries of the weather, the availability of work, the quality and volume of the crop as well as the price it fetches on the market are only some of the factors which influence weekly and seasonal earnings. The last weekly wages which each respondent reported to have received were subject to these uncertainties.

Table 18. Last weekly wages received by the migrant worker and his family.

<u>Family Wages</u>	<u>Family Respondent</u>	<u>Solo Individual</u>
	(N=58) %	(N=149) %
less than \$100	24.1	27.5
\$100 - \$199	34.5	42.3
\$200 - \$299	13.8	28.8
\$300 - \$399	6.9	6.7
\$400 - \$499	8.6	.7
\$500 - \$599	6.9	0
\$600 - \$699	5.2	0
\$700+	0	0
	100.0	100.0
Mean	\$232.76	\$160.74
Median	\$175.07	\$153.19
Mean, Orleans County	\$244.00	\$146.70
Mean, Monroe County	\$217.00	\$204.50
Mean, Genesee County		\$183.30

In interpreting these figures, it should be remembered that no effort was made to "correct" for the over or under-representation of various earnings.

Table 19. Family Income Last Season in the Oak Orchard Area

Family Income	Family Respondent		Solo Individual	
	(N=33)	%	(N=76)	%
less than \$500		3.1		0
\$500 - \$999		0		6.6
\$1,000 - \$1,499		3.1		13.2
\$1,500 - \$1,999		0		10.5
\$2,000 - \$2,499		6.3		14.5
\$2,500 - \$2,999		3.1		11.8
\$3,000 - \$3,499		15.6		7.9
\$3,500 - \$3,999		6.3		7.9
\$4,000 - \$4,499		9.4		3.9
\$4,500 - \$4,999		15.6		3.9
\$5,000 - \$5,500		12.5		5.3
more than \$5,500		25.0		14.5
		100.0		100.0
Mean		\$4,251.00		\$3,065.79
Median		\$4,599.35		\$2,720.00
Mean, Orleans County		\$4,229.00		\$2,394.00
Monroe County		\$5,563.00		\$3,977.00
Genesee County		-		\$5,028.00

labor unless there was a net dollar inflow into their pockets, and therefore the community's.

The nature of migrant farm labor has a significant effect on the extent to which they have a direct economic impact on the community. Migrant farmworkers reside not in the communities themselves but in camps and/or communal housing. For the most part there are no rent or utilities payments. As temporary (average four months) residents, the only taxes migrants pay are sales taxes on purchases. On the other hand, migrant farmworkers require very few direct resources from their host communities. These communities do not, to our knowledge, hire additional government personnel with local tax dollars to provide services to migrant farmworkers during their stay. Additional services to migrants are generally funded through direct or indirect federal grants. In budget terms, there would be no changes made to the budgets of local communities if migrant farmworkers no longer worked the fields. This point is discussed further along under the "government" model.

Assumption #3: The direct economic impact of migrant farmworkers is limited to the effects of their local expenditures on goods and services and the effects of outside funding to local entities providing services to the migrant farmworkers.

Based on assumption #3, our economic impact model has been sub-divided into three parts. The "expenditures" model (E) determines the overall economic impact of the purchases of goods and services in the host communities. The "services" model (S) determines the direct and indirect economic effects of outside (non-local) funding for services provided to migrant laborers.

Our third model, the government model, estimates the sales tax revenue only from the migrant farmworkers themselves. The data limitations of this model prohibited the researchers from determining additional government impact.

Such impact would usually include local governmental budgetary costs attributable to the migrant program (a negative), and the revenues from recipients of migrant services grant monies for various other government services or property taxes. It is the purpose of this discussion to show that local government does receive revenues from the migrant farmworkers, and that these revenues most likely exceed the actual cost of services to migrant farmworkers by county and local governments.

Migrant Farmworker Income and Expenditures

Information on migrant farmworker income and expenditure patterns is difficult to obtain, as migrants do not maintain a steady flow of income from any one employer. Without a salary or hourly rate to refer to, and with much of their livelihood dependent on the availability of work or the whims of nature, migrants do not usually have a precise set of records which reflect their earnings for a particular season. For an economic impact study, the portion of earnings which are spent in the local area takes on added importance since many migrants depend on their earnings "up north" for their annual wage income. Thus, a percentage of all earnings are taken with the migrants to their home bases in Texas, Florida, Jamaica, and Puerto Rico.

In order to obtain a better estimate of both local income and local expenditures of migrants, a series of questions was developed for insertion in the sample survey discussed previously. Questions 39 through 45 of the survey (see Appendix A) explore estimates of last year's income (both individual and family), the number of persons contributing to, and dependent on that income, the income from last season and portion of which was spent locally, and weekly or seasonal expenditures on selected items. Although the reliability of any estimation procedure may be questioned, it is our contention that error moves both ways, allowing the sampling procedure to approximate the norms of the population. Appendix B shows the results of our survey which pertain directly to a determination of total wages paid. Crosstabular analysis of these data items allowed us to differentiate the income levels of families versus singles by county. Likewise, we showed differences of income between fruit and vegetable pickers, and also processors (Genesec County). These differences are shown where appropriate throughout the analysis.

Table 21 is a determination of the total seasonal wages paid to migrant farmworkers in the 1983 season. In this case we differentiate between family and single person income, and by county. Sample data for weekly income in 1983 are multiplied by the appropriate population figures and average length of stay. This 1983 wage estimate was then averaged with last year's estimated wage to obtain what we feel is a more appropriate average seasonal wage. The total wages paid in the 1983 season was determined to be approximately \$2,076,040 for all migrant farmworkers in the Oak Orchard service area.

Expenditures in the service area are listed on Table . Migrant farmworkers were separated into family units and singles for the purpose of this study, as they are two economically distinct groups. Families tend to spend a greater percentage of their income in the service area (85.2%) than do singles (49.8%), as many "single" workers are sending or taking a portion of their incomes home to families. When the expenditures categories in Table were totalled, we found overall expenditures in the local areas to be approximately \$1,212,814, or 58.4 percent of total wages paid.

