

The Fields: The Hidden Faces of Farmworker Women

Volume II



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Association of Farmworker Opportunity Programs

The Association of Farmworker Opportunity Programs' mission is to improve the quality of life for migrant and seasonal farmworkers and their families by providing advocacy for the member organizations that serve them.

Health & Safety Programs

To address the needs of workers in one of the most dangerous jobs in the country, AFOP's Health & Safety Programs strive to empower farmworkers to protect themselves against pesticides and heat stress through health and safety education. Our programs utilize bilingual, interactive, low-literacy training techniques and materials.

For more information contact Levy Schroeder, Director of Health & Safety Programs, at schroeder@afop.org or (202) 828-6006 ext. 130.

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Levy Schroeder, Director of Health & Safety Programs at the Association of Farmworker Opportunity Programs

AFOP's Health & Safety team has spent nearly a year interviewing farmworker women, collecting stories and researching the issues that matter most to women's health and well-being. It is undeniable that farmworker life is difficult, fraught with poverty and body-breaking labor. When we examine the challenges farmworker women face in particular, the old adage, "a woman's work is never done" springs to mind. Fulfilling multiple roles as breadwinner, caretaker, cook, laundress, housekeeper, nurse, and household accountant, farmworker women carry a heavy physical and emotional burden. Dealing with occupational hazards, sexual harassment and other job-related worries adds to the stress.

In our travels throughout the country, the farmworker women we encountered were eager to share their stories and tell us about the struggles they face. In their voices we heard exhaustion, frustration, and, in the case of the women of Kettleman City, pleas for help in telling their story about the environmental injustices afflicting their community. We also heard a narrative of high-spirited hope and of strength that comes only from struggle.

We invite you to peruse this edition of *The Fields*, and explore the health and safety issues farmworker women navigate every day. We also call upon you to consider the lives of the women we met, who so generously and courageously shared of themselves. There are many ways to join in improving the quality of life for farmworker women. After all, women's work is never done.



Daniel Sheehan Executive Director Association of Farmworker Opportunity Programs

Farmworker women experience a life so difficult that it is beyond the reach of our imagination. They toil day-in and day-out in sweltering fields, doing backbreaking labor. They suffer from unwanted advances and sexual assaults from crew leaders and growers as they work to make ends meet. They worry about the well-being of their children and families. Yet, not only do they not receive recognition for their hard work, they lack even the most basic necessities, such as adequate housing, regular medical care, and even food to feed their families. This edition of *The Fields* explores farmworker women's stories from all around the country. It is because of these strong women that we can provide our own families with healthy fruits and vegetables each day.



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Many individuals and organizations made this publication possible.

Florida:

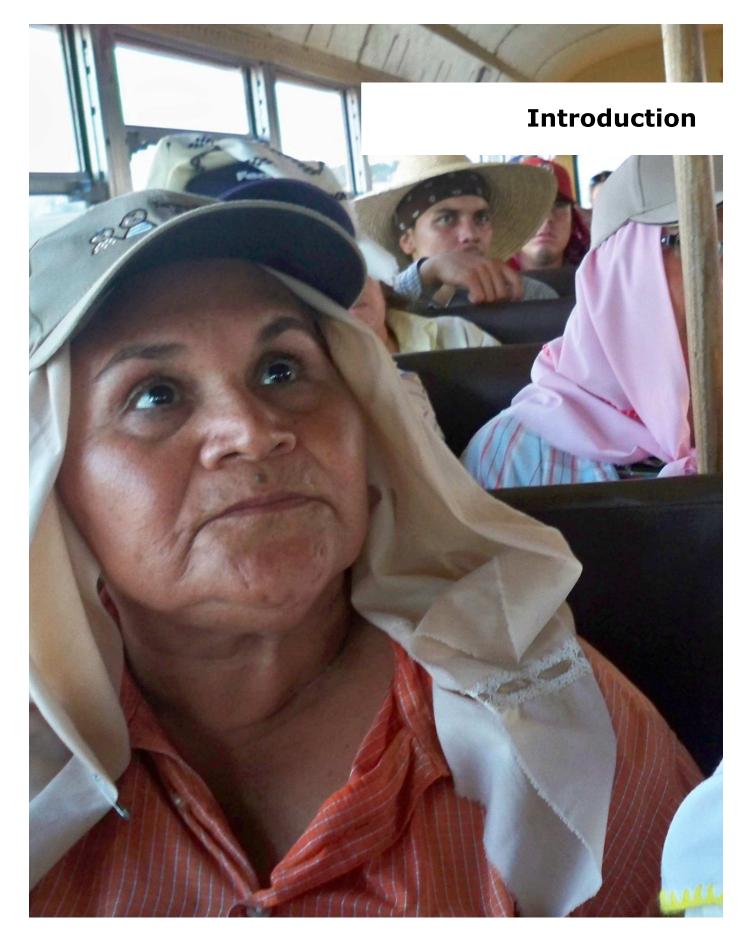
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Jesús Gamboa (Chair 2011-2012) Nita D'Agostino Cynthia Thomas-Grant Jennifer Shahan Chris Huh Jeffrey Lewis Leida Cartagena Pat Constantino



Esmeralda's Story



Esmeralda lives in Florida and works as a farmworker. She does not always have enough money to keep her children in day care while she works. On the days money is tight, she brings her children to the fields, inching the little ones along on a blanket as she works on top of ladders picking oranges.

When Esmeralda spoke with a member of the AFOP Health & Safety Programs' staff, she had recently taken her children to work that week.

