

The Occupational Health  
of Migrant and Seasonal Farmworkers  
in the United States

# Progress Report



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**I**n 1986, the Farmworker Justice Fund, Inc., a national non-profit advocacy organization based in Washington, D.C., published its report, *The Occupational Health of Migrant and Seasonal Farmworkers in the United States*, with support from the Office of Migrant Health<sup>1</sup>. The purpose of the report was fourfold: (1) to examine farmworker health data gathered between 1970 and 1985; (2) to describe ongoing research; (3) to discuss the laws and proposed legislation, as well as regulations at both the state and federal level dealing with farmworker occupational safety and health; and (4) to make recommendations for research and program priorities on farmworker health.

In this follow-up report, we examine the progress made on the 13 recommendations of our 1986 report under the leadership of the Office of Migrant Health—and we look to the future (see the “Discussion” section). This report also includes a list of farmworker occupational health resources released after our 1986 publication.

## Recommendations

### **1. Improve coordination and communication among agencies that serve farmworkers at the national, state and local levels.**

At the federal level, the Interagency Committee on Migrants, which was initiated by the Office of Migrant Health, meets quarterly to discuss issues of coordination and collaboration to improve migrant farmworker services. The committee includes representatives from migrant farmworker service programs at the Departments of Health and Human Services, Education, Justice, Labor, and Agriculture as well as the Environmental Protection Agency. In October 1987, the committee established two major long-term objectives: (1) to encourage the development of interagency agreements among federal programs at the national, state and local levels; and (2) to encourage and facilitate the establishment of interagency committees at the state and local level similar to the one at the national level. (See Appendix II for the committee’s mission statement.)

Two ongoing projects of the Interagency Committee on Migrants, which were spearheaded by the Office of Migrant Education, have been the preparation of a directory of national and regional farmworker service organizations and the compilation and analysis of federal agency definitions of “migrant” and “seasonal” farmworkers. The next phase of this latter project is to identify and eliminate barriers to service due to differences in these definitions. Already some progress has been made. In 1987 the Women, Infants and Children (WIC) Program of the U.S. Department of Agriculture revised its definition of migrant farmworker to be consistent with the definition used by the Office of Migrant Health.

The Interagency Committee on Migrants is still mainly a forum for the exchange of information. It should be more strongly encouraged to evolve into areas of policy development. In addition, given the complexities of setting fund-

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1. Available for \$15 (postage included) from the National Rural Health Association, 301 E. Armour Blvd., Suite 420, Kansas City, MO 64111 (phone: 816-756-3140). Cost to NRHA members is \$10.

The Office of Migrant Health, responsible for administration of the Migrant Health Program, is located in the Bureau of Health Care Delivery and Assistance, Health Resources and Services Administration, Public Health Service, U.S. Department of Health and Human Services, Rockville, Md. See Appendix I for an organizational chart of the Bureau of Health Care Delivery and Assistance and the Office of Migrant Health’s position within it.

ing priorities within agencies, the committee should be used to promote migrant farmworker research issues when funding priorities are set, and to facilitate coordination on these research efforts.

To enhance interagency cooperation, the Office of Migrant Health currently maintains interagency agreements with the Environmental Protection Agency; the Office of Migrant Education in the Department of Education; Supplemental Food Programs in the Department of Agriculture; the Alcohol, Drug Abuse and Mental Health Administration; and intra-agency agreements with the Health Care Financing Administration and the Migrant Head Start Program.

One of the newest interagency collaborations was the joint Migrant Education/Migrant Health national conference held in Hollywood, Fla., in May 1988. More than 1500 participants attended.

The Office of Migrant Health is developing a strategic work plan for 1989-1992 focusing on three basic themes: (1) access to care, (2) integration and coordination of services, and (3) improved communications. To achieve these objectives, the Office of Migrant Health is using a variety of tools. One tool is profiles of the number of migrant and seasonal farmworkers in each state. These profiles will be used to increase the number of migrant and seasonal farmworkers being served and to identify geographic areas where health services are needed. A copy of the plan is available through the Office of Migrant Health (see resource list under "General").

## **2. Give funding priority to preventive health care projects and services.**

In late 1987, the Office of Migrant Health convened a meeting of their staff, state officials, Migrant Health Center administrators and medical directors, and environmental health specialists to discuss the development of an environmental health strategy for the Migrant Health Program. This "Environmental Work Group" identified two top priorities for funding of practical environmental demonstration projects during 1989-1990. These priorities are: (1) housing, potable water, and waste water disposal; and (2) pesticides and field sanitation. The summary of the meeting and the work group's recommendations are in Appendix III. The themes that the work group emphasized in its recommendations were coordination of efforts, education about environmental conditions, and creative uses of resources.

In response to the Environmental Work Group recommendations, the National Demonstration Water Project (NDWP) of Leesburg, Va., a national non-profit organization with expertise in rural water and sanitation, has proposed two demonstration projects for fiscal year 1989. The projects will develop environmental plans for areas served by Migrant Health Centers in Washington state and southwest Michigan. These improvement plans will encompass the full range of area environmental issues—such as water quality, housing, insect control, pesticide safety and field sanitation. All resources of the area—such as growers, other health practitioners including local and county health departments, and funding sources—will be utilized. NDWP envisions funding these demonstration projects for one or two years, thereby providing seed money for long-range, large-scale environmental improvements.

The National Water Project has successfully used this concept of providing small grants to help leverage larger funds from other sources through its Migrant Environmental Services Assistance (MESA) project, which works to improve environmental conditions for farmworkers.

The MESA project was organized in 1980 and is funded by the Office of

Migrant Health. In 1986, for the first time, MESA awarded small grants to help finance farm labor housing repairs. Besides facility improvement projects, MESA recently has funded projects to improve field sanitation, to test water sources for pesticide contamination levels, and to develop educational materials for farmworkers about water contamination.

In 1987, Migrant Family Health Services of Hendersonville, N.C., loaned local growers ten portable sanitation units to help them comply with the new federal requirement to provide field sanitation facilities, i.e., toilets, handwashing facilities, and drinking water. The Migrant Health Center purchased the units through a MESA grant. This project assisted both farmworkers and growers and gave the center good publicity in the community.

Another project geared toward environmental improvement for farmworkers in their home base states is one begun in fall 1986. The Office of Migrant Health placed a U.S. Public Health Service registered sanitarian, Lee Halle, within the Texas Department of Health to work in three counties of the lower Rio Grande Valley. Halle works cooperatively with decision makers at all levels—community leaders; state and local agency policymakers; and local, state, and national elected officials—to improve the health of valley residents. He promotes proper legislation and zoning requirements, and provides technical assistance on a wide range of environmental issues. One of the accomplishments in Hidalgo and Starr Counties (in 1987 and 1988, respectively) has been the establishment of land use regulations requiring developers to submit plans for water lines, waste water facilities, and proper roads and drainage for properties; and to receive clearance from the County Board of Supervisors before they can build. Such planning ensures the development of good lots with proper sanitation, and leads to more healthful living conditions as well as increased land values and an increased tax base for the community.

The Office of Migrant Health is negotiating with the Indian Health Service to expand this program of sanitarians during fiscal year 1989. The Office of Migrant Health has approached the Indian Health Service because the service



already has a national network of sanitarians and the means to recruit more.

The Office of Migrant Health has funded some new health education projects in the last two years (see also recommendation #12). One project is a migrant farmworker nutrition manual designed for Migrant Health Center outreach workers and laypersons without formal training in nutrition, as well as for medical professionals. The manual takes into account cultural differences in food consumption and preparation, and other realities of migrant life. Certain chapters in the manual, such as one about special therapeutic diets, are included in response to needs expressed in a 1986 survey of Migrant Health Center nutrition services.

The Office of Migrant Health also has encouraged the funding of health promotion and disease prevention projects from private sources, such as foundations, and through meetings and other communications. The Office of Migrant Health has approached funders to stir interest in projects to improve the living and working conditions of farmworkers.