Income and Expenditures from Grant Monies for Services to Migrant Farmworkers

A wide variety of services are made available to migrant farmworkers through direct and indirect Federal or State grant aid. The research team was able to determine that four funded programs for migrant farmworkers directly result in employment and expenditures in the service area.

Health services are provided through the Oak Orchard Community Health Center with offices in Brockport and Albion. Oak Orchard received \$180,833 in 1983 for providing health and social services directly to migrant farmworkers. Day care for migrant farmworker children is provided through the State of New York, with programs both in Orleans and Western Monroe Counties. Total annual funding for those programs was \$171,599 in 1983. A third program, Rural New York Farmworker Opportunities, Inc., provides social services to both migrant and seasonal farm labor. Their 1982-83 Annual Report indicated that 61% of all services in New York State are provided to migrant farmworkers. Rural New York maintain a staffed office in Albion, a separate budget for which is not available. With four employees and rented office space, we estimated the budget amount at about \$75,000. Sixty percent of that amount would yield our estimate of \$45,000 in RNYFO expenditures on migrant programs in the service area. The Migrant Tutorial Outreach Program, based in Brockport, had a 1983 annual budget of \$270,000, spent on the education of migrant children in the service area. Total expenditures of the four programs combined are \$667,432. This is probably a low estimate of the value of goods and services provided to migrants overall, however a larger number cannot, at this time, be justified with facts.

Governmental Revenues from Sales Taxes

Looking again at Table 20 we note that not all the items purchased are subject to the payment of sales tax. For purposes of this model, food, transportation, and health care expenditures were eliminated from the list of taxable expenditures. Overall, then, \$557,706 may be considered taxable purchases. With the county portion of sales taxes set at 3 percent, county sales tax revenues from the expenditures of migrant farmworkers were approximately \$16,731 during the 1983 season.

The value of goods and services purchased locally through direct grants cannot be determined. With a value of \$667,432, however, we can state that at least several thousand dollars in additional sales and other tax revenues were generated locally.

Multipliers

The multiplier concept is generally useful in explaining how monies spent in an economy generate greater spending. This concept, popularized by the well-known economist John Maynard Keynes, was originally developed for application to the economy of a large entity, such as a nation. The Regional Economic Assistance Center at SUNY Buffalo has applied the multiplier concept to the rural Oak Orchard area. Arguments may be made for increasing or decreasing the multipliers chosen, however the fact remains that each dollar spent for consumption generates and re-generates income in the economy.

The traditional multiplier formula is represented by this formula:

$$\text{Multiplier} = \frac{1}{1 - \text{Marginal Propensity to Consume}}$$

According to this formula, the larger the propensity for an individual to consume, the greater the impact on income. In order to measure the impact of spending only in the local area, it is necessary to isolate the local component of the multiplier. This was quite simple for the migrant farmworkers, as Table shows the percentage of migrant farmworker income spent in the local area. For spending on the grant monies received for Migrant services, the marginal propensity to consume (MPC) is derived as follows:

$$\text{MPC} = (\text{Propensity to consume locally}) (\text{Percent of grants spent locally})$$

Based on earlier studies, we have determined that in urban Erie County, New York, the propensity to consume locally is estimated at 50 percent of all sales dollars. Because our relatively rural service area does not offer as wide a variety of consumer goods and services as offered in an urban area, we

have estimated that the marginal propensity to consume locally in the Oak Orchard area to be 45 percent, or 10% less than that for Erie County. Thus, an estimated 55% of total sales dollars flow out of the area for purchases and non-local taxes. It was also estimated that 2% of the expenditures made outside the service area should be added to account for the return of tax monies to the area. The net outflow from the service area for grant monies is, therefore, 53% of every sales dollar. We have assumed, also, that the propensity to spend direct grant monies locally (salaries rather than supplies) is high. Again based on earlier studies, an estimate of 95% was chosen.

The following calculations determine the multipliers for our study:

$$\begin{array}{l} \text{Migrant Farmworkers} \quad \frac{1}{1 - (.584)(1-0)} = \frac{1}{.416} = 2.4 \\ \text{Migrant Service Grants} \quad \frac{1}{1 - (0.85)(1-.153)} = \frac{1}{.6005} = 1.67 \end{array}$$

Total Economic Impact

We have determined that migrant farmworker wages for 1983 totalled approximately \$2,076,040. Of those wages approximately 58.4%, or \$1,212,824 were spent in the local area. Using the multiplier, it can be estimated that the impact value of those expenditures was \$2,910,754. Likewise, a total of approximately \$667,432 was received by local agencies to operate migrant services. Those expenditures, when multiplied, give an impact value of approximately \$1,114,611. Thus the total expected direct impact value of the migrant farmworkers to the businesses and communities of the Oak Orchard Service Area in 1983 was about \$4,025,365. In round figures, \$4.03 million were pumped into the service area's economy during the 1983 migrant season. That amounts to \$3,696 for each of the 1089 migrant farmworkers that the Oak Orchard area hosted in 1983. This is significant, and should be noted by the communities hosting migrant farmworkers. After all, the communities themselves are the ultimate beneficiaries of the hard work of migrant farmworkers.

Table 20.

Total Seasonal Expenditures By Category

	<u>Families</u>	<u>Singles</u>	<u>Total</u>
Food	\$198,433	\$303,667	\$502,100
Clothing	75,238	142,810	218,048
Laundry	14,493	19,617	34,110
Alcohol	5,329	39,234	44,563
Tobacco	5,541	28,248	33,789
House Supplies	10,231	54,927	65,158
Children Supplies	14,281	28,248	42,529
Transportation	65,434	69,051	134,485
Recreation	8,099	16,478	24,577
Work	14,067	25,894	39,961
Personal Care	6,181	17,263	23,444
Health Care	5,968	12,555	18,523
Radio, TV, Stereo, etc:	4,875	23,955	9,229
Small Appliances	910	1,787	1,011
Total Seasonal Expenditures	<u>\$429,080</u>	<u>\$783,734</u>	<u>\$1,212,814</u>
Percent of wages	85.2%	49.8%	58.4%

