

MIGRANT HEALTH PROGRAM

AN ATLAS OF
STATE PROFILES
WHICH ESTIMATE NUMBER OF
MIGRANT AND SEASONAL FARMWORKERS
AND MEMBERS OF THEIR FAMILIES

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
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Division of Primary Care Services
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PREFACE

The goal of the Migrant Health Program is to improve the health status of Migrant and Seasonal Farmworkers (MSFWs) and their families. To achieve this goal the Office of Migrant Health provides support to organizations which arrange or directly deliver primary health care services to MSFWs. In order to plan, monitor, and evaluate service delivery systems, information is needed on the numbers and distribution of the target population at the national, state, and local levels. Moreover, the legislation which authorizes the Migrant Health Program, Section 329 of the Public Health Service Act, requires that priorities for assistance be assigned to areas where the greatest need exists. Therefore, the Migrant Health Program periodically seeks to obtain updated information about MSFWs; where they work, where they winter over, whether or not non-working family members travel with them, etc. The last time that such a data collection effort was undertaken was in 1979 (the results were published in April 1980 in a report entitled 1978 Migrant Health Program Target Population Estimates) and, so, by 1987 it was time to do it again.

Because of the difficulties of counting transient migrant farmworker populations and because of the definitional problems in identifying seasonal farmworkers, there is no comprehensive and reliable national source of regularly updated quantitative information. Therefore, each state with any Migrant Health Program activity was asked to prepare a state profile estimating how many MSFWs were present in the state, and showing where they worked and/or resided. Limited available resources restricted profile development to utilization of secondary data sources. Since the available data and the nature of the MSFW population characteristics varied among the states, the methodologies for deriving the estimates also varied. However, a generic "scope of work" identifying the parameters to be reported was distributed to those organizations preparing profiles. This atlas presents data based on and summarized from the individual state profiles.

Because the state profiles represent estimates prepared by a variety of organizations using different methodologies, it was necessary for purposes of consistency to review submissions for compliance with the generic scope of work and to validate each submission. This process was carried out by Ben Duggar of the Center for Health Policy Studies in Columbia, Maryland, through an arrangement with the East Coast Migrant Health Project. In some cases it has been necessary to "adjust" the state profile estimates to correct for differences in the definitions or assumptions which were used. We have also separated the migrant from the seasonal farmworker populations when this was not done in the profiles, since planning for health services varies, depending on whether the population resides in the area year round. The reader should note that the estimates presented in this atlas represent duplicated counts of migrant farmworkers (e.g., migrant farmworkers were identified and counted at every location where they reside, even if only for a brief period).

The original state profiles should be consulted to quantify the fluctuations in the migrant farmworker population by month of the year, or to determine the proportion of each population which consists of agricultural workers versus non-working dependents. Sources to contact for access to the original profiles, and the instructions provided to groups performing the

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profiles, appear in this publication. It is intended that the state profiles will be updated by the original authors from time to time as migration patterns, crops, and farm workforce needs and numbers change. Readers may wish to provide their comments concerning state estimates directly to the listed sources so that future estimates may improve. It is our hope and expectation that all federal, state, local public and private entities providing services to MSFWs will use this atlas and their respective state profiles to plan, develop, and implement improved services to these populations.

We gratefully acknowledge the efforts of the many groups across the nation that have made this atlas possible. Our thanks extend not only to those who directly prepared the profiles, but also to those who supported the effort in other ways, such as participation on committees and review groups which planned and monitored the profile development for their states.

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HOW TO USE THIS DOCUMENT

Purpose

This document is designed to facilitate planning for services for migrant and seasonal farmworkers (MSFWs) and for evaluating the extent to which existing programs are reaching the target population. The expected users and uses are:

- Migrant Health Centers (MHCs) should use the state profile data to identify logical service area boundaries, to prepare "needs assessments", and to assess the success with which they are reaching components of their target population.
- Other local organizations serving MSFWs may use these data to plan and coordinate services with existing MHCs or, in areas without a MHC, to support an application for Migrant Health Program funding for the delivery of health services to unserved MSFWs.
- State and regional organizations should use the profiles to identify pockets of potentially unserved MSFWs, analyze the need for reallocation of resources to match the distribution of the target population, and develop statewide or substate regional strategic plans for meeting MSFW primary health care needs.
- Federal agencies which support programs for MSFWs may use the profiles as additional sources of state estimates on the numbers and distributions of MSFWs, and as tools to foster interagency coordination and, where feasible, program integration among and within those local organizations which they support.
- The Migrant Health Program will use these data to meet the legislative mandate contained in Section 329.(b)(1) of the Public Health Service Act to determine the need for migrant health services and to assign priorities for provision of assistance to projects and programs consistent with such needs. The Migrant Health Program will also use the state profiles to evaluate the appropriateness of the service area boundaries proposed by MHCs, to monitor the effectiveness with which MHCs are reaching their target populations, to evaluate the impact of migrant health activities, and to assist in the development of comprehensive statewide integrated plans for providing health services to MSFWs.

As a result of the needs for current data, and because the last time that comprehensive estimates of the Migrant Health Program target population were collected was in 1979, the Office of Migrant Health requested that arrangements be made for the development of state estimates of MSFWs. These estimates, developed during the period 1987-1989, became known as "state profiles" and provide the basis for the present document. The Migrant Health Program currently funds health care delivery activities in 41 states and Puerto Rico, and priority was assigned to these states for profile

development. Data from all but one of these priority states are included in the 41 states plus Puerto Rico presented in the Atlas. It is anticipated that most of the remaining states will also engage in the "profiling" process in the future (Chapter 2 details the profile status for the remaining states). It is also anticipated that the state profiles will be updated from time to time as crops and patterns of migration change.

Additional information on the methodologies used to develop the profiles can be found in the notes to the profile data displayed for each state in Chapter 3, and in the introduction to Chapter 4.

Definitions

The legislation which authorizes the Migrant Health Program (contained in Section 329 of the Public Health Service Act) defines a "migratory agricultural worker" as "an individual whose principal employment is in agriculture on a seasonal basis, who has been so employed within the past twenty-four months, and who establishes for the purpose of such employment a temporary abode". A seasonal agricultural worker is defined as "an individual whose principal employment is in agriculture on a seasonal basis and who is not a migratory agricultural worker". The legislation provides a restrictive definition of "agriculture" which has been interpreted to exclude those working in the fishing, lumber, dairy, cattle, or poultry industries and those working in food processing plants unless the processing is performed "on a farm incident to or in conjunction with --- the production, cultivation, growing, and harvesting of any commodity grown on, in, or as an adjunct to or part of a commodity grown in or on, the land". Individuals formerly employed as migratory agricultural worker who "can no longer meet the requirements --- because of age or disability and members of their families" retain eligibility indefinitely.

Migratory agricultural workers, local seasonal agricultural workers, and members of their families, as defined above, represent the target population for the Migrant Health Program. However, it is recognized that other federal and state programs also serving migrant and/or seasonal farmworkers and/or family members (e.g., Department of Education's Migrant Education Program, Department of Labor's Job Training, Department of Agriculture's Migrant Women, Infant and Children Supplemental Food Program, Department of Health and Human Service's Migrant Head Start, etc.) may have different definitions for their target populations. Although these differences may be of little consequence for some programs and/or geographic areas, they may also represent the reasons for large discrepancies among comparative estimates of target populations for other areas or programs.

Contents and Limitations of the Atlas of State Profiles

A major purpose for the state profile development initiative has been to meet planning needs of state agencies, state primary care associations, individual migrant health centers (MHCs) and other programs serving MSFWs. Data needed for planning health services for MSFWs include the following:

- Year round (seasonal) versus short-time populations (migrants)
- Numbers of farmworkers versus non-working family members
- Months the migrant farmworkers are present
- Both the peak numbers and numerical range of MSFWs in an area.

These data can be used to refine the MHC delivery systems to increase service utilization, to identify needs for new access points, and for development of statewide strategic plans which leverage the input from Section 329 funding to improve the utilization and access to primary health care services by MSFWs.