**3. Devise ways to make health care services available and accessible to more farmworkers (e.g., explore models for farmworker health insurance coverage).**



The Office of Migrant Health funded the 122 migrant health centers in more than 400 rural areas on a budget of \$45 million during fiscal year 1987. This funding brought health services to about 17 percent (500,000) of the estimated three million migrant and seasonal farmworkers and their families in the United States. The Office of Migrant Health continues to fund two farmworker hospitalization insurance plans under Blue Cross/Blue Shield, one based in Laredo, Texas, and the other in Immokalee, Fla. In fiscal year 1988, the U.S. Congress cut the Migrant Health Program budget by \$1.9 million, a 4.2 percent decrease.

The 1989-1992 strategic work plan of the Office of Migrant Health contains objectives to increase the accessibility and availability of primary care services to areas and populations currently not being served, notwithstanding decreased funding. These include:

- (1) "an ongoing assessment of current health care delivery systems to refine the range of services provided and ensure that appropriate services are being offered to meet the specific health needs of the migrant and seasonal farmworker population;
- (2) "the use of state profiles to determine the appropriate market penetration of migrant and seasonal farmworkers and a target penetration level for each center;
- (3) "the use of the state profiles to identify geographical areas where primary health services remain inaccessible to the migrant and seasonal

farmworker population and to develop alternative delivery approaches to provide health services in such areas; and

- (4) "continuing to foster integration of services to migrant and seasonal farmworkers from all appropriate state and local agencies. Regional offices, the Migrant Health Centers, and to some extent, the state primary care associations are expected to act as catalysts in this integration."

In addition, the Office of Migrant Health has developed several strategies to leverage new funds to extend, expand, and improve the quality of farmworker services. These strategies include:

- (1) encouraging foundations to allot resources for migrant health issues (e.g., the Milbank Memorial Fund, the Robert Wood Johnson Foundation, the Jim Hogg Foundation);
- (2) encouraging state primary care associations to engage in migrant health issues; and
- (3) establishing mechanisms, such as the formation of migrant coordinating councils, to foster coordination among migrant service providers.

Not all the impetus for expansion of health care services to farmworkers has come from the Office of Migrant Health. As part of its funding of projects that promote improvements in occupational health, the New York-based Milbank Memorial Fund (see resource list under "General") is supporting several projects to evaluate and improve farmworker health care services in New Jersey and New York. These include two projects in New Jersey designed to increase access to primary health care services for farmworkers (Sa-Lantic Health Services Inc., Hammonton and the Farmworker Support Committee or C.A.T.A. of Glassboro) and surveys in New York and adjacent states on access to health care and factors affecting client satisfaction with migrant health care services (Rural Opportunities, Inc., Rochester, N.Y.; and Cornell University, Ithaca, N.Y.).

#### **4. Develop a training program on farmworker occupational health for Migrant Health Center clinical staff, including standardized clinic protocols where appropriate.**

Much progress has been made in this area, in large part due to the leadership and commitment of the Migrant Clinicians Network. The network, an organization composed of Migrant Health Center clinical providers, was founded in 1984. The network is governed by an eleven-member board, six of whom are "stream coordinators," two each from the East, Midwest and Western migration streams.

Since 1986 the network has produced a number of resources for health care providers, and these have been compiled into a resource book (see "Training Materials"). These resources include a networking directory of Migrant Health Center clinical providers, a uniform drug formulary to achieve continuity in prescribing medications for the management of chronic disease among migrant and seasonal farmworkers, and a portable medical record for prenatal patients. In addition, the network has designed migrant-specific guidelines to accompany standard clinical protocols for treating chronic conditions. These guidelines employ an innovative system developed by the Migrant Clinicians Network—the CLEF approach. When designing strategies for chronic care management for migrant farmworkers, the protocols must take into account four areas: the Culture of migrant farmworker patients; Language; Environmental and Educational factors; and Follow-up care for a mobile population.

The network has used the CLEF approach to prepare guidelines for the management of adult onset diabetes. For example, some of the environmental

factors to take into account when treating migrant farmworkers include knowledge of the patient's housing and work conditions. How will insulin be stored? Is there access to a tub or shower to prevent infections and foot problems? Are drinking water and toilet facilities available?

In 1987 the National Migrant Referral Project began publishing a two- or four-page clinical supplement as part of their bimonthly *Migrant Health Newslines*. Many of the articles in the supplement have been written by Migrant Clinicians Network members.

Also in 1987 the National Migrant Referral Project produced orientation materials for clinicians new to the Migrant Health Center health care delivery system. These materials include a videotape about culture and health care, and the environmental and working conditions of farmworkers; a written guide accompanying the video; and a provider orientation checklist. (See NMRP citation under "Training Materials.") One of the proposed uses of these training materials is in the orientation training of National Health Service Corps physicians, many of whom are assigned to Migrant Health Centers.

The National Migrant Referral Project is collaborating with the Office of Migrant Health to produce several training videotapes with companion manuals for clinicians. During 1988 NMRP will produce a pesticide training video and manual based on the curriculum developed by Drs. Keith Long and Donald Morgan at the University of Iowa. A training video on how to take an occupational health history also is planned.

The Office of Migrant Health and the National Migrant Referral Project also are working with the University of California at Davis Pesticide Farm Safety Center on training materials and health care provider communication about pesticide exposure. The National Migrant Referral Project *Migrant Health Newslines* July/August clinical supplement about pesticide poisoning was developed in coordination with the Pesticide Farm Safety Center.

The Pesticide Farm Safety Center was founded in 1986 and is funded by the U.S. Environmental Protection Agency. The center has three objectives: (1) to educate farmworkers and their families, pesticide handlers, health professionals and other interest groups about pesticide-related health and safety issues; (2) to create a national clearinghouse for pesticide and crop information; and (3) to develop a research program in pesticide health and safety including toxicology and epidemiology. (See also recommendations #5 and #7.)

##### **5. Institute a national clearinghouse/resource center on farmworker health issues.**

The National Migrant Referral Project, Inc. (NMRP) of Austin, Texas, receives funding from the Office of Migrant Health for "the development and operation of a national information system to aid the provision of quality primary health care to migrant and seasonal farmworkers." Since 1986, NMRP has been developing a Migrant Health Information Resource Center. The center is a repository of printed and audiovisual materials. The center also collects health education materials developed by Migrant Health Centers.

NMRP continues to publish its bimonthly newsletter, the *Migrant Health Newslines*, which features clinical supplements dealing with research, diagnosis and treatment issues pertinent to migrant and seasonal farmworker health care delivery. NMRP also provides staff support to the Migrant Clinicians Network.

Large scale distribution of migrant health publications is done through the National Clearinghouse for Primary Care Information in McLean, Va. (see "Resource List" under "General").



## **6. Encourage migrant health program personnel to submit comments and testify when federal or state legislation and regulations affecting farmworker health are proposed.**

On May 1, 1987, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) issued federal field sanitation standards for farmworkers. These regulations require agricultural employers who hire eleven or more workers to provide them with free drinking water, toilets and wash water in the fields.

Migrant Health Centers contributed valuable and necessary health data to OSHA's regulation. During 1984, Migrant Health Center physicians and administrators testified at regional hearings scheduled by OSHA and submitted written testimony, including diagnostic data and results of their own research. Alerting Migrant Health Center personnel about proposed federal legislation or regulations affecting farmworker health and safety can be done in many ways: through communications from the regional offices of the Department of Health and Human Services; through the *Migrant Health Newslines* published bimonthly by the National Migrant Referral Project, Inc. of Austin, Texas; via the Migrant Clinicians Network; at health conferences such as the annual migrant health conference sponsored by the National Association of Community Health Centers, Inc.; and via newsletters published by other advocacy organizations.