Determination of Total Wages Paid, 1983Orleans County:

1. Families, 1983: 17 weeks * \$244.00 = \$4,148/season
 1982: \$4,229/season
 Average \$4,188.50 * 52 = Total wages of \$217,302
2. Singles, 1983: 10.5 weeks * \$146.00 = \$1,533/season
 1982: 2,394/season
 Average: \$1,963.50 * 335 = Total wages of 657,772

Orleans County total estimated wages paid 1983: \$875,574

Monroe County (Western):

1. Families, 1983: 23.1 weeks * \$217.00 = \$5,013/season
 1982: \$5,563/season
 Average: \$5,288 * 54 = Total wages of \$285,552
2. Singles, 1983: 19.2 weeks * \$204.50 = \$3,926/season
 1982: \$3,977/season
 Average: \$3,951.50 * 76 = Total wages of \$300,314

W. Monroe County total estimated wages paid, 1983: \$585,866

Genesee County:

no families

1. Singles, 1983: 20.5 weeks * \$183. = \$3,752/season
 1982: \$5,028/season
 Average \$4,390 * 140 = Total wages of \$614,600
- Total estimated wages paid, 1983: \$2,076,040

Total Wages/Singles: \$1,572,686
 Total Wages/Families: \$ 503,354

Note: Average length of stay in weeks = $\frac{\text{average no. months} \times 30.5 \text{ days}}{7}$

APPENDICES

Q18a. Health problems mentioned.

Tooth problem
Vision problem
Respiratory problem
Skin rash
Back/musculoskeletal symptoms
Headaches
Stomach aches
Dizziness/general weakness/loss of appetite
Diabetis
Ulcers
High/low bloodpressure
Arthritis/rheumatism
Pregnancy
Gynecological problem
"Nerves"
Nutritional deficiency problem
Nose bleeds
Kidney problems
"Male problems"
Ear infection
Hemorrhoids
Heart attack
Bowels swelled up
Chest pains
Blood circulation problems
Cold
Flu
Heart murmur/defect
Hearing problem
Allergies
Diarrhea
Hernia
Blood in urine
Thyroid problem
Pneumonia
Deafness
Stunted growth
Gallstones
Seizures/spasms
Appendicitis
Tonsillitis
Tumor
Throat/vocal cord problem

Appendix B

	<u>Families</u>	<u>Singles</u>
1. Last weekly wages paid:		
Orleans:	\$ 244.10	\$ 146.10
Monroe:	\$216.70	\$ 204.50
Genesee:	-	\$ 183.30
all non-processors: (Orleans & Monroe)	\$233.00	\$ 156.40
2. Last weekly wages paid by crop:		
Fruit:	\$212.50	\$ 161.00
Vegetables:	\$255.26	\$ 153.00
3. Crop now working on:		
Fruit:	28%	72%
Vegetables:	67%	25%
Both:	5%	3%
4. Money made last season:		
Orleans:	\$4,229	\$ 2,394
Monroe:	\$5,563	\$ 3,977
Genesee:	-	\$ 5,028
Overall average:	\$4,563	\$ 3,247
5. Average length of stay:		
Orleans:	4.0 months	2.4 months
Monroe:	5.3 months	4.4 months
Genesee:	-	4.7 months
6. Money spent here last season:	\$2,496	\$ 1,388

LITERATURE REVIEW

The literature review showed that most migrant farmworker information relevant to this study is available on the topic of health care. To our knowledge no economic impact study per se has been attempted.

Research on the health care needs of migrant farmworkers has emphasized utilization patterns and barriers to health care.

Health Services Utilization

Utilization rates of migrant farmworkers have been found to be much lower than those of other low income populations. (Slesinger 1979; Walker 1970; Bleiweis 1977). Low utilization rates, it is often explained, are the result of access barriers to health services. These barriers include lack of transportation, the presence of children in the household, lack of education, language problems, cultural differences, inappropriate clinic or office hours, lack of money, discrimination, lack of information about available services. Some studies have assessed utilization patterns when one or more of these barriers were removed (Walker 1970; Anderson 1977; Rudd 1975). These studies suggest that removing certain access barriers will not always result in higher utilization of health services.

A three-year prepaid insurance project in Texas (Walker 1970) revealed that removing the economic barriers to health care did not result in a significant increase in ambulatory use. Although hospital use approached national norms and there was a slight increase in utilization of ambulatory care at the end of the study period, overall utilization rates remained well below national levels.

Similar findings were reported from the East Coast Migrant Entitlement Project based in Florida--despite an active and extensive outreach effort in this project. The correlation between these two studies is interesting, too, because the two populations involved were quite different in their ethnic composition: Mexican Americans constituted almost the entire Texas group, while the Florida population comprised 24% Hispanics and 75% Blacks. The correlation between the Texas and the Florida study questions the notion that a Mexican American health subculture largely accounts for low utilization rates of Anglo services.*

*For a critique of this school of thought see Weaver 1973.

On the other hand, the existence of healers (curanderos) and the reliance upon folk medicine among Mexican Americans of rural origins is well known; local informants of the Oak Orchard area, too, report the use of herbs and folk remedies among Mexican American migrants. Obtaining systematic information on its importance in the utilization of Anglo health services, however, has proven to be difficult (McElroy 1981; Slesinger 1981). Migrants often will not acknowledge their use of or preference for folk remedies, a reticence which in turn questions the reliability of their reported use of and satisfaction with Anglo health services. Slesinger found that only 4% of the almost exclusively Mexican American respondent population reported the use of folk remedies and the consultation of healers. McElroy found similar reluctance to acknowledge non-Anglo health care options in her California project. However, with an increasing ethnic awareness and hostility toward Anglo services (during the eight months strike) many more migrants acknowledged the use of folk healing and, moreover, they found them to be superior to Anglo health care options.

A Utah project (Anderson 1977) compared the utilization of private physicians to that of public health services when both types of care were financially equally available. (Findings were not compared to other populations). The study reported that only 25% of the total number of visits fell onto private physicians. The ratio of acute care visits to preventive care visits, however, was nearly 4:1 for the private practices, but it was only 2:1 for the clinics.

