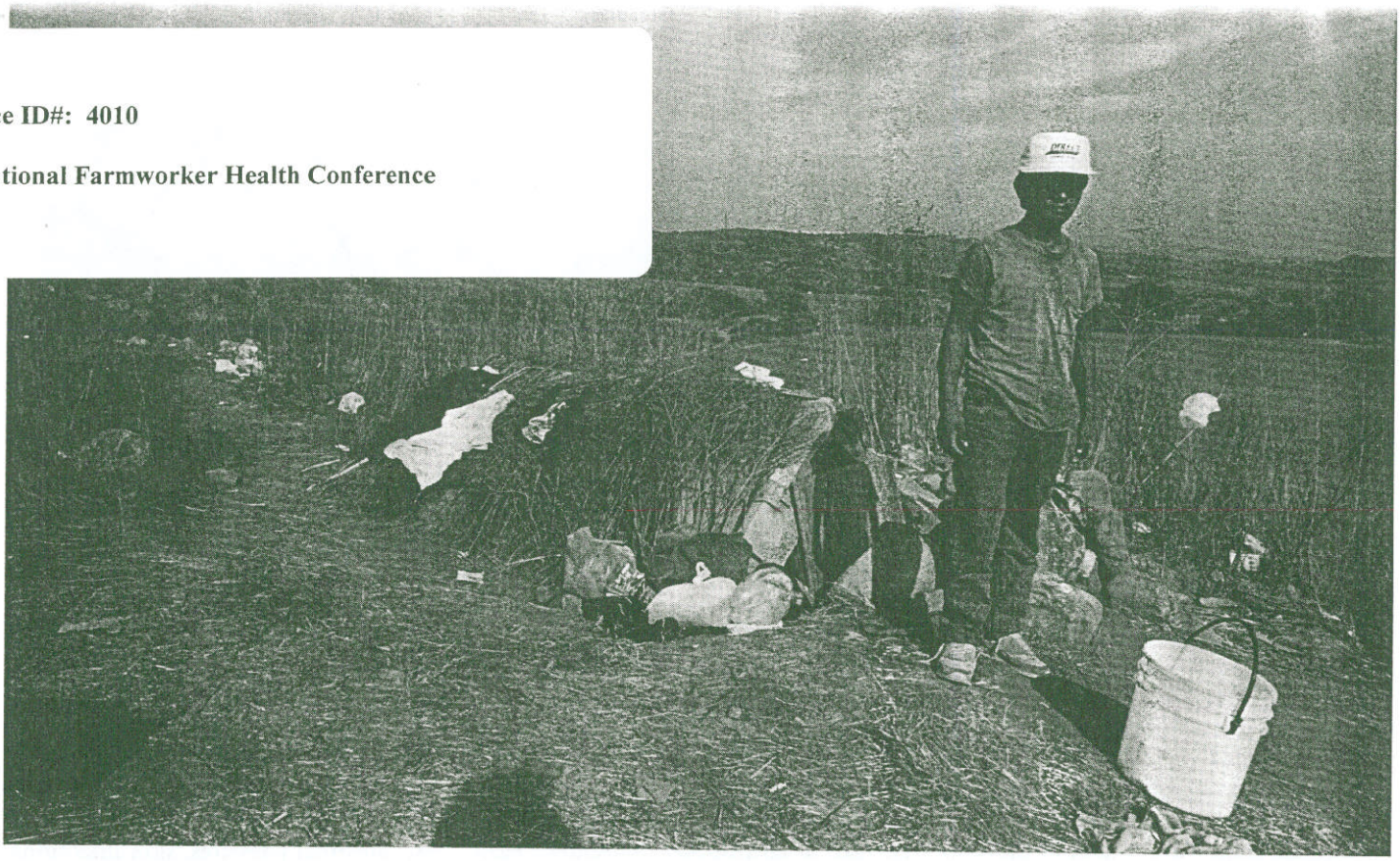

A 19-year-old farmworker near San Diego, California, stands in front of his only home, a cardboard-and-grass shelter. The young man complained of heart pain; the medical worker he consulted could not find anything wrong and concluded that his pain was stress-related.

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1996 National Farmworker Health Conference

Half of all US farmworkers may be infected with TB, and as many as 4 to 5 percent are infected with HIV.