In July 1988, the U.S. Environmental Protection Agency published its proposed worker protection standards in the *Federal Register* with a public comment period of 90 days. The proposed regulations cover such issues as re-entry intervals, worker notification and training, medical monitoring of pesticide applicators, emergency procedures in case of known or suspected pesticide poisoning, decontamination procedures, and personal protective equipment, among others. Input from Migrant Health Center health care providers is once again vital to establish an accurate record of the hazards and health problems that farmworkers face, and to recommend ways to better protect farmworkers at the workplace.

At the state level, those Migrant Health Centers that have ties to other organizations in the community—such as consumer, health, or environmental groups—are more likely to be informed about the full range of pending legislative or regulatory changes in their state which may affect farmworkers. For example, local groups monitoring state pesticide laws can alert Migrant Health Centers about aspects that will affect farmworkers. Likewise, Migrant Health Centers can inform other sectors of the community about proposals that affect workers and the general public as well. Recent examples include pesticide application posting laws in New Jersey and New York, encompassing agricultural and non-agricultural areas, and proposed field sanitation regulations in Michigan.

State and regional primary health care associations, now numbering 33, also can play a role in state level activities. For example, the North Carolina Primary Health Care Association has made formal presentations before the North Carolina Farmworker Council, an appointed body of state legislators, state agency heads and farmers. The council addresses coordination of farmworker services and policy issues. In addition, the association participates in meetings and activities of the North Carolina Farmworker Services Committee, which is composed of state and private farmworker services programs and organizations.

The Office of Migrant Health and its regional staff are exploring efforts to assist Migrant Health Center personnel to respond at both the state and federal levels when farmworker health data are needed for legislative or regulatory purposes.



**7. Delineate the current and future research priorities of federal agencies, identifying public and private sources for migrant health research.**

In 1986, the Office of Migrant Health commissioned the National Rural Health Association to compile a directory of public and private current and potential funders of migrant health research projects. This compendium is listed in the resource section under the "General" subheading.

With regard to the federal government, thus far it has proven easier to catalog current agency research priorities than to influence the planning process for future priorities to include migrant and seasonal farmworker research. Some inroads have been made, however. The Office of Migrant Health is working with the U.S. Environmental Protection Agency's (EPA) Farm Safety Staff, a part of the Office of Pesticide Programs, and one of EPA's grantees, the University of California at Davis Pesticide Farm Safety Center, in the development of the center's agenda. The Pesticide Farm Safety Center has national research, outreach and educational objectives, and has appointed an advisory panel of farmworker representatives, clinicians, state agency staff and academic researchers to assist it in setting priorities. The Office of Migrant Health is an ad-hoc member of this advisory panel.

In addition, communications have occurred between the Office of Migrant Health and the National Institute for Dental Research, one of the institutes of the National Institutes of Health in Bethesda, Md.

To date, the federal Interagency Committee on Migrants (described under recommendation #1) has not addressed the issue of joint development or coordination of research priorities.

In November 1986, at the direction of the Office of Migrant Health, the Farmworker Justice Fund organized a meeting to bring together Migrant Health Center clinicians, a university-based researcher with experience in migrant health research, and a foundation staff person to discuss the development of a migrant health research agenda and strategies to secure research funding. Subsequently, the Office of Migrant Health contacted several national foundations. Since 1987 this focus on outreach to foundations by the Office of Migrant

Health has been put on hold.

Since 1985, the principal private funding source for migrant health—particularly occupational health—has been the Milbank Memorial Fund, based in New York City. In August 1988 Dr. Robert Ebert became the fund's president. Therefore, it is uncertain whether Milbank will continue with migrant health research as a funding priority.

**8. Establish a standardized farmworker health data gathering system through the federally funded Migrant Health Centers. Analyze existing farmworker information, especially computerized data bases. Where appropriate, develop additional research projects based on these findings.**

Two projects funded by the Office of Migrant Health are addressing the first part of this recommendation. During 1987, the National Migrant Referral Project, Inc. began an illness or morbidity reporting system demonstration project with a statistically selected group of Migrant Health Centers in the Midwestern stream. Concurrently, the MITRE Corporation of McLean, Va., is studying computerized migrant patient data bases in each of the three migrant streams (East, Midwest, and West) to determine migrant farmworker health status profiles. Both of these projects use the kind of information typically recorded on a Migrant Health Center's patient encounter form: patient birth date, sex, marital status, diagnostic and procedural codes, migrant status, and service delivery site. These projects will develop morbidity profiles by ranking the frequencies of diagnoses and procedures. Results are not yet available.

Within the system of federally funded Migrant Health Centers, there are still only two clinics (North County Health Services, San Marcos, Calif.; and Su Clínica Familiar, Harlingen, Texas) that use the Computer Stored Ambulatory Record (COSTAR) system. COSTAR maintains health outcome data that is not typically recorded on a patient's clinical encounter form. Prospective farmworker health studies that capitalize on this computer software have yet to be developed.

The Migrant Clinicians Network has established a subcommittee to begin developing a medical information retrieval system that will be based on the work done in the two morbidity demonstration projects described above. An epidemiologist will assist the subcommittee in this work. The system is projected for testing in fiscal year 1990.

With regard to analysis of existing data bases, the National Center for Health Statistics (NCHS) is examining the subset of respondents in the Hispanic HANES (Health and Nutrition Examination Survey) who had ever done farm work. Researchers from NCHS presented preliminary findings at the 1987 annual meeting of the American Public Health Association (APHA) and will present more farmworker data at the APHA meeting in November 1988. The Hispanic HANES data was collected between 1982 and 1984.

Further analysis of Migrant Head Start data or of the health data in the Migrant Student Record Transfer System has not occurred.

**9. Further develop or facilitate research projects between migrant farmworker health programs and academia, including, for example, schools of medicine, public health, nursing, and optometry.**

These partnerships between Migrant Health Centers (with the patients and data) and academia (with the staff, research expertise and computer facilities) are especially fostered when research monies are available. A university that has not previously conducted farmworker health research may decide to make this a

priority if funding is available. Likewise, a Migrant Health Center or other farmworker organization applying for a research grant may seek assistance from a local university.

The Office of Migrant Health does not have a formal mechanism to link Migrant Health Centers with academic institutions for research purposes. The Director of the Office of Migrant Health has met with the Director of the Area Health Education Centers (AHECs) Program to foster this type of collaboration. The AHEC Program, which is also based in the U.S. Department of Health and Human Services, provides funding for community-based health education and training.

AHECs can use Migrant Health Centers as practice sites for AHEC health professional training. In turn, AHECs can become involved in research projects conceived by Migrant Health Centers. Colorado, Arizona, California and Florida are examples of states where Migrant Health Centers are cooperating with AHECs on a variety of projects, including research and health professional training. For example, the Arizona AHEC Program is working with Valley Health Center and other health care providers in the western Arizona AHEC area to establish a data base of farmworkers' health status and occupational history that will be available to researchers, policymakers, farmworkers and growers, as well as to the general public.

This kind of activity could be additionally facilitated by the National Migrant Referral Project and state primary health care associations. The EPA-funded Pesticide Farm Safety Center at the University of California at Davis is a logical starting point for Migrant Health Centers planning research on farmworker exposure to pesticides.

The Bureau of Health Care Delivery and Assistance sponsors a project with the American Medical Student Association (AMSA) to place medical students in Migrant and Community Health Centers during the summer. The medical students complete community service projects in health promotion and disease prevention. They are provided a stipend and relocation allowance during their

six- to eight-week placements. During 1988, at least 115 medical students will participate.

One recommended action to stimulate research is to adapt this AMSA project to include medical students interested in research projects. This possibility has been discussed by the Migrant Clinicians Network in terms of students conducting health status surveys of farmworkers, for example. A further step would be to provide funding for such short-term or longer term research projects for other health professional students, as well as graduate students in fields such as public health, demography and anthropology. Providing such opportunities to fledgling or potential researchers may kindle commitment to farmworker health after graduation.