A Florida respondent survey (Bleiweis 1977) asked whether transportation problems, the presence of children in the household, and the lack of education affected health care utilization. According to this study these factors were of little import. The major factors that affected utilization were the presence of an acute medical condition and the perception of being in poor health.

Slesinger hypothesized that the level of education and the ability to speak English would affect utilization in a positive way. She found however, that education and language proficiency accounted for no noticeable difference in the proportions visiting physicians and clinics.

Reasons for which migrants seek care

The reasons for which migrants seek care have been studied through respondent surveys (Bleiweis 1975; Slesinger 1976; McElroy 1981) and medical records reviews (Walker 1977; Rudd 1975; Anderson 1977; Harper 1969).

Although not all studies differentiate between various kinds of services (acute, chronic, preventive care) some common trends can be determined. Bleiweis, Slesinger, and McElroy--in spite of examining three very different populations--report similar findings. The statewide Wisconsin study (Slesinger) as well as the regional study conducted in Florida (Bleiweis) reported that the most frequent reason for which migrants sought care were related to the kind of work they did: orthopedic, muscular, and skin conditions. Respiratory problems, too, (Bleiweis, McElroy) are believed to be work related, e.g. through exposure to pesticides and high pollen count.

The chronic conditions that are most frequently cited are eye trouble, nerve trouble, heart disease and hypertension, musculoskeletal disorders, digestive system problems, genitourinary problems.

Strikingly low preventive care (physical check-up, vision and dental checks) utilization rates have been found in all studies. The need for dental care among migrant farmworkers is indeed so obvious that most studies do not even make a big point of it. This topic is addressed separately, however, and then usually in relation to migrant children (Castaldi 1982; Barnett 1979; Bagramian 1980). The Florida study found that the use of dental facilities by migrant farmworkers was almost limited to those conditions that required tooth-extraction. McElroy found similar conditions among California migrants and reported that in spite of improvements in the health status generally, even small children still have their milk teeth extracted and filled.

Self-perceived health status and needs

Studies of migrants' own perception of their health needs depend upon respondent surveys for their methods. Such surveys are costly, time-consuming and difficult to conduct for a mobile population. Consequently, only few such studies exist. Only Slesinger and McElroy, in fact, provide information on the migrants' self perceived health status and needs. The self-perceived health status of Wisconsin migrants, even that of younger migrants, was found to be much lower than that of other populations. The finding, argued Slesinger, combined with low utilization rates for medical services generally, illustrates that the health needs of this population are not sufficiently met.

By asking the migrants which services they would use if they were available, the same study determined as the most frequently reported needs: dental care, clinics and doctors available on nights and weekends; doctors and medical facilities located closer to home; and Spanish-speaking health professionals.

Similar needs are reported in McElroy's study of settled-out migrants in California.

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RESPONDENT'S NAME: _____
 CAMP: _____
 DATE: _____
 INTERVIEWER: _____

Community Services Research and
 Development Program
 Department of Social and Preventive Medicine
 SUNY at Buffalo

1983 SURVEY INSTRUMENT
 MIGRANT WORKER HEALTH NEEDS ASSESSMENT

Introduction

We are from the State University in Buffalo. We are trying to find out about the health needs of migrant workers who come to this area and their feelings about health care here. We would also like to know some more about your work and where you come from. All information will be strictly confidential and will be used only for reports on health needs.

Somos de la Universidad del Estado de Nueva York en Buffalo. Estamos haciendo un estudio sobre el cuidado de la salud para trabajadores migrantes que vienen a esta región, y quisiéramos opiniones sobre el cuidado de la salud. También nos gustaría saber algo más sobre su trabajo y de donde vienen. Toda información será completamente confidencial y la usaremos solamente para reportes de la salud.

Would you be willing to answer some questions for a few minutes?
 ¿Le permite Ud. hacerle unas preguntas?

YES Thank you.
 Gracias.

NO

The questionnaire is divided into three parts. First I would like to ask you some questions for background information. Then follow questions about health. The last section asks about income and spending.

El formulario está dividido en tres partes. Primero quisiera hacerle unas preguntas generales. Siguen las preguntas sobre la salud. El último parte tiene preguntas acerca de ingresos y gastos.

1. To begin, would you please tell me where your home base is?
 Para empezar, me podría decir, por favor, dónde está su hogar cuando no vive aquí?

STATE AND TOWN _____

2. At the present time are you
 En este momento es Ud.

- | | |
|-------------------------------------|----------------------|
| <input type="checkbox"/> single | soltero/a |
| <input type="checkbox"/> married/lt | casado/a - juntado/a |
| <input type="checkbox"/> separated | separado/a |
| <input type="checkbox"/> divorced | divorciado/a |
| <input type="checkbox"/> widowed | viudo/a |

3. Is there anybody related to you who is living in this camp?
 Están viviendo algunos de sus parientes en este campamento?

NO → "4"
 YES → "how many?"
 "cuántos?" → NUMBER OF PEOPLE +R

How many of these people are actually living with you?
 Cuántos de estos parientes están viviendo aquí con Ud.?

NUMBER OF PEOPLE + R

We would like to know about the health of all members of your family. Would you please tell me who the family members are that are living with you? All names of people and camps will be removed before we analyze this information.

Quisiéramos saber sobre la salud de todos sus parientes que están viviendo con Ud. Me podría decir, por favor, quiénes de sus parientes están viviendo con Ud.? Toda información que identifica a una persona o a un campamento será eliminada del formulario antes de que analicemos la información.

5. When you return to _____ HOME STATE Which relatives live together with you in the same house or apartment?
 Cuando regrese a _____, cuáles parientes viven con Ud. en el mismo hogar.

