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Policy Brief Number 4

Health of Migrant Farmworkers in California

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Executive Summary

For more than half a century, California has led the nation in agricultural production, supplying over 50% of the nation's fruits, nuts, and vegetables, while exporting 20% of its produce to feed the world. This harvest generated almost $27 billion in gross income in 2000, with an estimated $100 billion in related economic activity.

Unlike much of the nation's agriculture, which has been transformed by mechanization, California remains heavily dependent upon a large seasonal workforce, since most of the state's 350 crops cannot be harvested by mechanical means. At present, our migrant farm worker workforce numbers some 732,000 workers, employed on the state's 85,000 farms. When household members, who include an estimated 400,000 children under the age of 18, are counted, the total number involved is 1.3 million.

In spite of the economic value of the harvest they produce, California's migrant workers still find themselves largely marginalized and impoverished. Since they are excluded from basic labor regulations with respect to overtime pay, child minimum age requirements, and some health and safety worker protections, it is not surprising that they have made little progress.

The racial and ethnic composition of the workforce has changed significantly over the past 30 years; while it was once made up of Asian, White, and Latino workers, it is now more than 95% Latino, of which 34-42% are undocumented. Growers no longer hire workers directly, electing instead to use farm labor contractors for the most part. Most growers no longer provide housing; the number of farm labor camps has dropped from 5,000 in 1980 to just 1,000 in the year 2000. In spite of their hard labor, 61% of migrant families are impoverished; often they are not paid the minimum wage and the State lacks enough inspectors to enforce existing regulations.

With low wages, inadequate housing, and dangerous work, it is not surprising that studies have documented high rates of injuries among farm workers; further, a significant number suffer from poor nutrition and chronic disease as well as depression.

Although access to affordable quality health care for migrant women and children has improved, it still falls below national standards. The men are worse off; almost half have not seen a physician in over two years. Dental care remains almost non-existent in many farm areas.

Because approximately 70% of migrant agricultural workers lack public or private health insurance, this lack of access to health care is not unexpected. There is evidence that a significant number of migrant women and children are eligible for programs but are either unaware of them, face bureaucratic barriers, or are afraid to sign up because they fear use of public programs will adversely impact their ability to become legal U.S. residents. One way the State could help is by allowing this mobile population to sign up

for portable, year-long coverage with Medi-Cal and Healthy Families programs, providing continuous coverage even if the recipient's county of residence changes.

Despite evidence of persistent poverty and squalor, we did find evidence of hope and progress for improved housing with an innovative program in the Napa Valley, in which growers were assessed a fee to help pay for farmworker housing.

Although the health statistics were disarming, we identified a new health outreach program in Ventura County, funded by The California Endowment, known as *La Familia Sana,* which shows great promise. By training community workers (some former migrant workers) as *promotoras*, this group linked the resources of four existing migrant health centers and a hospital to bring direct services and information about existing programs directly to the migrant workers.

Long-term solutions are complex and involve controlling the surplus of undocumented workers willing to work for wages that most would find unacceptable. This would involve Federal recognition that this is a binational U.S. – Mexico issue that disproportionately impacts our state. NAFTA may be a significant factor as well. By framing it within the context of NAFTA, we believe that an adequate supply of seasonal workers could be ensured while at the same time protecting the workers' labor and human rights. A just wage, safe workplace, and adequate housing would have the greatest impacts on the health of migrant farm workers.

In summary, the health and health care problems facing migrant agricultural workers are complex and require a comprehensive solution reflected in the recommendations presented. Policy options that hold promise to improve health care coverage range from allowing portability of Medi-Cal and Healthy Families to subsidizing insurance premiums or co-pays and implementation of programs to increase use of existing community resources. Other options focus on augmenting resources for clinics that serve migrant populations as well as promoting policies to increase the number of health professionals who work in rural areas. Options directed towards environmental issues (including programs to decrease pesticide exposure) and improvements in wage and living conditions are also included. The costs of new programs could be offset through targeted taxes. Ultimately, solutions will require a bi-national effort between the U.S. and Mexico that may include immigration reform. Further studies are needed to describe the health issues migrants face. Because of the political, social, and economic factors the migrants face, solutions to health care problems will require policy changes at local, state, national, and international levels. Only through comprehensive solutions can we expect improvement in the poor conditions that migrants face.