**10. Provide pre- and/or postdoctoral training fellowships for migrant farmworker health research.**

No progress has been made on this recommendation.

**11. Develop health studies that are collaborative, multicenter efforts designed to increase knowledge on key migrant and seasonal farmworker health issues.**

There are several efforts at multicenter research and data analysis currently underway. Two of these projects—the morbidity reporting demonstration project in the Midwest and the analysis of patient data by migrant stream to determine health status profiles—are discussed under recommendation #8. These demonstration projects will lead to the development of a medical information retrieval system to be tested in fiscal year 1990.

In addition, the Migrant Clinicians Network has developed a farmworker health survey that primarily focuses on work-related health concerns. The survey will be field tested during 1988. A national study to be conducted through migrant health centers is planned once the pilot testing is complete. The Farm Labor Organizing Committee, headquartered in Toledo, Ohio, (see resource list under "General") plans to begin a health study of its members in June 1989. Farmworkers and their families will be enrolled in the study in Ohio and Michigan and then followed back to their home bases in Florida and Texas. The study will last for two full annual migration cycles. The research team will be headed by Dr. Marion Moses.

**12. Develop culturally appropriate health education materials for farmworkers on work place health and safety; preventive health care, including dental health; deafness prevention; child growth and development; infant feeding practices; nutrition; family planning; sexually transmitted diseases; substance abuse; and use of medications.**

Since 1986 there have been a variety of farmworker educational materials and training programs developed or expanded.

In 1985, with funding from the Office of Migrant Health, the Midwest Migrant Health Information Office in Detroit developed a training program for farmworkers to serve as health aides in the labor camps. The camp health aides are not trained to diagnose or treat illness. Rather, they learn to recognize new or recurrent health problems in the farmworker camps, learn health promotion and disease prevention strategies, know what health care and social services are available and refer camp residents to them, and conduct follow-up visits to camp residents who go for medical treatment. The aides work under Migrant Health Center staff supervision.

A lay health advisor training program for migrant farmworkers also has been developed at the University of North Carolina School of Public Health with funding from the Division of Maternal and Child Health, U.S. Department of Health and Human Services. Training materials include a manual and videotape that illustrate the program. Currently, 19 migrant health centers have camp health aide and lay health advisor programs. (See "Clinician/Lay Health Advisor Training" list under "Training Materials.")

As noted in the discussion under recommendation #2, the Office of Migrant Health has funded the preparation of a nutrition manual for Migrant Health Center outreach workers, laypersons without formal nutrition training, and medical professionals that will be published by Georgetown University and made available in late 1988. A 30-minute training videotape based on the manual also

is planned. In addition to the manual and video, patient information handouts have been prepared in Spanish and English, and a Creole version will be available in the coming months. The various information sheets detail special therapeutic diets, explain the basics of good nutrition, and describe nutrition needs during different periods of life, such as during pregnancy.

The Office of Migrant Health also is funding the National Migrant Referral Project to produce a videotape to train persons such as Migrant Health Center outreach workers to conduct vision screening tests.

Since 1987, through its interagency agreement with the Office of Migrant Health, the EPA has supported a pesticide "train the trainers" program. The Work Group on Pesticide Health and Safety, coordinated by Dr. Alice Larson, has conducted training workshops in Washington, Oregon and Arizona. Workshops also are planned for Pennsylvania, New York, South Carolina and Idaho. The work group brings together representatives of interested organizations already reaching farmworkers, farmers and families for its workshops. Thus, representatives of state agencies, migrant education programs, Migrant Health Centers, grower associations, and farmworker advocacy groups typically come together for these training sessions on pesticide health and safety. The work group provides these trainers with the tools and materials to do training. There is a follow-up phase to assist trainers in whatever ways necessary as well as an evaluation process. (See "Pesticides" list under "Training Materials.")

Through March of Dimes funding, North County Health Services of San Marcos, Calif., developed a program called "Healthy work, healthy babies" ("Trabajo sin riesgos: niños sanos") to teach Hispanic migrant workers about the reproductive hazards they face at their jobs and in their living environments. The program was developed for migrant, rural and community health centers. Bilingual written and audiovisual aids are included (see "Training Materials").

In its role as information center, the National Migrant Referral Project collects farmworker health education materials developed by Migrant Health Centers. NMRP also organizes a film festival of farmworker materials at the annual migrant health conference sponsored by the National Association of Community Health Centers.

Farmworker unions and farmworker advocacy organizations also have developed health education materials. For example, Arizona Farm Workers has printed brightly colored fact sheets about pesticides and field sanitation. An affiliated organization, the Maricopa County Organizing Project, published a calendar with health, pesticide safety and employment information. The United Farm Workers of America (UFW) publish their monthly magazine *Food and Justice*, which includes health information for members and supporters. The UFW also has prepared a video about the hazards of pesticide exposure to grape workers. (See "Training Materials.") Migrant legal services programs have prepared and distributed pesticide safety and field sanitation information to farmworkers.

### **13. Improve the compatibility and efficiency of the computer systems in use by Migrant Health Centers.**

The Office of Migrant Health provides ongoing technical support regarding automated systems and data analysis through the MITRE Corporation of McLean, Va. MITRE provides technical assistance to the Migrant Health Centers. MITRE's current work focuses on developing effective mechanisms for patient referrals, transfer of health records, and national trend analysis of migrant health status.

## Discussion

This report primarily describes activities initiated by the Office of Migrant Health with regard to the 13 recommendations of our 1986 report on farmworker occupational health.

Substantial progress has been made in the development of training materials for Migrant Health Center clinicians and outreach workers. Activities of the Migrant Clinicians Network—supported through the Office of Migrant Health—have been particularly impressive in the areas of clinician education and methods to improve the continuity of health care throughout the Migrant Health Center system (e.g., the design of the medical record for pregnant migrant farmworkers to take with them as they seek care in different health centers, and the development of the CLEF approach to apply standard clinical protocols for more effective and responsive patient care). Now that these tools for training and treatment have been developed, they should be widely distributed and evaluated for their effectiveness.

The camp health aide program and similar “train the trainer” health and safety models are important ways to reach farmworkers through their own community leaders. Development and evaluation of health education materials in Haitian Creole and other languages such as Vietnamese and Indian languages of Mexico and Guatemala are still needed since the majority of educational materials are only available in English or Spanish. Many of these materials should be geared for illiterate persons.

Under the leadership of the Director of the Office of Migrant Health, Sonia M. Leon Reig, inroads have been made toward better coordination and communication at the federal and state levels among agencies serving farmworkers. At the federal level, the Office of Migrant Health has been the prime motivator for the quarterly meetings of the Interagency Committee on Migrants. Continued leadership and encouragement for broadening the scope of the committee’s activities to encompass policy development and research issues is vital. At the state level, the Office of Migrant Health has been fostering the involvement of state and regional primary care associations in coordination, communication and advocacy on farmworker issues. This encouragement should continue.

The Office of Migrant Health is exploring systems for the collection and analysis of farmworker health data to provide more accurate information about the health status of farmworkers served by Migrant Health Centers. Such information has been sorely lacking on a national and a stream basis. A morbidity reporting system would help identify changes in disease trends and highlight geographic areas or age groups with special resource allocation needs.

Research to provide even the most basic of national vital statistics about farmworkers is still necessary. We do not know the life expectancy or the infant mortality rate for farmworkers, for example. The Office of Migrant Health has made efforts during the past three years to stimulate interest in farmworker health research among private funding sources. This type of outreach at the level of the directorship of the Office of Migrant Health is crucial. It is both a public relations and monitoring activity. The Office of Migrant Health can inform national foundations about farmworker health and be a liaison for Migrant Health Centers and affiliated researchers to make contacts with these funding sources.