- | | |
|--|-----------------------------|
| <input type="checkbox"/> father | padre |
| <input type="checkbox"/> mother | madre |
| <input type="checkbox"/> brother (how many?) | hermano (cuántos?) |
| <input type="checkbox"/> sister (how many?) | hermana (cuántas?) |
| <input type="checkbox"/> wife/husband | esposa/marido |
| <input type="checkbox"/> girlfriend/boyfriend | novio/novia |
| <input type="checkbox"/> children (how many?) | hijos (cuántos?) |
| <input type="checkbox"/> in-laws (how many?) | suegro/a (cuántos?) |
| <input type="checkbox"/> other relatives (how many?) | otros familiares (cuántos?) |

TOTAL IN HOUSE (INCLUDING R)

6. In which month did you arrive in this area of New York this year?
 En cuál mes de este año llegó Ud. a esta región de Nueva York?

PROBE FOR MONTH AND DAY _____

7. How did you travel to New York State?
 Cómo viajó Ud. a Nueva York?

- | | |
|---|--|
| <input type="checkbox"/> car (coche) | <input type="checkbox"/> train (tren) |
| <input type="checkbox"/> truck (camión) | <input type="checkbox"/> other - what? (otro - qué?) |
| <input type="checkbox"/> bus (bus) | |

a. Whose car/truck/bus was it?
 Quién es el dueño del coche/camión/bus?

- OWN
- FAMILY MEMBER
- FRIEND
- CREWLEADER
- OTHER (SPECIFY) _____

8. What crops are you now working on? CHECK ALL THAT APPLY
 En qué cosecha trabaja ahora?

- | | |
|---|----------------|
| <input type="checkbox"/> CABBAGE | REPOLLO |
| <input type="checkbox"/> CUCUMBER | PEPINO |
| <input type="checkbox"/> POTATOES | PAPAS |
| <input type="checkbox"/> OTHER VEGETABLES | OTRAS VERDURAS |
| <input type="checkbox"/> APPLES | MANZANAS |
| <input type="checkbox"/> PEACHES | MELOCOTONES |
| <input type="checkbox"/> OTHER FRUIT | OTRAS FRUTAS |

9. Did you work anywhere else in New York State before you came to this camp this year?
 Trabajó Ud. en otro lugar en el estado de Nueva York en este año antes de llegar aquí?

- YES → "where?" (dónde?) _____
- NO

10. In which month do you think you'll leave here this year?
 En qué mes cree Ud. que va a salir de aquí este año?

MONTH/DAY _____

11. Where do you think you'll go?
 Para dónde piensa Ud. salir de aquí?

12. Have you worked before in this area of New York?
Trabajó Ud. aquí en este parte de Nueva York antes de este año?

YES NO → "13"

a. How many years have you been coming here to work? (including this year)
Cuántos años ha venido Ud. a trabajar en esta región?

_____ YEARS

b. Did you come here to work last year?
Vino Ud. aquí en el año pasado para trabajar?

YES NO → "12e"

c. Did you come alone or with any members of your family?
Vino Ud. solo o con algunos parientes?

ALONE

WITH FAMILY → "how many family members?"
con cuántos parientes?

NUMBER

+R

d. In terms of the money that you ("and your family") earned here last year, would you say that it was
Pensando en el dinero que ganó Ud. ("y sus parientes") aquí en el año pasado, diría Ud. que fue una temporada

- a very good season, muy buena,
 a good season, buena,
 a fair season, regular,
 a poor season? mala?

e. Have you worked for this employer before?
Trabajó Ud. para este empleador antes?

YES NO → "13"

f. For how many years have you worked for him? (including this year)
Por cuántos años?

_____ YEARS

13. How many years altogether have you been working as a migrant? (including this year)
Por cuántos años ha trabajado Ud. como migrante?

_____ YEARS

14. Were your parents migrant farmworkers?
Eran migrantes sus padres?

YES
 NO

15. How about your grandparents, were they migrant farmworkers?
Y sus abuelos, eran migrantes ellos?

YES
 NO
 DK/NA

16. IF R HAS CHILDREN Do you think any of your children will become migrant farmworkers?
Piensa Ud. que algunos de sus hijos van a ser migrantes?

- YES, ALL OF THEM
 YES, SOME OF THEM
 NO, NONE OF THEM
 HOPE NOT
 DK/NA

The following questions have to do with what you think about your own health and with your use of health services.

Las siguientes preguntas son acerca de lo que Ud. piensa de su salud y del uso de servicios para la salud.

17. In general, would you say your own health is excellent, good, fair, or poor?
En general, diría Ud. que su salud es excelente, buena, regular, o mala?

- EXCELLENT
- GOOD
- FAIR
- POOR

18. Do you have any health problems that've been bothering you?
Tiene Ud. cualquier problema de la salud que le ha molestado?

- YES
- NO → "19"

What kind of health problem is this? Qué clase de problema tiene?	PROBE FOR SYMPTOMS, BODY PARTS AFFECTED	How long have you had this health problem? Hace cuánto tiempo tiene este problema?

19. Do you think you need medical care now?
Piensa Ud. que necesita atención médica en este momento?

- YES
- NO
- DK/NA

20. Was there any time over the last two weeks when you couldn't go about your normal activities for most or all of a day because of an illness, accident or injury?
Durante las últimas 2 semanas, hubo algún tiempo cuando Ud. no podía hacer sus actividades normales por la mayor parte de un día a causa de una enfermedad o herida?

- YES
- NO → "21"

What exactly was the problem?
Qué fue el problema?

How long did this condition last?
Cuánto tiempo duró esta condición?

ACCIDENT, INJURY _____

COLD, FLU _____

OTHER (WHAT?) _____

What did you do about this problem? (PROBE consult doctor, consult other healer, self-treatment, etc.)

EXPLAIN _____

21. In your experience as a migrant worker, have you ever felt you had some health problem that was due to pesticides or insecticides?
 En su experiencia como trabajador migrante, ha sentido Ud. problemas de la salud relacionado al uso de pesticidas o insecticidas?

- YES What was that? _____
 Podría explicarlo? _____
- NO
 DK/NA

The following questions have to do with the kinds of health services that you have used or would use here in New York State.

Las siguientes preguntas son acerca de los servicios para la salud que Ud. usa o usaría aquí en el estado de Nueva York.