The reader should be aware that each migrant farmworker family is counted in multiple locations and that the total numbers of MSFWs present throughout the nation at any given time will be substantially less than the totals of MSFWs counted throughout the year at all locations. The figures which appear in the Atlas represent annual aggregates for each state and include inter and intrastate migration, turnover among migrant farmworkers during the agricultural season, local seasonal farmworkers who do not migrate, MSFWs and family members who sought but could not obtain agricultural work, and those who formerly but no longer engage in seasonal farm work due to age or disability. The peak number of migrant farmworkers present will be less than the annual aggregate number, while the seasonal farmworker peak and aggregate population will be identical. Differences between the peak and aggregate estimates for migrant farmworkers are small in areas with short harvest seasons and in which few migrant farmworker families reside during the winter.

Adjusting certain of the state profile data was necessary before incorporating them into this report. Such adjustments render the data more useful to the Office of Migrant Health by improving the comparability of definitions and assumptions used among the individual state profiles. The summary information presented in this document includes for most states:

- Information on numbers of MSFWs disaggregated by county or agricultural area.
- Separate migrant and local seasonal farmworker population data.
- Maps which display the distribution of MSFWs, crop areas, and locations of all MHCs and selected community health centers (CHCs).¹
- Other state level data (distribution of Section 329 funding by state, numbers of MSFW users of MHCs located within the state, impact ratios

¹ Community Health Centers (CHCs) are health centers which receive federal funding support under Section 330 of the Public Health Service Act. They serve all individuals, including MSFWs, residing in the CHC's service area, but are not funded to provide the special services designed to meet the unique needs of the MSFW population.

of MHC users to target population data derived from the state profiles, and agricultural business data).

- Comparison information on target population estimates (earlier estimates from the Migrant Health Program, from other sources, and user data from other programs serving MSFWs).

Estimates of MSFWs and members of their families are presented at three levels in this document. The first level consists of the summary table in Chapter 2. This table provides the estimated aggregate MSFW population, including non-working family members, for each state which submitted a state profile, including Puerto Rico. The table includes for each state the proportion of the national MSFW estimate, information on the numbers of migrant and seasonal farmworkers and family members who were reported to have received one or more services from a migrant health center located in that state, information on the aggregate of the Migrant Health Program funds awarded to MHCs located in the state, and information on the agricultural industry in each state. Because some MHCs serve migrants who work or reside in contiguous states, the state level data on the proportion of the target population served must be cautiously interpreted.

Chapter 3 contains maps for each of 41 states and Puerto Rico. The maps display the distribution of the MSFW population for each state, location of major crop areas and seasons, locations of MHCs, and locations of selected CHCs. The map for each state is followed by a list of the community and migrant health centers (C/MHCs) which appear on the map, and information on the season and category of crops corresponding to each of the major crop areas drawn on the map. This information is followed by a table which presents detailed numerical data on the distribution of MSFWs, generally at the county or agricultural district level, identical to the figures on the map. The migrant farmworker population is listed separately from the local seasonal farmworker population on the map and in the table. The data in the tables and on the maps were developed directly from the profiles submitted from each state, although in a number of cases it was necessary to "adjust" the profile data for comparability of definitions or assumptions, or to correct for mathematical errors. A brief explanation of the adjustment methodology follows each state table to which an adjustment was made. The tables represent duplicated counts of migrant farmworkers, and each migrant farmworker family may be counted in several of the county totals, depending on whether they engaged in intrastate migration. Readers who wish to examine these data at a further disaggregated level (e.g., migrant farmworkers with and without non-working family members), to identify the crops which employed differing numbers of MSFWs, or to determine the period of the year when differing numbers of migrant farmworkers were present must consult the original state profile. Sources from which the complete state profile can be obtained are listed in Chapter 4.

Some of the profiles from which the data in Chapter 3 were derived represent extensive and detailed reports running to several hundreds of pages. In other cases the original profiles were simple compilations of data from a number of programs which served or provided estimates of the numbers of migrants or seasonal farmworkers for all or portions of the states. In the

case of incomplete profiles submitted for several states, whenever possible the Office of Migrant Health devised algorithms to estimate the MSFW population profile from the raw data included in the submission. Because of the major differences in the methodologies used for developing profiles in the different states, modest differences in the numbers from state to state may represent artifacts of the methodologies rather than true differences in numbers of MSFWs. However, each state's methodology was consistently applied throughout the state, and the relative distributions of MSFWs among the counties within a state are considered reliable. Thus, these data can be used to identify pockets of unserved MSFWs, the relative magnitude of the target population for specific migrant health centers, and the approximate distribution between migrant and local seasonal agricultural workers and members of their families.