Migrant Health Centers need training and assistance in fund raising and grant writing. Workshops to develop such skills should be included at the annual

migrant health conference. Fund-raising success stories and new funding source information should be included in the *Migrant Health Newslines*. For example, recently the Robert Wood Johnson Foundation announced its new priority to fund projects to prevent the spread of AIDS and to improve services for people with AIDS. In addition, the newly formed Dionne Warwick Foundation is funding Black and Hispanic AIDS prevention and service activities.

Efforts by the Office of Migrant Health to attack the root causes of health problems among farmworkers are to be applauded. This long-range approach is exemplified in the funding of the MESA environmental grants, the placement of the registered sanitarian in the lower Rio Grande Valley and planned expansion of this program, and the convening of the Environmental Work Group to set priorities for future environmental health projects. No matter how excellent, efficient or far-reaching the provision of health care services by Migrant Health Centers, if farmworkers receive treatment and then return to unhealthy and dangerous living and working conditions, their health status will not improve.

The Office of Migrant Health espouses a health promotion and disease prevention philosophy. Through its activities it is taking seriously its charge to provide environmental health services as directed in the Migrant Health Act. The Office of Migrant Health has promoted the concept of leveraging funds in its environmental projects. Through this approach seed monies have a multiplier effect: employers, community and other government resources, and additional funding sources are tapped to accomplish projects such as repairing and building housing or upgrading water systems.

Another important charge to the Office of Migrant Health in the Migrant Health Act is to assist in the implementation and enforcement of acceptable environmental health standards. For farmworkers to have safer and healthier labor camps and work places, not only must protective standards be issued, they must be rigorously enforced. Existing farmworker protection standards are weak, limited in scope (for example, the OSHA field sanitation standard only covers farms with eleven or more employees), and of low enforcement priority to OSHA, EPA, and their state enforcement agencies. This situation must change. Agriculture is one of the three most dangerous occupations in the United States, and all who work in agricultural settings should be adequately protected. Enforcement issues should be vigorously addressed in the Interagency Committee on Migrants and at the state level. Leadership from the Office of Migrant Health is necessary to build momentum on this issue.

The Office of Migrant Health received \$43.5 million in fiscal year 1988, a 4.2 percent decrease from 1987 funding. The Migrant Health Centers served 500,000 migrant and seasonal farmworkers and their families with primary and supplemental health services such as medical, dental, laboratory, pharmaceutical, health education, and transportation and outreach services as well as environmental health services as outlined in this report. Currently, the Migrant Health Centers reach 17 percent of the estimated three million migrant and seasonal farmworkers and their families. In these times of fiscal austerity and burgeoning budget deficits, programs that implement health promotion and disease prevention are fiscally responsible. The Office of Migrant Health needs sufficient funds to build on its achievements, reach more farmworkers, and contribute to improving their living and working conditions and overall health.

The nation's attention focuses on farmworkers only sporadically—in times of weather disasters such as the drought of 1988 or the freeze in the South in 1983 or through powerful documentaries such as Edward R. Murrow's "Harvest of Shame" aired on Thanksgiving Day, 1960. Yet, every day the American consumer



eats fruits and vegetables picked by farmworker adults and children.

The time is well past due for this nation to afford farmworkers decent health care. It should be apparent to all thoughtful observers that farmworkers, the most productive sector of labor in one of America's most successful industries, should not be rewarded for their efforts with disability and disease. Farmworker health and safety must become a national priority.



## Resource List

### Environmental Health

National Water Project: *The Mesa Book: Cases in Migrant Environmental Services Assistance*. Arlington, VA: National Water Project, 1988. To order, contact: NDWP, 602 S. King Street, Suite 402, Leesburg, VA 22075 (phone: 703-478-8652).

### Field Sanitation (See also "Training Materials")

- Arbab, D. and Weidner, B.: Infectious Diseases and Field Water Supply and Sanitation among Migrant Farm Workers. *American Journal of Public Health* 76(6):694-695, June 1986.
- Ciesielski, S. and Seed, J.: Intestinal Parasites in Adult Migrant Farmworkers in North Carolina. *Migrant Health Newslines* (clinical supplement) April/May 1988. Available from: National Migrant Referral Project, 2512 South IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- Edwards, R.: Intestinal Parasites in Migrant Farmworker Children in North Carolina. *Migrant Health Newslines* (clinical supplement) April/May 1988. Available from: National Migrant Referral Project, 2512 South IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).

- Martin, D.; Gustafson, T.; Pelosi, J.; et al. Contaminated Produce—A Common Source for Two Outbreaks of Shigella Gastroenteritis. *American Journal of Epidemiology* 124(2):299-305, 1986.
- Occupational Safety and Health Administration: 29 CFR Part 1928. Field Sanitation; Final Rule. *Federal Register* Vol. 52, No. 84, pp. 16050-16096, May 1, 1987. Washington, D.C.: U.S. Government Printing Office.
- Ungar, B.; Iscoe, E.; Cutler, J.; et al.: Intestinal Parasites in a Migrant Farmworker Population. *Archives of Internal Medicine* 146:513-515, 1986.
- U.S. General Accounting Office: Occupational Safety & Health: Federal Costs Incurred in Developing Field Sanitation Standard. Report No. GAO/HRD-88-15FS, November 1987. Order from: U.S. GAO, P.O. Box 6015, Gaithersburg, MD 20877. (First five copies are free; additional copies cost \$2.00 each.)

## General

- American Civil Liberties Union: *The Hands That Feed Us: Undocumented Farmworkers in Florida*. Washington, D.C.: American Civil Liberties Union and American Friends Service Committee, 1986. Order for \$5.00 from: ACLU, 122 Maryland Avenue, N.E., Washington, D.C. 20002.
- de la Torre, A. and Rush, L.: The Determinants of Breastfeeding for Mexican Migrant Women. *International Migration Review* Vol. 21, Fall 1987, pp. 728-742. Staten Island, NY: Center for Migration Studies. Contact: CMS, 209 Flagg Place, Staten Island, NY 10304-1148 (phone: 718-351-8800).
- Farm Labor Organizing Committee: For information about FLOC's activities, contact: Mr. Balde-mar Velasquez, Farm Labor Organizing Committee, 714-1/2 S. Saint Claire, Toledo, OH 43609 (phone: 419-243-3456).
- Farmworker Justice Fund, Inc.: *Farmworker Justice News*. Quarterly newsletter. Available from FJF, 2001 S St., N.W., Suite 210, Washington, D.C. 20009 (phone: 202-462-8192).
- Guendelman, S. and Perez-Itriago, A.: Migration Tradeoffs: Men's Experiences with Seasonal Lifestyles. *International Migration Review* Vol. 21, Fall 1987, pp. 709-727. Staten Island, NY: Center for Migration Studies. Contact: CMS, 209 Flagg Place, Staten Island, NY 10304-1148 (phone: 718-351-8800).
- Housing Assistance Council: *After The Harvest: The Plight of Older Farmworkers*. Washington, D.C.: American Association of Retired Persons, 1987. Contact: AARP, 1909 K St., N.W., Washington, D.C. 20049.
- Littlefield, C. and Stout, C.: A Survey of Colorado's Migrant Farmworkers: Access to Health Care. *International Migration Review* Vol. 21, Fall 1987, pp. 688-708. Staten Island, NY: Center for Migration Studies.
- Milbank Memorial Fund: *Annual Report 1987*. Also, list entitled "Occupational Health Program Grants" (March 29, 1988). Contact: Ms. Carol R. Ausubel, Program Officer, Milbank Memorial Fund, 1 East 75th St., New York, NY 10021 (phone: 212-570-4805).
- National Clearinghouse for Primary Care Information: For a copy of their publications list or more information contact them at: 8201 Greensboro Drive, Suite 600, McLean, VA 22102 (phone: 703-821-8955).
- National Rural Health Association: *A Compendium of Health Resources for Agencies Serving Migrant and Seasonal Farmworkers*. Kansas City, MO: National Rural Health Association, 1987. Available from: NRHA, 301 E. Armour Blvd., Suite 420, Kansas City, MO 64111 (phone: 816-756-3140).
- North Carolina Primary Health Care Association: Contact Mr. Steven E. Shore, Executive Director, NCPHCA, 975 Walnut St., Suite 355, Cary, NC 27511 (phone: 919-469-5701).
- Office of Migrant Health: Contact: Sonia M. León Reig, Director, Office of Migrant Health, U.S. Public Health Service, Parklawn Building Room 7A-45, 5600 Fishers Lane, Rockville, MD 20857 (phone: 301-443-1153).
- Runyan, D. and Morgan, P.: *Nutrition and Migrant Health: Trends in Nutrition Services at Migrant Health Centers*. Kansas City, MO: National Rural Health Association, 1988. Available from: The Migrant Clinicians Network, c/o National Migrant Referral Project, Inc., 2512 South IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- Sakala, C.: Migrant and Seasonal Farmworkers in the United States: A Review of Health Hazards, Status, and Policy. *International Migration Review* Vol. 21, Fall 1987, pp. 659-687. Staten Island, NY: Center for Migration Studies. Contact: CMS, 209 Flagg Place, Staten Island, NY 10304-1148 (phone: 718-351-8800).
- Slesinger, D.: The Role and Future of Migrant Farmworkers in Wisconsin Agriculture. *Wisconsin Academy Review* 33(1):32-35, December 1986.
- Slesinger, D.; Christenson, B. and Cautley, E.: Health and Mortality of Migrant Farm Children. *Social Science Medicine*—23(1):65-74, 1986.