22. If you ("or anyone in your family") got sick while you are working here, where would you go for health care?

Si Ud. ("o alguno de sus parientes") se enfermara cuando estaba trabajando aquí, dónde iría para atención médica?

PROBE FOR SPECIFIC ANSWER: WHICH DOCTOR, HOSPITAL, CLINIC, ETC.

Where else would you/they go?
 Hay otro lugar donde iría? _____

a. How would you get there? CHECK ALL THAT APPLY
 Qué transportación tiene para ir allí?

- OWN CAR
 FAMILY MEMBER TAKES ME
 CREWLEADER TAKES ME
 FRIEND TAKES ME
 GROWER TAKES ME
 OTHER (SPECIFY) _____
 DK/NA

23. Have you ("or anyone in your family") ever used health services in New York State?

Alguna vez, ha usado Ud. ("o alguien en su familia") cualquier servicio de la salud en el estado de Nueva York?

- YES NO → "25"

What health services did you use? Did you use a
 Cuáles servicios ha(n) usado? Usó ("usaron") un

where was this located?
 dónde fue eso?

private doctor (médico particular) _____

hospital (hospital) _____

clinic (clínica) _____

other service - which? (otro servicio - cuál?) _____

a. For the times that you ("or anyone in your family") used any of these services, how did you pay? Did you have insurance or Medicaid, did you pay out of your own pocket, was there no charge, or what?

Para los tiempos que Ud. ("o alguien en su familia") usó cualquier de estos servicios, cómo pagó? Tuvo seguros o Medicaid, pagó en efectivo, no le cubrieron nada, o qué?

- INSURANCE
 MEDICAID
 OUT OF POCKET "how much?" _____
 NO CHARGE
 OTHER (WHAT?) _____

24.

Have you ever received/you said you received health care at the Oak Orchard Community Health Center ("the clinic").

Alguna vez, ha recibido/dijo que ha recibido servicios de la salud de la "clínica" (Oak Orchard Centro de Salud de la Comunidad).

YES NO → "25"

a. Did you go to the office in Albion or in Brockport or to both?
Fue eso en la oficina en Albion o en Brockport o en ambas?

- ALBION
- BROCKPORT
- BOTH

b. Do you feel the health care you received there was
Diría Ud. que los servicios que recibió fueron muy buenos, buenos, regulares, o malos?

- very good,
- good,
- fair, or
- poor?

c. What did you like and what did you not like at the Oak Orchard Community Health Center ("the clinic")?
Qué le gustó y qué no le gustó en la clínica (Oak Orchard Centro de la Salud de la Comunidad)?

LIKED _____

DIDN'T LIKE _____

25. Would any of the following reasons keep you from seeing a doctor in this area?
Piensa Ud. si algunas de estas razones le impedirían ir a un médico en esta región?

	WOULD	WOULD NOT
a. I don't know what doctor to go to No sé a qué médico ver		
b. I can't afford it No tengo como pagarlo		
c. I would lose pay or income from work Perdería trabajo		
d. I have no transportation No tengo transporte		
e. I am unable to get there during the doctor's office hours No puedo ir durante las horas de servicio		
f. The doctor's office is too far away La oficina está muy lejos		
g. I can't speak English No hablo inglés		
h. It takes too long to get an appointment Demora mucho tiempo conseguir una cita		
i. There is no one to look after my children No tengo nadie que me cuide a mis hijos		



26. Would you please tell me whether the following statements are true for you or not?

Por favor, dígame si Ud. está de acuerdo o no con lo siguiente?

	TRUE	NOT TRUE
a. I feel uncomfortable with doctors No me siento cómodo con los médicos		
b. I think the doctor or the clinic won't be friendly towards migrants Creo que el médico o la clínica no sean amistosos a los migrantes		
c. I don't believe in doctors - No creo en los médicos		
d. Other healers are sometimes better than doctors A veces los médicos no son tan buenos como otros curanderos		
e. I'm never sick - Nunca me enfermo		

27. Did you ever have a physical exam or check-up when you were not sick?
If YES, "how long ago was that?"

Tuvo Ud. un examen físico alguna vez cuando no estaba enfermo?
"hace cuánto tiempo?"

- NEVER
- DAYS
- WEEKS
- MONTHS
- YEARS AGO

28. Did you ever go to a dentist?
Alguna vez, vió a un dentista?

IF YES, "how long ago was that?"
"hace cuánto tiempo fue eso?"

- NEVER → "29"
- DAYS
- WEEKS
- MONTHS
- YEARS AGO

a. Was this for a check-up or did you have some kind of problem?
Fue eso para un examen o para algún problema?

- CHECK-UP
- TREATMENT
- BOTH

b. Have you ever been to a dentist here in this area?
Alguna vez, vió Ud. a un dentista aquí en esta región?

YES NO → "29"

c. Where was that?
A dónde fue?

d. For the times that you went to a dentist here, how did you pay? Did you have insurance or Medicaid, did you pay out of your own pocket, was there no charge or what?

Para los tiempos que Ud. vió a un dentista aquí, como pagó? Tuvo seguros o Medicaid, pagó en efectivo, no le cubrieron nada, o qué?

- INSURANCE
- MEDICAID
- OUT OF POCKET "how much?" _____
- NO CHARGE
- OTHER
- NA

Do you think you need dental care now?
Piensa Ud. que necesita atención dental en ese momento?

- YES
 NO → "30"
 DK/NA

a. Are you receiving dental care now?
Está recibiendo esa atención dental ahora?

- NO YES

b. For what reasons are you not going to a dentist?
Por qué razón no va al dentista?

30. Did you ever have your vision checked by a doctor? When was that?
Alguna vez, le revisó la vista un doctor? Hace cuánto tiempo?

- ___ NEVER
___ DAYS
___ WEEKS
___ MONTHS
___ YEARS

31. Have you been having any problems with your eyes which make you think that maybe you should have your eyes checked by a doctor?
Ha tenido Ud. problemas con los ojos que le hacen pensar que debería consultar un médico?

- YES NO

Why haven't you gone yet?
Por qué no ha ido todavía?