Chapter 4 describes the information requested by the Office of Migrant Health to be included in state profiles (the generic scope of work used for requests for proposals) and lists the "source" of the profile prepared for each state. In some cases the source listed actually prepared the profile, in other cases the listed source sponsored the profile development through a contract. By contacting the listed profile source the reader may be able to obtain the original state profile document, including additional information on the methodology, disaggregated figures by month of year, agricultural workers versus family members, etc. If the total population figures in the original profile differ from those tabulated in this document, adjustments have been made and the reader should consult the notes in Chapter 3 to determine how the Office of Migrant Health made the adjustments.

INDIVIDUAL STATE TABLES AND MAPS

State Tables and Maps

The state profile results appear in the pages which follow. States are listed alphabetically, each consisting of a "set" of pages. The items in the order which they appear in a state set are as follows:

- A map which displays the numbers of MSFWs, by county or agricultural area, as provided in the state profile, and the locations of all MHCs and selected Community Health Centers (CHCs). Major agricultural areas are outlined on the map (a letter designating each such area is keyed to a list of the time of year for agricultural activity and the major crop types appearing on the page following the map).
- A legend which interprets the symbols, lists the names of the MHCs and CHCs on the map, and gives the months of agricultural activity and categories of principal crops harvested in the agricultural areas outlined on the map (agricultural area information was obtained from Guide to Farm Jobs, published by the Department of Labor, Employment Training Administration, 1978).
- Tabulations by county or agricultural area of migrant farmworkers (including family members who travel to this location), local seasonal farmworkers (including non-working dependents), and the total MSFW population. These tables run from one to five pages per state.
- If the state profile required "adjustments" to correct errors, or for comparability with the profiles from the other states, a brief explanation of the adjustment methodology follows the table.

The location of one service delivery site for each Section 329 funded MHC appears on the state map and is cross-referenced to the list of MHCs on the legend page following the map. MHCs and their locations were identified from the 1989 Migrant Health Centers Referral Directory (prepared by and available from the National Migrant Resource Program, Inc., 2512 South IH 35, Austin, TX 78704, phone (800)531-5120). Although many MHC grant recipients operate multiple service sites, only one site per grantee is plotted on the map for any given state. The site selected for display of a multisite MHC is the service site at which the central administrative office is located. If the administrative office is not located at a service delivery site, the service site located within the largest concentrations of MSFWs is displayed. In such a case the list of MHCs on the legend page references both the locations of the administrative office and that service site. Readers must refer to the 1989 Migrant Health Centers Referral Directory to identify other satellite service sites, or to identify new grantees funded after 1989. A satellite clinic located in a state contiguous to that within which the MHC's administrative office is located appears on the contiguous state map. Grantees that have implemented voucher model service delivery systems without direct care delivery sites are indicated on the maps by the location of their central administrative office.

Because there may be concentrations of MSFWs not served by the existing MHCs, we have plotted selected Community Health Centers (CHCs) receiving funds under Section 330, and which are located in or adjacent to underserved pockets of MSFWs (these CHCs may already serve some of the MSFWs, and could expand their services to this population). The selected CHCs were identified from the directory entitled 1989 330-Funded Community Health Centers Directory (published by HRSA, BHCDA, and available through the National Clearinghouse for Primary Care Information, 8201 Greensboro Dr., Suite 600, McLean, Virginia 22102, phone (703)821-8955). Selection of CHCs for display was based on the following criteria: 1) selected CHCs are located in small to medium size towns or rural areas within counties having substantial numbers of MSFWs, and 2) there are no MHCs conveniently located so as to serve these MSFWs.

In addition to the dates representing the beginning and the end of the season for each agricultural area, symbols indicating the principal types of labor intensive crops appear in the legend. Crops have been classified into three broad categories: 1) fruits and nuts, 2) vegetables, and 3) field crops. The categories are a functional classification adapted from the US Department of Agriculture and are based on how the crops are consumed, rather than a botanical classification. The symbols together with a sample of the crops which are included within each category appear below.