## Occupational Health

- Association of Schools of Public Health: *Proposed National Strategies for the Prevention of Leading Work-Related Diseases and Injuries. Part 1.* Cincinnati, OH: National Institute for Occupational Safety and Health, 1986. Contact: NIOSH, Technical Information Branch, 4676 Columbia Parkway, Cincinnati, OH 45226 (phone: 513-533-8380).
- Centers for Disease Control: *Prevention of Leading Work-Related Diseases and Injuries.* A reprint of articles from *Morbidity and Mortality Weekly Report* between 1983-1986. Order from the NIOSH address above.

## Pesticides (See also "Training Materials")

- Ames, R.; Brown, S.; Stratton, J.; et al.: *Cholinesterase Activity Depression Among California Pesticide Applicators: Results from the 1985 Cholinesterase Monitoring Program.* Berkeley, CA: Pesticides Unit, California Department of Health Services, September 1987. To order, contact Pesticides Unit, Hazard Evaluation Section, California Department of Health Services, Berkeley, CA 94704 (phone: 415-540-3063).
- Association of Birth Defect Children: *Voluntary Birth Defects Registry. Newsletter Winter/Spring Vol. 10, 1987.* Contact: ABDC, 3526 Emerywood Lane, Orlando, FL 32812 (phone: 407-859-2821).
- Barnett, P.: *Diagnosis and Follow-Up of Organophosphate Pesticide Poisoning in the Absence of Baseline Cholinesterase Values. Migrant Health Newslines (clinical supplement) June/July 1988.* Contact: National Migrant Referral Project, 2512 S. IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- Brender, J.; Honchar, P.; Alexander, C.; et al.: *Occupational pesticide poisoning: reportable disease in Texas. Texas Medicine 84:29-35, April 1988.*
- Lowengart, R.; Peters, J.; Cicioni, C.; et al.: *Childhood Leukemia and Parents' Occupational and Home Exposures. Journal of the National Cancer Institute 79(1):39-46, July 1987.*
- Mentzer, M. and Villalba, B.: *Pesticide Exposure and Health: A Study of Washington Farmworkers.* Granger, WA: Evergreen Legal Services, Farm Worker Division, 120 Sunnyside Ave., P.O. Box 430, Granger, WA 98932. March 1988.
- Moses, M.: *A Field Survey of Pesticide-Related Working Conditions in the U.S. and Canada: Monitoring the International Code of Conduct on the Distribution and Use of Pesticides in North America.* San Francisco: The Pesticide Education and Action Project, P.O. Box 610, San Francisco, CA 94101. February 1988. Cost is \$5.00, less for quantities over 10.
- Moses, M.: *Cancer in Humans and Potential Occupational and Environmental Exposure to Pesticides. Abstracts of Selected Epidemiological Studies and Case Reports. January 11, 1988.* Contact: Marion Moses, M.D., P.O. Box 22579, San Francisco, CA 94122.
- National Coalition Against the Misuse of Pesticides: *Pesticides and You. Quarterly Newsletter.* Contact: NCAMP, 530 7th St., S.E., Washington, D.C. 20003 (phone: 202-543-5450).
- National Institute for Occupational Safety and Health: *Organic Solvent Neurotoxicity. Current Intelligence Bulletin 48, March 31, 1987. DHHS (NIOSH) Publication No. 87-104.* Cincinnati, OH: NIOSH, Technical Information Branch, 4676 Columbia Parkway, Cincinnati, OH 45226.
- National Research Council: *Regulating Pesticides in Food: The Delaney Paradox.* Washington, D.C.: National Academy Press, 1987. Cost is \$19.95 from National Academy Press, 2101 Constitution Ave., N.W., Washington, D.C. 20418.
- O'Malley, M.: *Recognizing Fieldworker Poisoning. Migrant Health Newslines (clinical supplement) June/July 1988.* Contact: National Migrant Referral Project, 2512 S. IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- O'Malley, M.: *Severe Dermatitis in Orange Pickers Traced to Pesticide Residues. Migrant Health Newslines (clinical supplement) June/July 1988.* Contact: National Migrant Referral Project, 2512 S. IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- Schwartz, D. and LoGerfo, J.: *Congenital Limb Reduction Defects in the Agricultural Setting. American Journal of Public Health 78(6):654-657, 1988.*
- U.S. Environmental Protection Agency: *Pesticides Fact Book. Publication No. A-107/86-003, June 1986.* Order from: EPA, Office of Public Affairs (A-107), Washington, D.C. 20460.
- U.S. Environmental Protection Agency: *40 CFR Parts 156 and 170. Worker Protection Standards for Agricultural Pesticides; Public Meetings and Proposed Rule. Federal Register Vol. 53, No. 131, pp. 25970-26021, July 8, 1988.* Washington, D.C.: U.S. Government Printing Office.

# Training Materials

## Clinician/Lay Health Advisor Training

- Midwest Migrant Health Information Office: *1988 Camp Health Aide Program Curriculum Guide, Camp Health Aide Manual, and Camp Health Aide Program—Assessment of Program Performance* (1987). For copies, contact: National Clearinghouse for Primary Care Information, 8201 Greensboro Drive, Suite 600, McLean, VA 22102 (phone: 703-821-8955).
- Migrant Clinicians Network: For information about the network and the resources it has produced, contact them c/o National Migrant Referral Project, 2512 S. IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- National Migrant Referral Project: *The Road to Quality Migrant Health: The Importance of Sensitivity and Respect for Lifestyles and Cultures*. 31-min. (1/2" VHS format) video about migrant life and culture for health care providers new to the migrant health care delivery system. Videocassette with accompanying guide entitled *Orientation to Multicultural Health Care in Migrant Health Clinics* (by Robert T. Trotter) available for \$25.00 from: National Migrant Referral Project, 2512 S. IH-35, Suite 220, Austin, TX 78704 (phone: 1-800-531-5120 or 512-447-0770).
- Watkins, E. and Larson, K.: *Migrant Lay Health Advisors—A Strategy for Health Promotion*. For information about the manual and videotape, contact: Dr. Elizabeth Watkins, Maternal and Child Health Migrant Project, University of North Carolina at Chapel Hill, School of Public Health, CB#7400, Rosenau Hall, Chapel Hill, NC 27599-7400 (phone: 919-966-5979).