Shawn Dougherty

On June 20, presidential candidate Bob Dole delivered an address on US immigration issues to a California audience. Dole was attempting to convince assembled voters of the necessity of denying primary and secondary education to the children of undocumented immigrants. Referring to the nation's multi-ethnic heritage, Dole, foot planted firmly in mouth, exclaimed, "We are a boiling pot. We have open arms."

We are a boiling pot indeed, and nowhere is the water hotter than in the field of farmworker health. Take, as an imaginary starting point, the difficulties involved in providing healthcare to the urban poor in the United States. Then send this patient population out on the road—permanently. Have them speak a different language than many of their healthcare providers. Then have Congress attempt to block all of their access to primary care. When the reader has completed this mental exercise, he or she will be in a position to ponder the challenges faced by healthcare providers who serve farmworkers. As Therman Evans, MD, of Whole Life Associates, Inc., told attendees of the conference's opening general session, "If we can solve the healthcare problem for the population that *you* have, we have solved the problem for the US, and indeed the world."

The 1996 National Farmworker Health Conference was held May 3-6 in Nashville, Tennessee, under the theme "Confronting the Challenge of Change." The conference was presented by the National Association of Community Health Centers in collabo-

ration with the Migrant Clinicians Network and the National Center for Farmworker Health.

Demographics and occupational hazards

The US Department of Human Services has estimated the number of migrant and seasonal farmworkers and their dependents at 4.2 million.[1] Eighty-five percent of the migrant and seasonal farmworker population is composed of ethnic and racial minorities, with Latinos and Blacks having the highest representation.[2] A demographic profile taken from health centers in Texas, Michigan, and Indiana most likely applies to the population as a whole: The population has a low median age, and a very high percent of the population is under age 15. The percentage of the population age 65 and over is low, but showing minor increases. An extremely high percentage of the population is Hispanic.[3] The majority of farmworkers are married and/or have children. Only 10 to 25 percent of farmworkers are estimated to be unauthorized workers.[4]

Migrant farmworkers tend to move in three migratory streams. The western stream originates in Texas or southernmost California and travels north to Oregon and Washington State. The midwestern stream originates in Texas and spreads north throughout the Midwest. The eastern stream originates in Southern Florida or Texas and moves north up the entire length of the eastern seaboard. These streams should be considered generalizations, and farmworkers will cross from stream to stream.

Agriculture and mining are classified as the two most dangerous occupations in the United States.[2] Farmworkers suffer from the highest rate of toxic chemical injuries of any group of workers in the United States. One repeatedly hears the phrase "Third World conditions" in association with farmworker heath. The phrase reflects not only the health status and living conditions of farmworkers as a group—up to 78 percent of all farmworkers suffer from parasitic infection and 44 percent have positive TB skin test results[2]—but points to the barriers to healthcare faced by farmworkers, the most important of which is poverty. Half of farmworker households earn less than $7500 per year. There is tremendous pressure not to miss a day of work to seek medical care—the farmworker cannot afford it, and his job may not be there when he attempts to return to work.

Frequent mobility, low literacy, language and cultural barriers, inability to secure reimbursement for healthcare costs, inaccurate or incomplete medical histories, poor access to referral services and logistical or transportation barriers add to this population's difficulties in obtaining healthcare, while unsanitary and often overcrowded living conditions increase the need for intervention. Medical treatment is often postponed until problems become severe, causing one provider to lament, "We're doing our primary care in the emergency rooms."

Health concerns of migrant farmworkers

According to Kim Larson, MPH, RN, of the Migrant Clinicians' Network, "The low standard of care for farmworkers' children begins *in utero*." Farmworkers' children are at increased risk for respiratory and ear infections, bacterial and viral gastroenteritis, intestinal parasites, skin infections, scabies and head lice, pesticide exposure,

This pregnant woman is going to prenatal care thanks to the Canyon Coalition for Healthcare in Vista, California. Only one-third of the women who need this care are able to obtain it.

tuberculosis, poor nutrition, anemia, short stature, undiagnosed congenital anomalies, intentional and unintentional injuries, substance abuse, and teenage pregnancy. Immunizations are often delayed or absent.[4] Children ages 5-9 are susceptible primarily to infections. Subsequently, dental disease becomes the number one health problem for males aged 15-19, and pregnancy becomes the most frequent presenting health condition for females in that age group. In the 30-44 age group, two of the top three problems for both males and females are diabetes and hypertension. Nearly half of all clinic visits for men and women in the 45-64 age group are for diabetes, hypertension or arthropathies. Among the elderly, 80 percent of clinic visits by females are for diabetes and hypertension.[3]