<u>Fruits and Nuts</u>	<u>Vegetables</u>	<u>Field Crops</u>
Apples	Asparagus	Alfalfa
Cantaloupes	Broccoli	Cotton
Cherries	Cabbage	Dry beans
Cranberries	Cauliflower	Grains
Grapefruit/Grapes	Cucumbers/Lettuce	Hay
Lemons/Limes	Lima beans/Peas	Hops
Peaches/Pears	Potatoes/Pumpkins	Seed Corn
Pecans	Snap beans	Tobacco
Raspberries	Squash	
Strawberries	Sugar beets	
Walnuts	Sweet corn	
Watermelon	Tomatoes	

Procedures for Review and Validation of State Profiles

A review of the process for validation of state profiles will assist in understanding the limitations of the state profiles and the reasons for the "adjustments" for some states. As noted in chapter 1 of this Atlas, a variety of organizations developed state profiles. Because of limitations on resources, organizations relied on locally available secondary data. Because of variations in available data, the estimating methodologies varied widely. Consequently, for purposes of comparability, profiles were centrally reviewed and validated according to the following procedures:

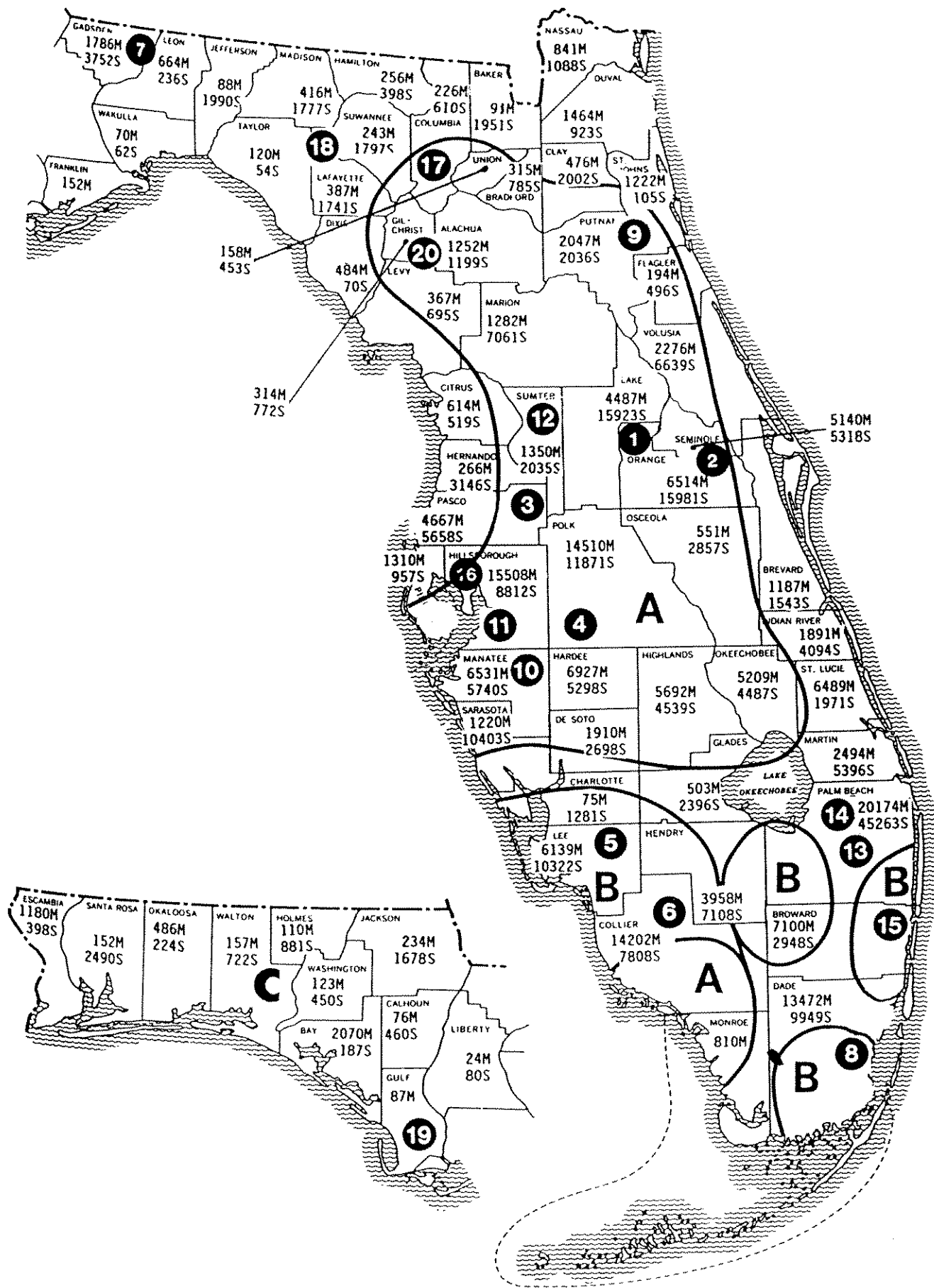
1. Receipt of the profile was entered in a profile log, noting the date on the profile, author/source, date received, and whether the report was forwarded directly or through the Regional Office.
2. A copy of the profile was then provided to the central reviewer for processing according to the following protocol:
 - a. Screen profiles for presence of the following elements:
 - 1) Map showing the numbers and distribution of MSFWs, and also displaying the locations of Migrant Health Centers (MHCs)
 - 2) Tabular display of the estimated numbers of MSFWs, by county, or other appropriate area designation (e.g., migrant camps)
 - 3) Separate estimates for migrant and seasonal farmworker populations
 - 4) Comparison/discussion of alternative secondary data sources, and justification for using the selected source to prepare estimates
 - 5) Complete description of the methodology used (adjusting secondary data sources for differences in definitions, eligibility, etc.)
 - b. Review the methodology and findings