INTRODUCTION

Rich soil and a receptive climate defined by short rainy seasons, extensive use of irrigation, and plentiful sun-drenched days have allowed California to develop an agricultural economy that is without parallel in the United States. For more than 50 years now, the state has been ranked the major agricultural producer in the U.S., providing more than 50% of the nation's fruits, nuts, and vegetables, and more than 90% of its grapes. [1] Moreover, California leads the nation in agricultural exports with almost 20% of its production going to feed the world. This fertile harvest generated gross cash income of $26.8 billion in 2000, which in turn led to an estimated $100 billion in production and related economic activity. [1, 2]

Over the past several decades, mechanization and modernization have modified the labor component of much of American agriculture. The situation in California, however, continues to be labor intensive, as most of the 350 crops cannot be harvested by mechanical means. As a result, the state is heavily dependent upon the availability of a seasonable workforce, willing to move from harvest to harvest and undertake difficult and dangerous manual labor. [3] Historically, California's fruit and vegetable growers have always relied on a steady stream of low-wage workers to insure a timely and bountiful harvest. This began as long ago as 1860, starting with the Chinese immigrant workers. In the 1890s, Japanese workers were imported as a successor group to work the fields, followed by Mexican immigrants in 1910 and East Indian and Filipino laborers in 1930. [4, 5] Each succeeding group of immigrants served to insure an oversupply of labor, thereby significantly reducing the threat of disruptive strikes, assuring that wages were kept low, and minimizing pressure on employers to provide adequate working conditions and benefits. In the early 1930s, a large contingent of internal refugees known as the "Dust Bowl migrants" arrived from Arkansas, Oklahoma, and Texas. Popularized in Steinbeck's powerful novel, *The Grapes of Wrath,* [6] this group created an enormous labor surplus, which further fueled the anti-immigrant sentiment that existed during the depression. This resulted in the U.S. government forcibly repatriating some 300,000-400,000 Mexicans in 1933. [5]

With the onset of World War II, many of these "Dust Bowl migrants" left the fields to work in California's large defense industry. To insure an adequate supply of labor for the state's growers, the U.S. government contracted with Mexico to develop a guest worker program known as the "bracero program." This government initiative involved some 4 to 5 million Mexican workers until it was terminated in 1964. [2-4, 5, 7]

Steinbeck's 1939 novel was not the first to focus public attention on the squalor faced by migrant farm workers; President Theodore Roosevelt raised the issue early in the century. Little was done however, and forty years ago, Edward R. Murrow's riveting documentary "Harvest of Shame" once again reminded the country that those who harvested the food we ate often went without enough themselves. [8] Although it prompted some public debate, the conditions of the migrant workers did not become a national cause until César Chavez and the United Farm Workers emerged in the late 1960s. Under his leadership, this group of workers finally began to make some political, social, and economic progress. [9]

In spite of these efforts, California's migrant workers still find themselves marginalized and impoverished. One reason for this persistent lack of progress is that agricultural workers remain a distinctive group with respect to labor regulations, victims of "agricultural exceptionalism." [7] Repeatedly, Congress has excluded them from the protections of the Fair Labor Standards Act (FLSA), as well as the National Labor Relations Act, both of which were intended to provide at least minimal standards of employment and collective bargaining rights. For example, agricultural workers are completely exempt from the requirements to receive overtime pay for all hours in excess of forty. Further, the minimum age for child labor is 14 for all industries with the exception of agriculture, where the minimum age is 12. Finally, the Occupational and Health Safety Administration (OSHA) worker protection requirements apply to all industries, regardless of size, but exclude farms with fewer than 11 workers, unless the employer operates a farm labor camp or an on-the-job fatality has occurred**.** [10] These are remarkable exceptions for an industry that has been shown to be among the most hazardous in the country. [4, 11, 12] A second reason for the persistence of these working conditions and the low wage status of migrant agricultural workers has been the composition of the workforce. In the early 1960s, the migrant agricultural workforce consisted primarily of U.S. citizens, less than half of whom were Latinos. [5] By the year 2000, California's migrant agricultural workforce had changed significantly in that it is now more than 95% Latino. Overwhelmingly, they are immigrants from Mexico and Central America. Moreover, between 34% and 42% of California's migrant agricultural workers are undocumented. [10, 13] Many leave a life of Third World poverty behind, with the goal of sending as much of their earnings back home to their families as possible. Driven by this personal economic imperative and competing against a surplus of laborers, many workers are willing to accept living and working conditions and wages that few Americans would accept.

DEMOGRAPHICS

The California agriculture industry employs an estimated 732,000 workers on over 85,000 farms. [14] Forty-five percent of California farm workers follow the harvests with their families, bringing the total number of people who live in farm worker households to 1.3 million. [14, 15]

Surveys have found that among California's migrant agricultural workers, between 64% and 82% are male. [5, 10, 13] The median age is 30 for undocumented workers and 40 for documented workers. Fifty-nine percent of workers surveyed are married and 45% have children. [10] Of workers living without families in California, 24% have obligations to families living elsewhere. [5, 10]