Farmworkers are six times more likely to have TB than others employed in the US. The transient nature of farm work and the long duration required for tuberculosis treatment make it difficult to assure patient compliance with screening programs, preventive therapy, and chemotherapy. In addition, crowded living conditions may contribute to the spread of tuberculosis among this population. (See page 15 for Allison Nist's discussion of TB screening and treatment in farmworkers).

Preliminary conclusions from a 1987 national study found an approximate HIV seroprevalence rate of 0.5 percent in seasonal and migrant farmworkers. In a similar study conducted in 1992, the number of farmworkers testing positive for HIV was 5 percent, ten times greater than the study conducted just five years previously.[5]

In his presentation, "HIV/AIDS update," Stephen Raffanti, MD, of Vanderbilt Medical Center, contrasted the mood of optimism that protease inhibitors have created among patients who can obtain them with the dismal outlook for developing countries and HIV-infected individuals in industrialized nations who cannot obtain needed medications.

Raffanti treats HIV patients in Tennessee, which is primarily a rural state. He spoke of the long distances that some patients must travel to clinics as a barrier to healthcare, mentioning patients who are "as sick as stink, yet they drive four hours to see a doctor." Raffanti, who has been involved with HIV in a laboratory or clinical setting for most of his career, stated that "AIDS is no longer a primary care disease," but a disease of specialists.

A recent University of Washington study supports Raffanti's remark. The study found that life expectancy of HIV patients increases if their physicians are experienced in treating the disease (see page 62 of the April 1996 issue of the *Journal*). Since farmworkers do not enjoy sufficient access to health education, preventive care, or primary care, it comes as no surprise that most HIV-positive farmworkers lack access to care by physicians experienced in HIV management.

How a barrier to healthcare becomes law

Two bills which threaten the health of immigrants, including farmworkers, are now before Congress. Senate Bill 1664 and House Bill 2202 have passed in their respective chambers and now await a joint conference committee which will hammer out the details of a single bill. Popularly known as "the illegal immigration bill," the joint bill will restrict the access of both legal and undocumented immigrants to healthcare, funnel the sick into emergency rooms, and hinder efforts to control the spread of infectious diseases.

Depending on whether language from the House or Senate bill is finally adopted,

Anita de la Vega Espinoza, RN, FNP

When Luz Lopez was pregnant, and was being physically pursued by Immigration and Naturalization Service Agents, she fell, and her water broke. Her daughter, Anita, was born prematurely. Anita de la Vega Espinoza is now a nurse practitioner and certified nurse midwife and in charge of policy decisions affecting Ryan White and HOPWA funds in six San Joaquin Valley counties in California.

Espinoza's father, Rumaldo Lopez, was an undocumented farmworker who first entered the US at age 19. His time in the US was the first in which he could count on three meals per day. Rumaldo returned to Mexico for Luz and reentered the US legally in 1953 to participate in the *Brasero* program, created during World War II when Mexicans were needed to work the fields in the US in place of American men serving in the military. In 1956 Rumaldo's application for residency in the US was approved. The family lived in tents at times in Texas and California, and Anita and her brother (now a family practice physician) worked alongside their parents picking cotton and grapes on weekends and during summers. Rumaldo eventually took a job with the Southern Pacific Railroad, and Anita completed high school in Redding, California.

Ms. Espinoza chose to study nursing in Mexico and received her bachelors degree at the University of Guanajuato. To fulfill a one-year community service requirement, she managed a 20-bed hospital on an Indian reservation and developed public health programs in outlying clinics. She completed her Masters (FNP) degree at the University of California, Davis, and completed a program in women's health at Stanford University. For the past seventeen years she has worked for the Family Health Care Network, now comprised of three clinics which serve farmworkers.

Espinoza is chair of both the Tulare County HIV Consortium and the Central San Joaquin HIV Consortium. In addition, she is secretary of the Central San Joaquin HIV Foundation, which has created a pioneering case management program at a local prison housing 4000 women.