The following questions concern such things as smoking, drinking, eating habits, and so on. For example:

Las próximas preguntas tienen que ver con temas como fumar, beber, y comer.
Por ejemplo:

32. Do you smoke cigarettes now, or have you ever been a smoker?
Fuma Ud. cigarillos ahora o ha fumado cigarillos en alguna época pasada?

- YES, CURRENTLY A SMOKER YES, ONCE BUT NOT NOW
 NO, NEVER BEEN A SMOKER, NA → "33"

On the average, about how many cigarettes do you currently smoke a day?
Aproximadamente, cuántos cigarillos fuma en un día?

- one to two packs,
 more than 10, but less than one pack,
 less than 10.
 DK/NA

33. How often do you drink beer, wine, and/or liquor during a week?
Cuántas veces durante la semana toma Ud. cerveza, vino, u otro alconoi?

- DRINK EVERY DAY
 5 OR 6 TIMES A WEEK
 3 OR 4 TIMES A WEEK
 ONCE OR TWICE A WEEK
 NEVER DRINK → "34"

- a. When you drink, how many bottles of beer, how much wine, liquor or mixed drinks do you have at one time?
Cuando Ud. toma alcohol, cuántas latas de cerveza, cuánto vino, o otro licor toma en una ocasión?

BEER LIQUOR
 WINE OTHER

- b. Do you think it would be healthier if you drank less, or do you think it wouldn't make any difference?
Cree Ud. que sería mejor para su salud si tomara menos, o piensa que no haría ninguna diferencia?

WOULD BE BETTER IF DRANK LESS
 WOULD MAKE NO DIFFERENCE
 DK/NA

34. How many hours do you normally sleep in a 24 hour period?
Cuántas horas duerme Ud. durante un período de 24 horas?

6 HOURS OR LESS
 7-8 HOURS
 9 HOURS
 MORE THAN 9 HOURS
 DK/NA

35. How often do you eat breakfast?
Cuántas veces desayuna Ud. durante la semana?

almost every day casi cada día
 sometimes de vez en cuando
 rarely or never casi nunca o nunca
 DK/NA

36. How tall are you?
Qué altura tiene?

FEET + INCHES _____
 DK/NA

37. What is your current weight?
Cuánto pesa Ud.?

POUNDS _____
 DK/NA

Now I'd like to ask you a few questions about the health and health care of the other members of your family who are living with you here.
Ahora me gustaría hacerle unas preguntas sobre la salud de los otros parientes que viven con Ud.

REFER TO THE ROSTER OF FAMILY MEMBERS AND ASK SYSTEMATICALLY EACH ONE OF THE QUESTIONS LISTED ON THE FAMILY SUPPLEMENT.

38. Now I'd like you to think back over the past 12 months. Since August 1982 to the present, during which months did you live in _____?
HOME STATE

Ahora, por favor, piense en el año pasado. Desde agosto de 1982 hasta el presente, cuáles meses pasó Ud. en su hogar en _____?
HOME STATE

--	--	--	--	--	--	--	--	--	--	--	--

Aug. '82 Sep. Oct. Nov. Dec. Jan. '83 Feb. Mar. Apr. May June July '83

a. Did you work in _____ during the past year?
HOME STATE

Trabajó en (home state) durante el año pasado?

YES NO → "39"

b. What type of work was it?
En qué trabajó?

SPECIFIC ANSWER _____

c. During what months was that?
Durante cuáles meses fue eso?

With our last questions we would like to get some information about income and spending.
Con las últimas preguntas quisiéramos obtener unas informaciones sobre ingresos y gastos.

39. How many people contributed to your family income in 1982, considering all sources?
Considerando toda clase de ingreso, cuántas persona contribuyeron al ingreso familiar en el año 1982?

NUMBER

a. Just roughly, how much did you and your family make last year, in 1982?
Aproximadamente, podría decirme el ingreso total de Ud. y su familia en el año pasado, 1982?

- | | |
|-----------------------|-----------------------|
| A. less than \$ 3,000 | H. \$ 9,000 - 10,000 |
| B. \$ 3,000 - 4,000 | I. \$ 10,000 - 11,000 |
| C. \$ 4,000 - 5,000 | J. \$ 11,000 - 12,000 |
| D. \$ 5,000 - 6,000 | K. \$ 12,000 - 13,000 |
| E. \$ 6,000 - 7,000 | L. \$ 13,000 - 14,000 |
| F. \$ 7,000 - 8,000 | M. \$ 14,000 - 15,000 |
| G. \$ 8,000 - 9,000 | N. \$ 15,000 - 16,000 |

b. How many people were dependent on this family income in 1982?
Cuántas personas dependieron de este ingreso familiar en el año 1982?

NUMBER

c. At any time during the past year (1982), did you or a member of your family receive any income from welfare or social security?

En cualquier momento del año pasado, recibió Ud. o algún miembro de su familia ingreso de welfare o de seguro social?

- WELFARE
 SSI
 NONE

d. Are you or a member of your family receiving income from welfare or social security now?

Recibe Ud. o algún miembro de su familia ingreso de welfare o seguro social ahora?

- WELFARE
 SSI
 NONE

IF R DID NOT WORK IN THIS AREA LAST YEAR (Q12b), SKIP TO 41.

IF R DID WORK IN THIS AREA LAST YEAR (Q12b), WAS HE ALONE OR WITH MEMBERS OF HIS FAMILY? CHECK BOX BELOW AND CONTINUE WITH Q40.

- ALONE
 WITH FAMILY

40. When you were here last year, would you tell me about how much money you ("and your family") made during that season?

Cuando Ud. trabajó aquí en el año pasado, me diría por favor, cuánto dinero ganó Ud. ("ganaron Ud. y su familia") durante esta temporada?