As noted earlier, California's migrant agricultural workforce is almost 96% Latino, with the remaining 4% primarily Southeast Asian and Punjab immigrants. Ninety-two percent of hired workers were born in Mexico; native languages include Spanish, English, Mixtec, Zapotec, Chinatec, Truqui, Mixe, and Mayan. Ninety-five percent of California's migrant agricultural workers use Spanish as their primary language. [13] Agriculture work is tied to the growing and harvesting seasons, which often results in the need for migrant and seasonal agriculture workers to move from farm to farm. Thirty

percent of California's migrant agricultural workers hold five or more jobs per year, while only 18% hold one job all year. In 1995, California's migrant agricultural workers averaged between 23 and 29 weeks of work, resulting in median total annual earnings between $7,500 and $9,999. [10, 13] While 61% of California farm workers live in poverty, only 18% of their families receive some type of government assistance. This includes some 14% who use the Supplemental Food Program for Women, Infants, and Children (WIC). [13] Among those families with U.S.-born children, 86% report participating in WIC, with an average value of the coupons of $37.40 per month. [13]

Wages are an important draw for undocumented workers who come to the U.S., particularly California. Migrant agricultural workers in California may earn up to 10 times what they would earn in their home countries. Immigration and visa requirements have not stopped the flow of the cheap labor into the U.S. Although 25% of California's migrant agricultural worker population has been in the U.S. for less than 3 years, 50% have been here for 3-10 years, and nearly 25% of undocumented workers have been in the U.S. for more than 11 years. [13] Undocumented workers are able to work by purchasing a false resident permit or social security number, or by picking fruits and vegetables without the supervisor's knowledge and selling their daily harvests to legal workers. [13]

HEALTH

Migrant workers play a critical role in California's economy and their health and well-being continues to be at the forefront of policy debates, brought forth by a wave of advocates representing a range of special interests. Like other Californians, these workers and their families have basic medical needs, which include access to high quality, affordable basic health care. This need exists whether they have lived in California for a few months or several years.

Mortality

While we found no published U.S. farm worker studies on mortality, one study examines the proportionate mortality among U.S. farm workers. [16] A total of 26,148 death certificates from 24 states during 1989-1993 were examined. Farm workers had higher proportionate mortality from injuries, tuberculosis (TB), mental disorders, cerebrovascular disease, respiratory disease, ulcers, hypertension and cirrhosis. This study also showed a lower mortality from infectious diseases (other than TB), endocrine disorders, nervous system diseases, pneumoconiosis, arteriosclerotic heart disease, and cancer.

Health Problems

Migrant agricultural workers self-report a variety of health problems, including tuberculosis, diabetes, back pain, extremity pain, arthritis, headaches, dermatitis, dental problems, allergies, eye irritation, depression, and ethnospecific illnesses such as*, nervios, aires, empacho* and *susto.* [13] One study based on physical exams, revealed that 81% of male workers and 76% of female workers were either overweight or obese. More than half of the men and nearly half of the women had at least one chronic disease risk factor, including obesity, high blood pressure, or high cholesterol. As a result, these workers are at a higher risk than the general population for heart disease, stroke, and diabetes. Surprisingly, anemia was common among the male workers. Poor nutrition is one factor that may contribute to the increased anemia, obesity, hypertension, and elevated cholesterol levels found in agricultural workers. This may be secondary to either poor personal dietary habits or to lack of time and resources to purchase and prepare healthy food. [10, 17] Further, the level of acculturation may also play a role: only 4% of undocumented migrant farm workers were found to have high cholesterol, versus 25% for documented farm workers, who tend to have been in the U.S. for longer periods of time. [17]

Ethnospecific Illnesses

Nervios: "nerves;" symptoms: "generalized feelings of severe anxiety, a sense of desperation, insomnia and the desire to cry; it is sometimes brought on by a frightening or difficult experience."

Aires (known as aires, aire, and/or aigre): "condition recognized by headaches, dizziness, body aches, or fatigue. The incongruence of internal versus external temperature (exposure to cold, particularly when the body is warm) is thought to cause the illness."

Empacho: "refers to an impacted stomach or digestive ailment – frequently likened to indigestion and most common among children. Symptoms may include stomachache, anorexia, vomiting, pain with diarrhea and abdominal fullness."

Susto: "fright;" symptoms include "restlessness, loss of appetite, fever, vomiting, or diarrhea. While susto and nervios are similar, susto is thought of as having a single-event cause, for example, witnessing a bad accident. [18]

Chronic Disease and Injuries

A binational survey of agricultural workers determined that chronic disease was the most prevalent category of reported health problems, with 25% of workers reporting prior diagnosis by a physician of asthma, diabetes, arthritis, high blood pressure or vascular disease, heart disease, or thyroid illness. [17]

The prevalence of chronic illness combined with low utilization of health care could affect a worker's ability to continue laboring in the fields. Piece-rate work (wages by the amount of food picked or pruned rather than by the hour) and demands for high productivity, common in the agriculture industry, may especially affect older workers and those with chronic, physically debilitating conditions such as arthritis. [13] Chronic mental illnesses such as depression also affect work. A recent study reported that 22% of

migrant farm workers experienced depression so severe it affected their ability to work; 53% of these believed that separation from family caused the depression. [13]