She speaks of the stigma attached to HIV in rural Hispanic communities, saying that AIDS is often not discussed, even in families with PWAs among their members. Regarding migrants with advanced HIV disease, she states "most of the time we lose them," meaning that they can easily fall through the cracks and be lost from sight of the healthcare system. Only solid case management and luck prevent this from occurring.

Her words of wisdom for clinicians working with HIV-infected farmworkers: "Be very sensitive to cultural beliefs, the role that family plays in their lives and be respectful of their level of education."

Ms. Espinoza was the 1996 recipient of the Migrant Clinicians' Network Unsung Hero Award.

Tuberculosis in Farmworkers

Allison Nist, MD, included the following clinical points in her talk "Combating Tuberculosis in Farmworkers" at the 1996 Farmworker Health Conference.

Several studies have documented the background prevalence of TB infection in farmworkers to be 40-70 percent, with sero-prevalence of HIV as high as 4-5 percent in some groups. With half of all farmworkers infected with TB and one in 20 to 25 infected with HIV, we can expect that the HIV epidemic will increasingly fuel the TB epidemic in farmworkers in the years to come, as it increases the likelihood that dormant TB infection will progress to active TB disease.

Extrapulmonary TB, with or without concomitant pulmonary disease, may become the "emerging mycobacterial disease" of this decade, since this presentation may occur in up to half of all patients with HIV/TB coinfection who develop active TB disease.

The most common presentations of extrapulmonary TB in HIV-infected persons are: miliary (disseminated) TB, pleural TB, and TB lymphadenitis. These may frequently be overlooked in HIV-infected persons referred for evaluation for INH preventive therapy unless the physician does a careful physical exam and views all chest radiographs (not just reports). Subtle hilar adenopathy and pleural effusions are frequently missed signs of active TB disease.

One recent case in Collier County last year involved a 42-year-old Haitian male, HIV-positive, referred for INH preventive therapy. PPD was 5 mm and CXR was read as lung fields clear without significant abnormalities. PE was pertinent only for adenopathy. He was placed on INH self-administered preventive therapy.

One month later he presented to a hospital emergency room, near stridorous from massive cervical adenopathy (see photo). Supraclavicular node biopsy revealed profuse AFB, DNA probe positive for *M.tb*, sensitive to all drugs, negative for *Mycobacterium avium intracellulare*. The CXR that initially had been read as LFC, on review had significant right hilar adenopathy. The patient responded well to standard

TB cervical adenitis (scrofula) is a frequent extrapulmonary manifestation of TB in HIV-positive patients. Photo courtesy Allison Nist, MD.

short-course TB chemotherapy. As is not uncommon, however, he did develop a significant suppurative inflammatory response in the nodes, with warmth and fluctuance. Rather than perform an I&D (which could have lead to highly infectious draining tracts which have great difficulty healing), we treated this patient three times during his therapy with pulse steroids. Each time the fluctuance and suppuration responded. Overall, the patient was treated with seven months of standard therapy. At case close-out, he had minimal residual adenopathy and CXR had returned to LFC.

Clinicians frequently assume that persons with MDR-TB will be disabled and easy to identify. They may be fooled.

We recently worked with a farmworker who had been treated with self-administered INH and Rifampin for three years from 1990-1993, never converting his sputum. Finally in 1990 it was discovered that he had developed TB resistant to both INH and Rifampin. He signed out against medical advice and was lost to follow-up until 1994. During this time, he traveled and worked as a migrant farmworker throughout the eastern stream (Florida through Delaware). He also attended clinics where he received insulin for his diabetes.

He was not identified as having TB until 1994, at which time CXR showed extensive destruction of his left lung and 4+ AFB smear MDR-TB. Treatment was successfully completed through one year of intensive treatment in our State of Florida TB Hospital (A.G. Holley Hospital in Lantana, Florida) and one year of outpatient treatment with PZA, ethambutol, ofloxacin, and clofazimine .

A PPD-positive farmworker with cavitary lung disease does not automatically have TB. Clinicians in migrant health centers need to remember that cavitary lung disease has an extensive differential diagnosis, including aerobic/anaerobic abscess, aspergillosis, histoplasmosis, coccidioidomycosis, blastomycosis, cryptococcosis, septic embolus, nocardiosis, atypical TB, actinomycosis, salmonellosis, amoebic abscess, staphylococcal or other colonization of emphysematous bullae, neoplasm, autoimmune disease (Wegener's granulomatosis or others), and, rarely, PCP.