The methodology must be explained in sufficient detail to permit the reviewer to understand what was done and to be able to replicate and validate the computations. During the review the definitions used in the secondary data sources are contrasted with those of the Migrant Health Program to be sure that appropriate adjustments have been made. The underlying assumptions in the methodology must be reasonable, and computations must be consistent with the stated methodology. The profile findings are screened against estimates from other sources for population components, or the entire MSFW population, to assess the consistency of results.

- c. Prepare a written critique of the profile

The critique, prepared for Office of Migrant Health use, includes results of the screening for completeness, a summary description and critique of the methodology, profile findings, and comparisons with other studies and sources. It contains any recommendations for information needed to permit a more complete review, items to be added to the profile, and corrections needed for mistakes or deficiencies.

3. The Office of Migrant Health then prepared a note to the cognizant Regional Office, accepting the profile or describing the clarifications, correction, or further information needed.



LEGEND

1 Health Centers

12 M Estimated Total Number of Migrants and Seasonals in County
34 S

B Agricultural Area

HEALTH CENTER NAME AND LOCATION

- 1* West Orange Farmworker Health Association, Inc., Apopka
- 2* Central Florida Community Clinic, Sanford
- 3* East Pasco Health Clinic, Inc., Dade City
- 4* Florida Rural Health Services, Inc., Frostproof
- 5* SW Florida Health Centers, Clinicas de Migrantes, Fort Myers
- 6* Collier Health Services, Inc., Immokalee
- 7* Gadsden Primary Care Center, Quincy
- 8* Community Health of South Dade, Inc., Miami
- 9* Family Medical and Dental Center, Palatka
- 10* Manatee County Rural Health Services, Parrish
- 11* Ruskin Migrant and Community Health Clinic, Inc., Ruskin
- 12* Project Health, Inc., Sumterville
- 13* Palm Beach County Health Department, West Palm Beach
- 14* Florida Community Health Center, Inc., West Palm Beach
- 15* Sunshine Health Center, Inc., Pompano Beach
- 16 Tampa Community Health Center, Inc., Tampa
- 17 Family Health Center of Columbia County, Inc., Lake City
- 18 Lafayette/Suwannee Rural Health Corp., Mayo
- 19 Wewahitchka Medical Center, Inc., Wewahitchka
- 20 Trenton Medical Center, Inc., Trenton

*329/Migrant Health Program Funding

AGRICULTURAL AREA SEASONS

- A November 1 - June 30 ☉ ☽
- B October 1 - June 1 ☉ ☽
- C April 1 - December 1 ☉ ☽