Injuries are also common among migrant agricultural workers. Nationally, farm workers' proportional mortality rates from total injuries, motor vehicle injuries, and other trauma is significantly higher than the general population. [16] Nearly 30% of respondents in the Binational Farm Worker Health Survey reported injuries due to repetitive motion, machine malfunction, or pesticide exposure. [18] In 1994, 10,546 injuries occurred in California's hired agricultural workers per 100,000 full-time equivalents (FTEs). [13] More than 20,000 disabling injuries among farm workers are reported annually in California. [19] Five percent of respondents in the California Agricultural Worker Health Survey (CAWHS) stated that they had been injured while traveling to or from a farm job in the prior 12-month period, and 18% of respondents have had a workplace injury compensated under the California Workers Compensation Insurance Program. [10]

Migrant Child Health

As noted earlier, about half of migrant agricultural workers have children, and many work and live with children at their side. [10] In California, there are over 400,000 youth age 18 and under living in migrant and seasonal farm worker households. [14] Two-thirds of migrant farm workers' children are born in the U.S. [20] The number of children in migrant agricultural households, the high rates of poverty in these households, and the immigration status of both parents and children all affect the health of these children. In a study of the San Joaquin Valley community of McFarland, for example, the California Department of Health Services found that over a third of children had not ever seen a dentist, over a fifth were anemic, and many preschool children had incomplete immunizations. [21]

The most frequently cited reason for incomplete immunizations is lack of insurance, despite Medi-Cal and the State Children's Health Insurance Program, known as Healthy Families. Medi-Cal is available only to citizens and legal immigrant children; Healthy Families also excludes undocumented children. [22] One remedy to decrease the number of uninsured children is a new insurance program called California Kids, which began in 1992. This program, funded by a private foundation, insures children ages 2-18 regardless of immigration status (http://www.californiakids.org). In addition to immigration issues, interstate mobility also impairs children's eligibility for health insurance programs. Moreover, lack of awareness of existing programs may also be a factor in the decreased access to health care services for children.

One barrier to care for children of migrant workers is the lack of clinics. The state's migrant health centers currently have the capacity to serve only 20% of eligible migrant children. [21] Low parental education, transportation problems, long wait times in community clinics, decreased preventative screening, language problems, cultural differences, and lack of a regular source of care also impact access and care. [21, 23] Moreover, the children of migrant agricultural workers often lack access to specialists, mental health professionals, or dentists. Lack of access to dentists may contribute to high rates of child cavities. In one study of migrant Latino children 6 and under, 56%

experienced cavities. [24] The life conditions of these children put them at increased risk for infectious disease (including TB, parasites, and STDs), as well as chronic diseases (such as diabetes and asthma), and risky behaviors (violence, use of tobacco, alcohol, and illicit drugs). Since daycare is largely unavailable, parents often must take young children to the fields or leave them with older siblings to care for them. This results in a group of children who have responsibilities as babysitters and thus cannot participate in the Migrant Head Start programs that are available. Moreover, since the family's annual income is earned during harvest season, it is common for all family members, including children, to work. [25] Even among families where children do not need to care for other children, seasonal, mobile parental employment means children must change schools frequently. As such, it is not surprising that migrant children have lower school completion rates.

In spite of multiple potential exposures to pesticides and toxic agricultural chemicals, little research has been done to document if there is an increased incidence of childhood cancers (such as leukemia) in migrant worker children. [23]

Migrant Women's Health

Migrant agricultural workers' health also encompasses women's health issues. Not only do many male workers live and travel with their wives or partners, up to 36% of California's migrant agricultural workforce is female. Health risks to these women workers include those faced by men; however, several conditions are either more severe or more complicated for women. For example, since women generally have a higher percentage of body fat than men do, they more easily retain lipid-soluble toxic chemicals to which they are exposed, such as organic solvents used in agriculture work. [26] For pregnant agricultural workers, the risks are greater, as some pesticides are toxic to the embryo. Other potential reproductive risks for female workers include infertility, miscarriage, low birth weight, fetal malformation, retarded fetal growth, and abnormal infant development attributable to chemicals passed in breast milk. [27]

Migrant agricultural women are also at risk for domestic violence. A recent study found that 20% of migrant and seasonal farm worker women reported physical abuse within the past year and 10% reported forced sexual activity within the same time period. [28] Since migrant farm workers lead mobile lives and are geographically and socially isolated, the needs of the women of this population who are survivors of domestic violence may be masked. Insecure economic situations, high stress environments/working conditions and social isolation may all put the women in this community at increased risk for abuse. [27]

Given the increased health risks these women face, both access to and use of health care are of critical importance. The California Agriculture Worker Health Survey found that approximately 40% of women farm workers surveyed had had a medical visit in the prior 5 months, but 44% had never been to a dentist. [10, 20] Women's frequent multifaceted roles as immigrants, wives of immigrants, and mothers of U.S. citizen children places them in a unique situation requiring further study to examine their health and limited access to care.