## Field Sanitation

- American Farm Bureau: Bilingual brochure (Spanish/English) for farmworkers about the federal field sanitation standard ("For Your Protection"). Brochure in English for the farm employer ("What Every Farm Employer Needs to Know About Federal Requirements for Field Sanitation Facilities"). Bilingual poster (Spanish/English) for farmworkers about hygiene and the health benefits of correct use of the facilities. Single copies, free; larger quantities \$.15 each, with discounts for sets of 50, 100 and 1000. Contact: American Farm Bureau, Information Division, 225 Touhy Ave., Park Ridge, IL 60068 (phone: 312-399-5758).
- Occupational Safety and Health Administration: U.S. Department of Labor Program Highlights. Fact Sheet No. OSHA-87-25. "OSHA's Field Sanitation Standard." Also available in Spanish ("Normas de Sanidad del Campo del OSHA"). Washington, D.C.: U.S. Government Printing Office, 1987. Contact: OSHA, U.S. Department of Labor, 200 Constitution Ave., N.W., Washington, D.C. 20210.

## Pesticides

- Arizona Farm Workers: Fact sheets about pesticides and field sanitation for farmworkers. Contact: A.F.W., 12225 Grand Avenue, P.O. Box 819, El Mirage, AZ 85335 (phone: 602-977-1219). For information about the Maricopa County Organizing Project Pesticide Project calendar, contact MCOP at this same address.
- North County Health Services: Health education program for Latino migrant workers consisting of: a booklet entitled "Protecting Yourself and Your Unborn Baby from Toxic Substances," four one-page fliers on pesticides, cleaning products, reproductive hazards at work and home, and symptoms of toxic exposure and first aid; videotape and slide presentation. All materials available in English and Spanish. Program comes with protocols for use in a clinic setting and with a model occupational history form. Contact: North County Health Services, 348 Rancho Drive, San Marcos, CA 92069 (phone: 619-471-2100).
- Texas Department of Agriculture:
- (1) Brochure entitled "A Guide to the Texas Agricultural Hazard Communication Law: Right-to-Know."
  - (2) Bilingual (Spanish/English) crop sheets for all major Texas crops.
  - (3) "Workplace Chemical List: Instructions for Completion in Compliance with the Texas Agricultural Hazard Communication Law. March 1988." To order TDA materials, contact Texas Department of Agriculture, P.O. Box 12847, Austin, TX 78711.
- United Farm Workers of America: "The Wrath of Grapes." 15-min. VHS video about farmworker exposure to pesticides in the grape crop and adverse health effects. Available from: UFW, La Paz, Keene, CA 93570 (phone: 805-822-5571).
- University of California at Davis Pesticide Farm Safety Center: For information about the forthcoming training videos and the catalog of training materials, contact Dr. Marc Schenker, Director, or Ms. Lynn Morrin, Coordinator, Pesticide Farm Safety Center, University of California at

Davis, Davis, CA 95616 (phone: 916-752-8939).

U.S. Environmental Protection Agency:

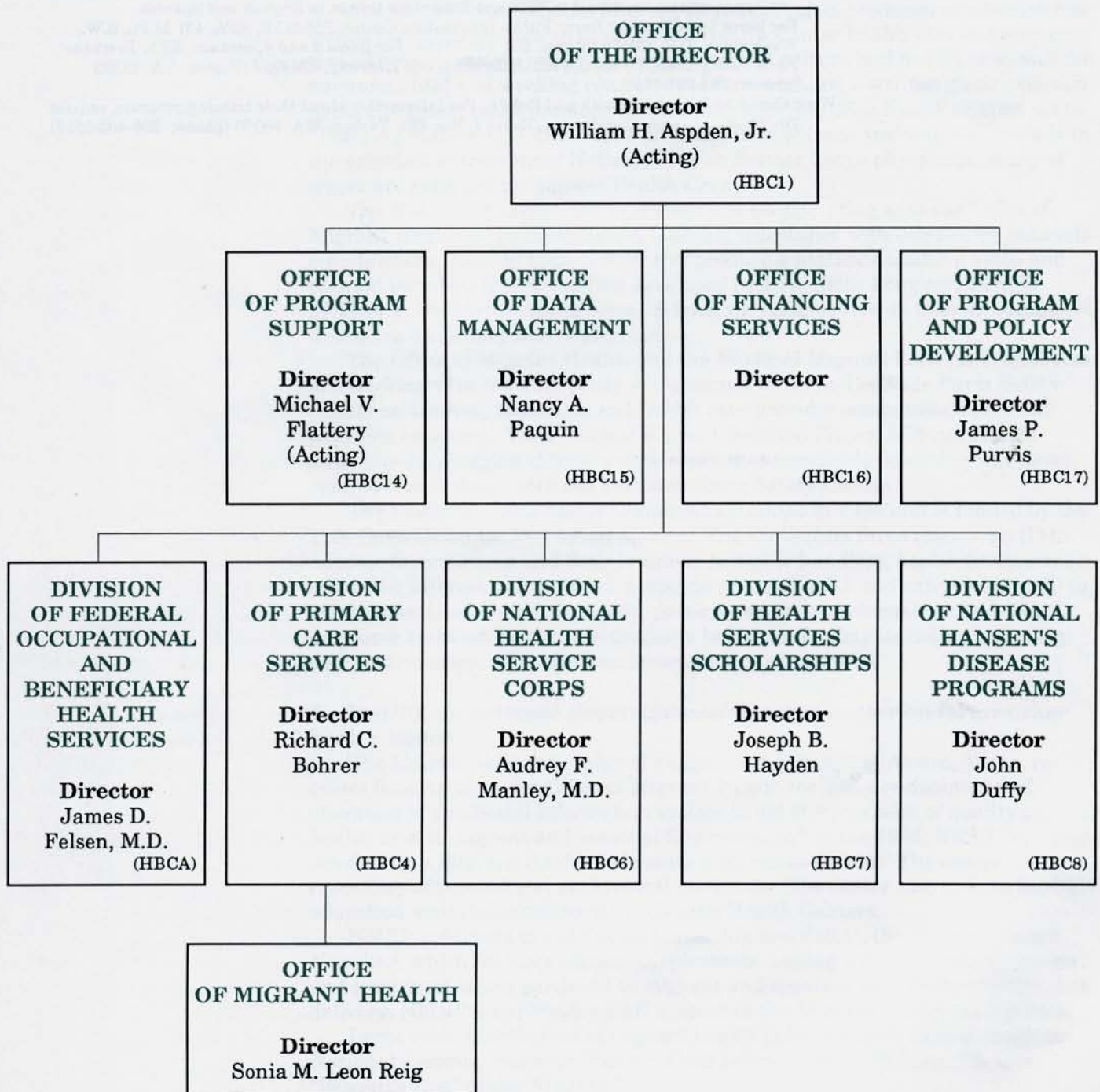
- (1) "Be Safe with Pesticides/Pesticidas con Cuidado." Bilingual pesticide safety poster for farmworkers, 22" x 28." (Free)
- (2) "Protective Clothing for Pesticide Users." Poster to assist in the safe selection and use of protective clothing for pesticide users. Spanish version is forthcoming. 17" x 22." (Free)
- (3) "Farmworker Pesticide Training Program." General EPA slide/tape program for farmworkers about pesticide safety converted to video format. Available in VHS and Beta in English and Spanish.
- (4) "Pesticide Safety Program for Non-Certified Mixers, Loaders and Applicators." EPA slide/tape program converted to VHS and Beta video format in English and Spanish.