Always take a complete family history and personal history for risk factors for exposure to TB. One middle-class gay male PWA with no apparent risk factors for exposure to TB, after developing pulmonary TB, was found on questioning to have had a father who died of active TB. PPD skin tests and even anergy panels may be misleading (false negative). A complete history may disclose risk factors that may be indications for INH prophylaxis in an HIV-infected person even when the PPD is read as 0 mm of induration. ■

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This young girl picking raspberries in south Michigan is part of a migrant family from Texas.

legal immigrants who are seeking "lawful permanent resident" status would become deportable if they receive Medicaid or other needs-based benefits for more than 12 months within either five or seven years after entering the US.

"Ineligible" immigrants, a class which includes legal immigrants seeking lawful permanent resident status, would be prohibited from using local health department clinics or migrant or community health centers receiving federal funds except for emergency care, or diagnosis or treatment of a communicable disease (Senate bill). The House bill allows for treatment of patients presenting with "symptoms of communicable diseases," a potentially crucial distinction. Under the House terms, a clinician would be able to treat an "ineligible" immigrant with a persistent cough—a symptom of TB. If the Senate language is adopted, the clinician would no longer be able to provide treatment when it was determined that the cough was not caused by TB.

In his paper "The Health Effects of S 1664 and HR 2202," E. Richard Brown, PhD, of the UCLA School of Public Health writes, "Undocumented immigrants currently are not eligible for any means-tested programs except emergency medical services, including childbirth services (funded by Medicaid), immunizations, and nutrition programs for pregnant women and children. These bills [S 1664 and HR 2202] extend this prohibition to prenatal and postpartum care, and they extend to nearly all publicly funded programs and services the prohibitions on providing nonemergency care that formerly were restricted to Medicaid."[6]

The new restrictions on prenatal and post-partum care will almost certainly cost the lives of some infants born to HIV-infected mothers. In a recent *JAMA* article, "Perinatal HIV Infection and the Effect of Zidovudine Therapy on Transmission in Rural and Urban Counties," the authors report: "After the announcement of the results of ACTG Protocol 076, zidovudine was given to 75 percent of HIV-positive women who delivered infants in North Carolina. Only 5.7 percent of infants who received any zidovudine became infected, compared with 18.9 percent of infants who received no zidovudine (P=.007)."[7]

A further blow to documented, "ineligible" immigrants comes in the form of changes in "deeming" which would make many sponsored immigrants ineligible for Medicaid and other need-based programs. Under the new system, the income of a sponsor is "deemed" available to the sponsored immigrant or "applicant." The combined income of the sponsor and the applicant is then used to determine whether the applicant is eligible for need-based programs, whether or not the applicant actually has access to his or her sponsor's income.

In their session on public policy and the pending immigration legislation, Josh Bernstein, JD, National Immigration Law Center, and Tina Casteñares, MD, Casteñares Consulting, attempted to dispel the myth that Hispanic immigrants come to this country in order to receive public aid. In fact, immigrants tend to underutilize the programs for which they are eligible. Difficulty in being able to provide documentation of income, varying eligibility requirements which must be met in different states, illiteracy and mobility are some of the factors which contribute to farmworkers' inability to receive financial assistance. As a result, farmworkers often contribute more to the public coffers than they take out.

Casteñares began her presentation by showing a slide of a warning sign which can be seen by the side of eight-lane highways in the San Diego, California area. The sign is a pictogram of two parents running across a road with a small child in tow. The sign's meaning can be interpreted as "Please watch for, and don't run over, fleeing immigrant families." Casteñares stated, "I like to show this slide because it gives a sense of the desperation of people who come to this country. They are not coming here for a picnic, and they are not coming for prenatal care."

Language issues in farmworker care

During his session, "Medicina Bilingüe," Robert E. Feiss, MD, director of multicultural and linguistic health services, Los Angeles County Health Authority, quoted from a 1993 *JAMA* article, "Ethnicity as a Risk Factor for Inadequate Emergency Department Analgesia."[8] The article's authors found that patients of Hispanic ethnicity who were Spanish speakers were two times less likely to receive analgesia during a hospital stay when compared with the population at large.