Health Systems for Migrants and Families

No general health insurance coverage for migrant agricultural workers exists, and nearly 70% of workers are left without any form of insurance, public or private. [10] Eleven percent of California's agricultural workers receive insurance through their employer, 7% participate in Medi-Cal, Healthy Families, Child Health and Disability Prevention (CHDP) Program, and less than 5% purchase personal private insurance. [10] As such, workers and their families must often patch together a system of care from the programs for which they are eligible, a process that requires *awareness* of eligibility for such programs. Unfortunately, workers and their families often do not know about or cannot use programs and services available to them. In addition, it is clear that a high proportion of California farm workers are categorically ineligible [due to their undocumented immigrant status] for Medi-Cal or other forms of publicly supported health insurance. [30]

A rural health infrastructure is needed that has more comprehensive medical facilities as well as transportation to these facilities. More collaboration is needed among the different providers of care, to increase utilization of services and to improve quality of care. Health care utilization is low among California's migrant agricultural workers and their families when compared to other groups. In 1999, the California Agricultural Worker Health Survey found that nearly one-third of male agricultural workers had never been to a doctor or clinic in their lives, half had never been to a dentist, and two-thirds

had never had an eye care visit. [10] A more recent survey found that 47% of California's migrant farm workers had not visited a doctor in the last two years and 58% had not seen a dentist in the same time period. [30].

Having been denied governmental health insurance in the past, migrant workers may not know that their U.S.-born children *are* eligible for programs. For example, the Binational Health Survey found that 70% of families with at least one U.S.-born child—so-called "mixed families"—did not have any family members covered by Medi-Cal**.** [18] The process of receiving program benefits such as Medi-Cal and Healthy Families requires navigating through a maze of eligibility requirements and application paperwork; the lengthy process, which must be repeated each time county of residence changes, may discourage migrant agricultural workers from enrolling in programs for which they are eligible. [18] Moreover, some mixed families continue to be concerned about the "public charge" issue, which is the inaccurate belief that using any public programs, such as signing their citizen children up for Medi-Cal, may adversely influence their ability to become a legal, permanent resident or to return to the United States after foreign travel. [18]

Even when given the option of private insurance, medical care may be financially out of reach for migrant workers and their families. Over 16% of California's migrant agricultural workers say their employer offers health insurance, but a third of these workers did not participate due to high premiums or inability to afford the co-payments. [10] "For example, a co-payment of $10 for a farm worker family with a $5000 annual income is the equivalent of a $75 co-pay for a family of average income." [21]

The type of insurance migrant workers and their families have determines what clinics and providers the patients go to. Community and migrant health centers, CHDP child assessment clinics, prenatal care clinics, family planning clinics, and hospital-based ambulatory services are available to migrant agricultural workers throughout California, though the type and extent of services varies by region. [21] In many rural areas, there is a lack of providers who accept government insurance programs; providers cite low reimbursement rates, and increased paperwork and administrative duties as reasons. [21] With few providers, the resources of nonprofit and public health centers are increasingly strained. In the San Joaquin Valley, for example, there are 77 licensed community and public health clinics, which had 1 million patient encounters in 1993; that is an average of nearly 13,000 visits per clinic. [21] California has a total of 125 migrant health centers from which to serve its entire migrant population data. [32, 33]

Since there are few places to seek health care, patients living in outlying rural areas must often arrange transportation to clinics and migrant health centers far from where they work or live. Because of a lack of reliable, affordable public transportation to clinics, many patients who seek care may not be able to keep their appointments. Although Medi-Cal covers transportation to medical services for its recipients, this is a little-known

and little-used benefit. A Fresno County survey of migrant agricultural workers found that not having transportation to the clinic was one of the most frequent reasons for missing an appointment. [21] Beyond insurance and the availability of health care providers, past negative experiences with the health systems may also impede the health care access for migrant agricultural workers and their families. [13,21] Cultural differences with respect to ideas about health and illness, as well as the role of medicine in treatment of symptoms mean that even multilingual providers may not fully understand what their patients are experiencing and what they desire. One study suggests that California's Mexican-born migrant farm workers may reject U.S. health care, returning to Mexico when the need for treatment arises. [18]

Underinsurance, an inadequate number of clinics dedicated to serving this population, and patients' past experiences with health care in the U.S. may also reduce health care utilization. As a result, chronic illnesses may go untreated and semi-acute conditions may worsen, increasing costs of treatment and increasing disability of migrant agricultural workers and their families. The current health systems and modes of treatment for this population are based on an acute-care model: i.e., the patient gets sick, goes to a clinic, provider treats the illness, and patient returns home, staying away from the clinic until another illness occurs. "While [existing programs] are invaluable sources of acute care coverage for farm worker families, many health conditions, such as chronic illness as well as primary prevention, do not receive clinical attention." [13] The fragmented care necessitated by the patchwork of payment systems and health services means that patients may see a new provider every time they seek medical care. Without a regular provider, long-term preventative care for these patients is frequently nonexistent. [18] Non-emergent and chronic conditions are either left untreated (and may develop into emergent conditions) or are treated using folk methods.