For items 1 and 2, order from: Public Information Center, PM-211B, EPA, 401 M St., S.W., Washington, D.C. 20460 (phone: 201-646-6410). For items 3 and 4, contact: EPA, Pesticide Farm Safety Staff, TS-757C, 1921 Jefferson Davis Highway, CM#2, Arlington, VA 22202 (phone: 703-557-7666).

Work Group on Pesticide Health and Safety: For information about their training program, contact Dr. Alice C. Larson, Coordinator, Route 4, Box 423, Vashon, WA 98070 (phone: 206-463-2816).

# Appendix I

DEPARTMENT OF HEALTH & HUMAN SERVICES  
Public Health Service  
Health Resources and Services Administration  
Bureau of Health Care Delivery and Assistance



## Appendix II

### Mission Statement of the Interagency Committee on Migrants—Revised 12/87

Federal programs serving migrant and seasonal agricultural workers and their families share the common objective of increasing access of migrant farmworkers to their program services. Whether those services are related to education, health, labor, environmental, vocational training, or rehabilitative care, the problem of access to the migrant family is common among service providers. Factors related to mobility, seasonal work patterns, the lack of resources, lack of access to local resources, and cultural lifestyle in the areas where migrants work and live complicate the provision of services.

The Interagency Committee on Migrants has been organized to identify those areas where federal programs can coordinate their services to better serve migrant and seasonal farmworkers. Outreach, shared services, and staff orientation are only some of the joint activities that migrant service providers can implement to improve access to their program services.

This committee meets every quarter to explore areas where closer program coordination and collaboration can better serve the migrant farmworker.

In October 1987, the committee established two major long-term objectives:

- (1) To encourage the development of interagency agreements among federal programs at the national, state and local levels.
- (2) To encourage and facilitate the establishment of interagency committees at the state and local level similar to the one at the national level.

Federal agencies represented in the committee include: the Department of Education, the Department of Health and Human Services, the Department of Labor, the Department of Agriculture, the Department of Justice and the Environmental Protection Agency. Numerous private and public agencies are invited to participate in these meetings.

## Appendix III

### White Paper on Environmental Conditions Affecting Migrant and Seasonal Farmworkers (MSFW) Population—March 1988 (Office of Migrant Health, DPCS/BHCDA/HRSA)

#### Summary of Discussion of Environmental Work Group Meeting

A meeting of Migrant Health Program (MHP) staff, state officials, migrant health project directors and medical directors was held in Rockville, Md., on Nov. 19, 1987, to discuss the development of an environmental strategy for the MHP since the impact of environmental conditions upon the health status of migrant and seasonal farmworkers affects the effectiveness of the health care delivery services offered by the Migrant Health Centers. Special invitations were given to specialists in environmental studies and to selected individuals who had prior experience working in this field. For a complete list of attendees, please see the attached list at the end of this report. It is noteworthy that representatives of migrant farmworkers, and state primary care associations, growers, and the National Advisory Council on Migrant Health also attended this meeting. Representatives from the regional office and the National Association of Community Health Centers were invited, but could not attend.

The meeting began with a thorough discussion of occupational and environmental findings as contained in a study performed by Valerie A. Wilk of the Farmworker Justice Fund. Wilk highlighted the relationship of environmental conditions documented in the report to the most significant health conditions found in the migrant and seasonal farmworker population. For a complete summary of Wilk's discussion, please refer to the report entitled, "The Occupational Health of Migrant and Seasonal Farmworkers in the United States." All participants at this meeting had received a copy of this report beforehand.

Excellent summaries of two successful environmental demonstration projects were then given by E. Roberta Ryder, director of the National Migrant Referral Project, and by Edwin Cobb of the National Water Project (NDWP). Ryder explained the process and results achieved in the MARCHA project in Bangor, Mich., in establishing a demonstration housing project for migrants in that area. Cobb then summarized the excellent results that NDWP has achieved in leveraging funds from other public and private agencies to establish potable water and waste disposal improvements in many areas affecting migrant and seasonal farmworkers. All participants at the meeting had received a copy of the MESA Book which describes the essential elements of this program and summarizes the environmental activities in MHCs supported by the NDWP. The MESA Book was published in March and is being made available to all MHCs and others. Of particular importance is the ability of NDWP with MHCs to coordinate and integrate other existing resources such as state and county health departments, private foundations, and other agencies of the federal government, such as the Farmers Home Administration in order to bring about needed improvements in environmental conditions. This is significant because the Migrant Health Program simply does not have the resources to fund this effort adequately.

The work group then discussed the setting of major priorities for the next three years in developing practical demonstration projects that can leverage other funds and that can show that united efforts can make a difference. After considerable discussion, the work group decided that there were two equal priorities for this effort:



- (1) housing, potable water, and waste water disposal; and
- (2) pesticides and field sanitation.

The work group agreed that these two priority areas were consistent with the findings of the occupational health study presented by Wilk and the successful demonstration projects discussed by Ryder and Cobb. It was strongly recommended by the group that any funds that the MHP could make available for environmental demonstration projects in the next three years be directed to these two high priority areas.

The work group ended its discussions by presenting a list of specific recommendations to the MHP regarding possible elements of an overall environmental strategy. The major recommendations are summarized below.

- (1) The MHP should encourage the formation of a technical assistance group composed of existing health center members with experience and capability in this area to advise and assist other health centers wishing to improve environmental conditions for MSFWs.
- (2) There should be an official letter from BHCDA supporting efforts in environmental improvements that should be sent to all regional offices and Migrant Health Centers.
- (3) Cooperative agreements between the Office of Migrant Health, Division of Primary Care Services and the states should include provisions for training of MHC staff in the environment, particularly where leveraging of resources and field sanitation issues are concerned.
- (4) There should be at least one demonstration project in each sector (i.e., East, West, Midwest, South) that would involve clinicians in environmental activities. It also was recommended that where this was the case, productivity indicators should be waived.
- (5) Migrant Health Center staff should be trained to act as ombudsmen in bringing to the attention of local governmental and health officials serious environmental conditions. This would include better utilization of existing county and state health departments, especially regarding their education and compliance capabilities.
- (6) There should be official recognition of facilities and camps that comply with regulations and are perceived as models of good environmental practices.
- (7) A dialogue should be created that would involve existing resources, private and public. Such dialogue could be a forum for action on enforcement issues, development of "model" farms, efficient use of resources as well as other areas of concern.
- (8) Environmental problems should be documented with facts and statistics and brought to the attention of responsible public officials. The message here should be that there is cost saving in improving environmental conditions.
- (9) Utilize the existing Interagency Committee on Migrants to leverage other agency resources and encourage support of their respective local agencies.
- (10) Explore the possibility with the NHSC of assigning field sanitarians to areas of serious environmental problems in the same way that Lee Halle was assigned to South Texas where significant improvements have been made.
- (11) Use resources of political organizations and church groups to begin to influence growers.
- (12) Work closely with the migrant education program to ensure that appro-

priate materials and techniques for educating the farmworker population are used, particularly regarding the environment, and the use of pesticides and their dangers. In working with the education of children, "third world" techniques should be explored. It was suggested that the Agency for International Development (AID) experience be consulted and that "Anglo-Saxon" methods of education are not entirely appropriate in this effort.

- (13) Efforts should continue to improve communication with medical directors of MHCs so that they are fully aware of the various efforts being undertaken in the area of environmental improvement.
- (14) The Migrant Health Program should provide for a facilitator at MHCs located in high priority areas to coordinate all efforts aimed at environmental improvements.
- (15) It was recommended that retired farmworkers be retrained as environmental health workers.

There were also several recommendations having to do with enforcement of field sanitation regulations and other environmental issues. It was pointed out to the work group that the MHP has no enforcement authority, but that efforts certainly will be made to raise these problems to the attention of appropriate authorities.

The next step in this effort will be to develop a workable environmental strategy to implement these recommendations in line with the priorities established by the work group. That final strategy will be shared with all the work group members, the Migrant Clinicians Network and other interested agencies and individuals.

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