FLORIDA

COUNTY	MIGRANT FARMWORKER POPULATION	SEASONAL FARMWORKER POPULATION	TOTAL MIGRANT & SEASONAL POPULATION
ALACHUA	1,252	1,199	2,451
BAKER	91	1,951	2,042
BAY	2,070	187	2,257
BRADFORD	315	785	1,100
BREVARD	1,187	1,543	2,730
BROWARD	7,100	2,948	10,048
CALHOUN	76	460	536
CHARLOTTE	75	1,281	1,356
CITRUS	614	519	1,133
CLAY	476	2,002	2,478
COLLIER	14,202	7,808	22,010
COLUMBIA	226	610	836
DADE	13,472	9,949	23,421
DESOTO	1,910	2,698	4,608
DIXIE	484	70	554
DUVAL	1,464	923	2,387
ESCAMBIA	1,180	398	1,578
FLAGLER	194	496	690
FRANKLIN	152	0	152
GADSDEN	1,786	3,752	5,538
GILCHRIST	314	772	1,086
GLADES	503	2,396	2,899
GULF	87	0	87
HAMILTON	256	398	654
HARDEE	6,927	5,298	12,225
HENDRY	3,958	7,108	11,066
HERNANDO	266	3,146	3,412
HIGHLANDS	5,692	4,539	10,231
HILLSBOROUGH	15,508	8,812	24,320
HOLMES	110	881	991
INDIAN RIVER	1,891	4,094	5,985
JACKSON	234	1,678	1,912
JEFFERSON	88	1,990	2,078
LAFAYETTE	387	1,741	2,128
LAKE	4,487	15,923	20,410
LEE	6,139	10,322	16,461
LEON	664	236	900
LEVY	367	695	1,062
LIBERTY	24	80	104
MADISON	416	1,777	2,193
MANATEE	6,531	5,740	12,271
MARION	1,282	7,061	8,343
MARTIN	2,494	5,396	7,890
MONROE	810	0	810
NASSAU	841	1,088	1,929
OKALOOSA	486	224	710
OKEECHOBEE	5,209	4,487	9,696

FLORIDA

COUNTY	MIGRANT FARMWORKER POPULATION	SEASONAL FARMWORKER POPULATION	TOTAL MIGRANT & SEASONAL POPULATION
ORANGE	6,514	15,981	22,495
OSCEOLA	551	2,857	3,408
PALM BEACH	20,174	45,263	65,437
PASCO	4,667	5,658	10,325
PINELLAS	1,310	957	2,267
POLK	14,510	11,871	26,381
PUTNAM	2,047	2,036	4,083
SANTA ROSA	152	2,490	2,642
SARASOTA	1,220	10,403	11,623
SEMINOLE	5,140	5,318	10,458
ST. JOHNS	1,222	105	1,327
ST. LUCIE	6,489	1,971	8,460
SUMTER	1,350	2,035	3,385
SUWANNEE	243	1,797	2,040
TAYLOR	120	54	174
UNION	158	453	611
VOLUSIA	2,276	6,639	8,915
WAKULLA	70	62	132
WALTON	157	722	879
WASHINGTON	123	450	573
TOTAL	182,790	252,583	435,373

ADJUSTMENTS TO FLORIDA PROFILE

The profile report computes the number of migrant children from Migrant Education and Migrant WIC participation data. The profile authors then used an average family size of 2.707 children and 2.0 adults to estimate the total migrant population. However, the following methodological errors required correction:

- The original profile multiplied the number of children by the average family size, rather than dividing by the number of children per family, to compute number of migrant farmworker families.
- All Migrant Education eligibility status III (formerly migrant) were erroneously included, as were children whose family agricultural work included poultry, dairy, and cattle.
- Provision was not included for the within state migration of agricultural workers and members of their families, nor was any correction made for the less than 100% enrollment of eligible migrant children.

The product of correction factors computed for the above problems resulted in a factor of 0.6773 which was then applied to the original estimated numbers of migrants in each county.

In estimating the seasonal population, the original profile included the following errors:

- The proportion of the work force engaged in agricultural work was multiplied by the total county population, rather than by the county labor force.
- The methodology assumed that only one person per family was employed in seasonal agricultural labor, and included those workers engaged in dairy, cattle, poultry, and full-time agricultural work.
- The methodology did not allow for some turn-over among the seasonal agricultural workforce during the year, nor for the potential double counting of some migrant farmworker family members as local seasonal farmworkers.

Correcting for these problems results in computation of a correction factor of 0.517 which was then applied to each of the county totals for seasonal farmworkers.