Efforts to Improve Access to Health Care in Ventura County

Existing clinics could reach more members of their communities through various efforts including offering transportation, hiring health promoters, and expanding hours to include evening and weekends. A pilot project in Ventura County, known as *La Familia Sana,* offers great promise as a community-based method to link workers and their families with existing programs. Funded by grants from The California Endowment and county tobacco funds to the Ventura County Medical Resource Foundation, the program uses lay health workers from the community, known as *promotoras.* These lay health workers go to labor camps in Fillmore and Piru as well as local schools, churches, stores and laundromats, to educate farm workers and their families about existing programs and services at a consortium of 4 migrant health centers. Two of these are operated by the county of Ventura and two are operated by Santa Paula Hospital. The *promotoras* also provide on-site screening services in the labor camps for TB, Hepatitis B and C, HIV, sexually transmitted diseases and hypertension. Workers are offered on-site immunizations for Hepatitis A and B and chest x-rays for positive TB screens. Finally, they are referred to one of the four clinics for follow-up. Since both Hepatitis B vaccine and TB prophylaxis therapy require six months, all workers are given an ID card with the health data on it to take to clinics in other migrant communities, as many of the workers are in Ventura for only several weeks as they follow the harvest north. The next phase of this program is to send trained eligibility workers with the *promotoras* to describe the existing public funded health programs -- Medi-Cal, Healthy Families, and CHDP -- and to determine eligibility at the time. Many eligible workers and families simply lack correct information about these programs and have avoided signing up because of issues such as "public charge." Thus far, this program has spent considerable funds on the various screening programs. A urine screening test for Chlamydia alone costs $50. It is our belief that the majority of these expensive screening tests would be covered by a state-federal program known as Family PACT. As such, this program could be duplicated at each labor camp in the state if funding was available for outreach workers and eligibility workers.

LINKED PROBLEMS TO HEALTH

Housing

Historically, farm workers have lived in substandard housing. The main federal program to address this chronic problem is one that provides low-interest loans to developers of farm-worker housing. In 1979, the annual allocation for this program was $69 million. In 1998, the annual appropriation was $27.5 million for these loans. In spite of these efforts, some 800,000 farm workers across the nation lack adequate shelter, according to the Housing Assistance Council. [9]

Housing is a particular problem in California. Ventura County, for example, has about 30,000 migrant farm workers and less than 1,000 housing units designated as farm worker housing. [34] Throughout the U.S., government housing does exist, but farm worker families, U.S. citizens, and legal immigrants have priority, leaving farm workers who are single, undocumented, or who follow the harvests to find their own housing. [9] As a result, many Californian migrant agricultural workers live in cars, tents, trailers, barracks, hotels, and crowded apartments. Lack of beds and indoor plumbing are common. [13]

Legislation passed to improve the housing situation may, in fact, have had the unintended consequence of exacerbating the problem. In 1986, Congress enacted stricter rules for housing provided by growers. Stating that they could not afford to comply, thousands of growers simply stopped providing housing; in California the number of labor camps dropped from 5,000 in 1980 to 1,000 in 2000. [35]

Substandard housing contributes to conditions that impact the health of farm workers. [13] Conditions that contribute to ill health include flea-ridden carpets, broken windows, and dirty clothing and bedding. Other factors include drug dealers and users and high crime rates, including rape and assault. Lack of ability to speak English, distrust of the police, and fear of deportation are barriers to seeking help among many farm workers.

Efforts to Improve Housing Problems Encountered by Migrants

One approach taken by Napa County growers was to obtain legal authority to collect an assessment from vineyard owners to develop farmworker housing on agricultural land. Using authority granted to the Napa County Board of Supervisors in 2001 by AB 1550, a County Service Area was created within which vineyard owners were assessed at a rate of $7.76 per acre, raising $344,544 annually to help pay for and maintain new farmworker housing. [42] Another effort to improve housing can be seen in Coachella, CA, at Vista del Sol. [9] In this community, 75 families built 75 homes in a 9-month period. This was facilitated by having a mortgage payment of $240/month after $70,000 low-interest Federal loan to each family. Currently there are 2,000 people on the waiting list for Vista del Sol. This could be structured as a classic "pay or play" program wherein growers either contribute to a general housing development fund or provide a housing voucher. By structuring the program in this manner, no one grower would have an economic advantage over another, as they would all be paying.