In the July 1996 issue of the *Journal*, William Breitbart reported on the widespread undertreatment of pain in patients with AIDS. When Breitbart's data and the findings of the JAMA article just cited are taken into account, worst-case scenarios involving pain in farmworkers with HIV disease are not difficult to imagine.

Another study cited by Feiss suggests that Spanish-speaking patients receive better care if their primary care provider speaks Spanish to them whether or not the provider is actually fluent in Spanish.[9]

It is highly desirable that clinicians who treat Spanish-speaking patients speak

Spanish themselves. Professional interpreters should be used in settings where this is not the case. Situations in which a family member acts as an interpreter are to be avoided. Family members may edit or reinterpret the words of either the patient or provider for various reasons. Children should never be used as interpreters. Feiss cited instances in which the use of children or other family members as interpreters has had serious legal ramifications for physicians.

Although the majority of farmworkers are Hispanic, the needs of other ethnic groups must be taken into account. All of the clinicians speak Spanish at the Family Health Network in California's San Joaquin Valley, but interpreters are employed there to serve the clinics' Laotian clientele, and an Arab population is served by the clinics as well.

Connecting the DOTS

Dedicated case management and maximal use of referral services are necessary to serve the healthcare needs of farmworkers. The current system does not easily accommodate mobility in a population undergoing treatment. To address this problem and provide continuity of care for tuberculosis patients, an ambitious tracking and referral system has been established. The Binational Migrant Tuberculosis Referral and Tracking Network project (TB-Net) will attempt to enroll all mobile TB patients seen on the US/Mexico border and in the migrant stream. The project was initiated by the Migrant Clinicians' Network, the El Paso City-County Health and Environmental District in partnership with the Pan American Health Organization and the US-Mexico Border Health Association.

Each enrolled patient receives a Portable Patient Tuberculosis Record, which is small enough to fit in a wallet, and contains pertinent treatment and laboratory information. As patients move up the migrant streams or across the border they present their TB record to any clinic they visit. Providers and patients are encouraged to contact the registry in order to obtain more detailed clinical information. The clinic staff is responsible for phoning or faxing the most up-to-date patient information to the centralized registry using a toll-free number.

Referral may take two primary forms. First, when a provider knows that a patient is moving to a certain area, he or she may use TB-Net to contact the appropriate health facility of that area to ensure that treatment is not interrupted. Second, when a patient travels to or arrives in an area and wants to know where he or she can receive services, the patient may present the portable record to any health provider. The provider can contact TB-Net. The network assumes responsibility for follow-up within seven days to ensure that action was taken. TB-Net can be reached at (800) 825-8205.

Summary

Future successes in farmworker healthcare are dependent on increasing the availability of preventive and primary care for this population. Given the recent threats to Medicaid and the pending immigration legislation before Congress, it would seem that a scenario involving decreased access to care is more likely to unfold.

Daniel Hawkins, vice president of policy research and analysis for the National Association of Community Health Centers, cited a Johns Hopkins study which concluded that community health centers provided the highest overall quality of care and had the best record of providing preventive care to children at the lowest overall cost compared with other classes of providers—private physicians, hospital clinics and managed care systems.[10]

There is noticeable shortsightedness in healthcare cost forecasting. Stinginess in ADAP funding, stinginess in primary care funding, stinginess in the funding of infectious disease control will produce only two results: physical suffering and increased hospitalization costs further down the road. ■

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Resources in farmworker healthcare

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Migrant Clinicians Network
P.O. Box 164285
Austin, TX 78716
Phone: (512) 327-2017
Fax: (512) 327-0719

National Center for Farmworker Health
1515 Capital of Texas Highway South,
Suite 220
Austin, TX 78746
Phone: (512) 328-7682
Fax: (512) 328-8559
Internet: http://www.ncfh.org

TB-Net
222 South Campbell
El Paso, TX 79901
Phone: (800) 825-8205

Call for Health provides health information and referral services to farmworkers via a nationwide toll free line staffed by bilingual personnel. If at all possible, farmworkers in need of healthcare services are referred to a migrant health center. If there is not a migrant health center near the caller, staff seek an alternate source of assistance. Farmworkers in need of referral services or physicians and/or clinics willing to be listed in the Call for Health data bank may call (800) 377-9968.

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