- | | |
|---------------------|-----------------------|
| A. less than \$ 500 | G. \$ 3,000 - 3,500 |
| B. \$ 500 - 1,000 | H. \$ 3,500 - 4,000 |
| C. \$ 1,000 - 1,500 | I. \$ 4,000 - 4,500 |
| D. \$ 1,500 - 2,000 | J. \$ 4,500 - 5,000 |
| E. \$ 2,000 - 2,500 | K. \$ 5,000 - 5,500 |
| F. \$ 2,500 - 3,000 | L. more than \$ 5,500 |

a. Of all the money that you ("and your family") earned here last year, what part of it would you say was spent here in New York? Would you say the part that was spent here was

De todo el dinero que ganó Ud. ("y su familia") aquí en el año pasado, qué parte diría Ud. gastó ("gastaron Uds.") aquí en Nueva York? Diría Ud. que el parte que gastó ("gastaron") aquí fue

- | | |
|--------------------------------------|---------------|
| <input type="checkbox"/> all of it, | todo, |
| <input type="checkbox"/> 3/4 of it, | tres cuartos, |
| <input type="checkbox"/> half of it, | la mitad, |
| <input type="checkbox"/> 1/4 of it, | un cuarto, |
| <input type="checkbox"/> hardly any? | casi nada? |

41. As I read this list, would you tell me about how much you ("and your family") spent on each type of thing during the past 7 days?
 Le voy a leer una lista. Me dice, más o menos, cuánto gastó Ud. ("y su familia") para cada clase de cosas durante los últimos 7 días?

	AMOUNT	DK/NA
a. Food - Comida		<input type="checkbox"/>
b. Clothes - Ropa		<input type="checkbox"/>
c. Laundry - Lavadero		<input type="checkbox"/>
d. Alcohol - Alcohol		<input type="checkbox"/>
e. Cigarettes and tobacco Cigarillos y tabaco		<input type="checkbox"/>
f. Household supplies, such as, pots and pans, brooms, linens, etc. - Cosas para la casa, como ollas v cazuelas, escoba, o manteles, cosas así		<input type="checkbox"/>
g. Children's supplies - Cosas para los niños		<input type="checkbox"/>
h. Transportation (gas, fees, car maintenance) Transporte (gasolina, honorarios, cosas para el coche)		<input type="checkbox"/>
i. Recreation (movies, eating out) Divertimiento (el cine, comer en un restaurante)		<input type="checkbox"/>
j. Work supplies (gloves, clothing, tools) Cosas para el trabajo, como guantes, ropa, herramientas		<input type="checkbox"/>
k. Personal care (hair-cuts, toiletries) Cuidado personal (peinado, cremas)		<input type="checkbox"/>
l. Health care (doctor's fee, medicine) Cuidado de la salud (honorario para el doctor, medicina)		<input type="checkbox"/>

42. Are you receiving food stamps now?
 Recibe Ud. estampillas de comida ahora?

- YES
 NO
 NA

a. IF R HAS FAMILY: Do you know about the WIC program?
 Conoce Ud. el programa WIC?

- YES NO

b. Are you enrolled in a WIC program?
 Participa Ud. en un programa de WIC?

- YES NO

c. Where are you enrolled?
 ¿Dónde?

43. What type of work do you ("and your family") currently do?
 Qué clase de trabajo hace Ud. ("y su familia") ahora aquí?

- PICKING
 FIELDWORK (HOURLY WORK)
 CANNING/PROCESSING
 NA

a. About how much did you ("and your family") earn altogether last week?
 Aproximadamente, qué fue el sueldo total de Ud. ("y su familia") la semana pasada?

- | | |
|---------------------|---------------------|
| A. less than \$ 100 | E. \$ 400 - 500 |
| B. \$ 100 - 200 | F. \$ 500 - 600 |
| C. \$ 200 - 300 | G. \$ 600 - 700 |
| D. \$ 300 - 400 | H. more than \$ 700 |

b. Do you usually make more or less than that in a week?
 Usualmente, gana más o menos que ésto en una semana?

- MORE
 LESS
 ABOUT SAME
 NA/DK

44. Do you pay
 Paga Ud.

	NONE	WEEK	MONTH	OTHER (WHAT?)
a. rent (renta)				
b. gas for cooking (gas para cocinar)				
c. electricity (electricidad)				

How much do you pay per ... (WEEK, MONTH, OR WHAT) ?
 Cuánto paga por ... ?

45. Since you have been working here in New York this year, have you ("or a member of your family") bought any special things? By "special things" I mean
 Desde que Ud. trabaja aquí en Nueva York este año, ha comprado Ud. ("o alguien en su familia") algunas cosas especiales? "Cosas especiales" quieren decir

	AMOUNT	PLAN
a. Radio, TV, stereo, taperecorder, etc. Radio, TV, estereo, grabador, etc.		<input type="checkbox"/>
b. Small electrical appliances, such as, toaster, mixer, coffee maker, tools, etc. Aparatos como tostador, mezclador, aparato para hacer cafe, herramientas, cosas así		<input type="checkbox"/>
c. Clothing for yourself or someone else Ropa para Ud. u otra persona		<input type="checkbox"/>
d. Any other special things, such as, things for the car (tires, tools, etc.) Otras cosas, como cosas para el coche (llantas, herramientas, etc.)		<input type="checkbox"/>

About how much did you spend on these kinds of things?
 Aproximadamente, cuánto gastó para cada clase de cosas?

Are you ("or anyone in your family") planning to buy any special things before you leave this area this year?

Piensa Ud. ("o alguien en su familia") comprar algunas cosas especiales antes de salir de aquí este año?

CHECK ALL THAT APPLY.

46. Finally, do you think that you would like to live in this area year-round?
Finalmente, le gustaría vivir aquí en esta región por todo el año?

- YES
- NO
- DK/NA

47. What is it that you like about this area and what don't you like?
Qué le gusta de esta región y qué no le gusta?

LIKE _____

DON'T LIKE _____

Thank you very much for helping us conduct this survey.
Muchas gracias por su ayuda en hacer este estudio.

INTERVIEWER'S NOTES

A. In which language was the interview conducted?

B. As far as you can judge, was the respondent

- very cooperative,
- fairly cooperative,
- not cooperative?
- dk

C. How well do you feel the respondent understood the questions you asked?

- understood all or almost all questions
- understood most questions
- understood some questions
- understood few or none
- dk

D. How long did it take to conduct the interview?

E. Do you have any other comments about this interview?