Education

The level of education also has a major impact on the life, work, and health of migrant workers and it is declining among workers. A 1965 study found that 57% of the farm workers had completed 8th grade; this had dropped to 29% by 1990. [33] Sixty-three percent of California's farm workers have six or fewer years of formal education. Only 51% report that they read Spanish well; only 5% say they read English well. [9, 12] Two-thirds are functionally illiterate. [10] This is a problem for worksite safety, as safety warnings for pesticides and other chemicals are only effective for those who can read the warnings. Moreover, illiteracy and low literacy make understanding and completing forms such as Medi-Cal applications nearly impossible. "The Medi-Cal application form is many pages of tightly jammed questions about residence, income, assets, expenses, citizenship, and personal history, which even a college graduate would find daunting to complete. Low-income persons, with low literacy or who may not speak English, are often overwhelmed not only by the application, but also by the required supporting documentation." [21]

Working Conditions

Several interconnected factors that are typical of agriculture work in California -- the use of labor subcontractors, the prevalence of low wages, and the presence of workplace hazards -- all impact the health status of migrant agricultural workers.

Growers in California tend to hire farm labor contractors, who provide the labor for planting, pruning, and picking. In 1997, 90% of the state's fruit and nut farms and 67%

of vegetable and melon farms used these contractors or "middlemen." [37] There are 1,200 licensed farm labor contractors in California and an unknown number of unlicensed contractors, all of whom attempt to underbid each other for contracts with farms. The growers are the beneficiaries of this system as they gain access to an ample supply of cheap labor while avoiding any direct responsibility for withholding taxes, paying minimum wages, providing housing, or complying with immigrant laws.

A second characteristic of agricultural work in California is low wages. Inadequate wages can lead to poor nutrition (high in fat, sugar, and/or salt), which can further complicate health conditions; moreover, such wages limit a workers' ability to pay for health services. While some farm workers make minimum wage, the abundant supply of workers and lack of means to enforce minimum wage regulations results in many workers earning below the minimum wage. In 1998, a U.S. Department of Labor survey of San Joaquin, Coachella, and Napa valleys found that 33% of raisin and grape vineyards failed to pay minimum wage. If extrapolated across the state's 8,000 vineyards, employers would have paid some 42,000 workers a rate below the legal minimum wage. The collective loss to the employees would exceed $4.2 million in any given season. [13] In another report, a two-year sample of court and state records found employers failed to pay 1,600 workers wages totaling $820,000. [37] While failing to pay minimum wage is a misdemeanor, which carries a fine of up to $100 and jail terms up to 30 days, only 11 such citations for minimum wage violations were issued in 1999. [38] Workers without legal immigration documentation are not protected by the Agricultural Worker's Protection Act, and have limited access to the anti-discrimination rights that are meant to protect legalized workers. [13]

Frequently, workers are victims of payment disputes between growers and contractors: if contractors are not paid, neither are the workers. If a contractor has disputed claims against him, growers are instructed to pay the state, and the laborers who actually did the work are not paid. Moreover, workers are reluctant to complain about wages or conditions for fear of losing their jobs or causing employers to report them to Immigration and Naturalization Services (INS). [37] The underbidding by the different labor contractors drives wages down, while piece-rate work forces workers to work as long as possible, creating a situation where injury prevention and health promotion are frequently secondary to production. [13] Some experts feel that wages and living conditions can only be addressed by significantly constricting grower access to foreign workers. Others believe that the only long-term solution to large-scale illegal immigration is to define a more permanent group of migrants who can count on more secure employment and earnings. [39] To meet both California's need for an adequate labor force and workers' labor and human rights, the issue should be reframed in the context of NAFTA and the broader bilateral U.S.-Mexico relationship. That is, the economic contribution of Mexican migrant agricultural workers in California should provide a basis for agencies on both sides of the border to negotiate improvements in wages, work and living conditions, and health care. One direction for policy reform to take is to change immigration policy. Whether the results amount to amnesty for undocumented agriculture workers or a new guest worker program that strengthens worker protection and earns legalization, collaboration between Californian and Mexican agencies is necessary.

A third characteristic of agriculture work in California is the presence of workplace hazards, including unsafe or unsanitary working conditions and exposures to pesticides and other agricultural chemicals. According to the California Agricultural Worker Health Survey, 13% of workers report they had no clean drinking water or cups. In this survey, only 57% of workers received pesticide safety training. [10] When asked when and what pesticide had been sprayed in the fields, not even the labor contractors may know. The contractors believe it is up to the growers to make sure that the fields are safe to pick. [13] Work conditions with little to no opportunity to wash skin or clothes increase pesticide absorption and thereby increase cancer risk. [40] Increased direct handling of pesticides and pesticide-laden fruits and vegetables is believed to explain the increased buccal, laryngeal, esophageal, and cervical cancers observed in migrant and seasonal farm workers, as compared to farm owners and operators. [16] In another study of cancer incidence among members of the United Farm Workers of America (UFW), risk of leukemia, stomach, cervical, and uterine cancers was elevated when compared to the California Latino population. [41]

Another potentially dangerous system is the *Raitero* system. In this system, many workers use transportation that employers provide for a fee and motor vehicle related collisions and associated injuries are common. [13]

POLICY OPTIONS

In writing this report, our focus has been migrant agriculture workers, not other migrant groups such as urban day laborers. We reviewed the current literature on migrant agriculture workers, including published articles, reports, and state and national databases, working closely with the California State Library. We conducted interviews with experts in areas of migrant health and farm workers. Additionally, we conducted a site visit of farm work sites and housing facilities. Because no statewide monitoring system exists to provide comprehensive data on the health of California's migrant agricultural workers, we compiled the information in this report from a variety of sources.

Healthcare experts, policymakers, and advocates have proposed several policy options to address issues affecting the health of California's migrant agricultural workers. In our opinion, the following options have great potential as both short- and long-term solutions to many of the issues raised in this paper.

1) Modify Medi-Cal and Healthy Families programs to increase access to care for farm workers and their families by enacting the following revisions:

    a) Medi-Cal and Healthy Families should be changed to portable, full-year continuous coverage for this particular mobile population. Eligibility for these programs is currently established on a yearly basis for each county in California; this system interrupts coverage for farm worker families who may move across county lines several times in a year. Other states have successfully implemented cross-county portability and/or presumptive eligibility (presuming a Medicaid recipient is eligible for services in his/her new county, based on eligibility in the previous county of residence), including Wisconsin and Texas. Any proposals to return to quarterly reporting for Medi-Cal would disproportionately affect farm workers and their families, and may cause many to lose their benefits.

    b) Establish criteria for presumptive eligibility for children of farm workers, and revise share-of-cost requirements in Medi-Cal to take into account the seasonal nature of farm work. In California, there is currently a 90-day waiting period for eligibility for Medi-Cal, during which the health services of applicants are not covered. In addition, share-of-costs for health services for farm workers may become a barrier to health care at certain times of year, since most farm workers do not have year-round employment.

2) Encourage California's state-funded health professional schools to make greater efforts to address the health needs of rural areas including increased recruitment and retention of students who are likely to practice in rural and farm worker communities. Incentive programs that provide scholarships or loan repayment in exchange for practice in underserved areas could be expanded and linked directly to migrant health programs.

3) Increase resources for community clinics to enable:

    a) Existing clinics to reach more members of their communities through various efforts including offering transportation, hiring of health promoters, and expanding hours to include evening and weekends.

    b) Opening satellite clinics to provide services for areas where services are currently lacking.

4) Improve enforcement of pesticide regulations to reduce pesticide exposure, one of the most controllable health risks among California's migrant agricultural workers.

5) Create new funds for targeted farm worker health programs through targeted taxes such as tobacco or alcohol.

6) Conduct a statewide assessment of farm worker health outcomes/needs and create a monitoring system to evaluate the impact and outcome of new and existing programs and services for this population.

7) Improve wages and living conditions for farm workers by:

    a) Enforcing the minimum wage law for farm workers, thereby enabling them to spend out-of-pocket resources for their health care. Wages should reflect the difficulty and hazardous nature of the work as well as its benefit to the economy of the state.

    b) Diversifying crop (fruit, vegetable, and horticulture) production to provide workers with a longer harvesting season, thereby allowing migrant agricultural workers to have more steady work. Polyculture crop production has also been cited as a way to significantly reduce the need for pesticides.

8) Expand current housing programs and establish pilot projects to develop additional housing for farm workers and their families. If housing is not provided as a benefit of work, housing vouchers for farm workers should be considered. Successful housing programs already in place in California include the Napa Valley growers' self-imposed assessment to improve and maintain farm worker housing and Coachella's Vista del Sol low-interest loans to allow farm workers to purchase homes.

9) Create a media campaign to address the social invisibility of farm workers and recognize their important contributions to agricultural production and American society.

10) Increase access to affordable health care by lowering premiums and/or co-pays, as well as requiring growers to offer employee benefits, including health insurance or vouchers with local providers.

11) Create programs to address the lack of knowledge about available public health and private insurance coverage options among migrant farm workers. Such education could include assistance with deciding the best time of year to apply for public insurance programs, since farm workers are generally not employed year-round, and assistance with filling out Medi-Cal and Healthy Families applications. This education could be delivered by lay health workers, such as the *promotoras* of the Ventura County *La Familia Sana* program.

12) Address the problems of migrant farm workers with policies framed in the context of NAFTA as well as a Mexico-California context, thereby insuring an adequate supply of agricultural workers for the state while addressing and protecting the workers' labor and human rights. Policy options include reforming immigration policies to provide amnesty for undocumented agriculture workers or creating guest worker programs with strong worker protection and earned legalization.

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