"I still take mine. I took mine this whole week 'cause I couldn't find any one to take care of them. When the chivo [crew leader] passes I would hide them. Sometimes the growers pass in the green trucks, but the worst experience that I had was that I would take my daughter with me and move her from spot to spot in the field. One time in this field I had barely just moved her, I had a blanket to put her on and right there a big old snake came, right where she was."

Introduction

"The majority of us are undocumented. We have neither voice nor vote." -Ruby, 34-year-old mother of four, farmworker in Kettleman City, California.

The fields are an extremely dangerous place for hundreds of thousands of farmworker women living in the United States. They suffer, like their male counterparts, from grueling hours in sweltering fields; performing rigorous, backbreaking, repetitive tasks; and are exposed to dangerous pesticides and hazardous equipment. Farmworker women also encounter additional hardships and dangers often not experienced by farmworker men. Farmworker women experience the burden of taking care of their children and families as primary caregivers, face the added dangers of sexual assaults and rape, and perform the same type of strenuous work, but often earn significantly less. Farmworker women also lack basic and lifesaving health care access.

According to the National Agricultural Workers Survey (NAWS), there are approximately 630,000 farmworker women in the United States, making up 24 percent of the farmworker population. These women earn minimum wage or less. They get no vacation days or sick days [1]. They work just as hard as men do and often continue working equally hard for their families in their homes on a daily basis. Maria, a 44-year-old farmworker and mother of two from Kettleman City, California, describes a day in her life as follows: "We [farmworker women] wake up and prepare both of our lunches. We work for ten hours [in the fields] and then we have to return for the children. We cook dinner, do laundry...at ten o'clock at night, we barely get to rest and lie down."

In many ways, our society imposes disproportionate burdens on the women who grow our food.

^[1] The National Agricultural Workers Survey, United States Department of Labor, 2005.

These women face the unthinkable choice of paying what little money they have for child care, or bringing their children along with them to the fields where they may be exposed to dangerous pesticides, equipment, and heat. Sometimes they are forced to submit to sexual advances or assault by crew leaders and foremen or risk losing their jobs. They worry about how to feed their families and keep a roof over their heads. They lack access to basic health services that can be lifesaving, such as gynecological checkups, prenatal care, and sexually transmitted infection (STI) screenings.

Farmworker women also face economic challenges as a result of their gender on a daily basis. They are often given fewer hours of work, since their employers may prefer men to do the most physically demanding jobs in the fields. Women also earn less for the same type of work compared to the men. The average income of a female farmworker is \$11,250 per year compared to \$16,250 for a male farmworker [2]. Frequently, they are overlooked for promotions or even fired solely based on their gender. The wage difference is often attributed to the piece-rate system through which workers are paid per number of buckets filled. That, combined with being placed in less-skilled jobs, leads to significant disparities in earning.



A farmworker woman in a lettuce field in Arizona.

As a group, U.S. farmworkers suffer a great deal for us to be able to eat many of the fruits and vegetables we enjoy. The women who work in the fields suffer disproportionately within this group simply because of their gender. The Association of Farmworker Programs Opportunity (AFOP) interviewed dozens of women in Florida and California in January and February of 2012. Women of all age groups shared their experiences, wanting their voices to be heard. These are their stories.

^[2] Bauer, Mary and Mónica Ramírez. 2010. Injustice on our Plates: Immigrant Women in the U.S. Food Industry. Montgomery, AL: The Southern Poverty Law Center.

Methodology

Migrant and seasonal farmworkers are often difficult to locate for interviews because of their isolated living environments and long work hours. To get accurate accounts from farmworker women, AFOP member organizations from all around the country contacted their vast network of farmworkers. Other allies and service providers were also contacted to reach farmworkers. Immokalee Technical Center (iTECH), South Florida Community College, and the Coalition of Immokalee Workers (CIW) hosted focus groups in Florida. Additionally, a group of mothers in Kettleman City, California, also hosted a focus group. These agencies recruited women of all ages, who were or had been farmworkers, and many of whom were mothers.

Staff conducted the focus groups in Spanish, asking open-ended questions and recording them with a video camera. The objective of the focus group research was to gather information on 1) experiences and hardships farmworker women face in the fields; 2) health issues pertinent to the farmworker communities; 3) the concerns of farmworker women working in the U.S.

Interviews with direct service providers and farmworker advocates from the communities where focus groups took place were also used to further detail the experience of farmworker women.

AFOP's Health & Safety Programs' staff also reviewed reports, journal entries, and scientific studies on a variety of topics, including farmworkers, farmworker health, migration and health, occupational health in agriculture, sexual violence, and farmworker women.

Background

There are approximately 2.5 million farmworkers in the United States, of which 24 percent are women and a large majority is Latino [3]. A variety of factors contribute to the poor health conditions from which farmworkers suffer, such as extreme poverty, limited access to health care, lack of insurance, cultural and linguistic barriers, overcrowded housing and substandard living conditions, lack of education, and dangerous working conditions.

Basic data regarding migrant and seasonal farmworkers is often lacking and incomplete. The average farmworker tends to be younger than the general population, with reports indicating that 66 percent of the population is under 35 years of age. A little more than half (52 percent) of the population is married and just under half (45 percent) have children. The vast majority (81 percent) is foreign born, with the majority of immigrants coming from Mexico. Spanish is the predominant language of 84 percent of farmworkers, while the remainder speaks English and other languages such as Tagalog, Ilocano, Haitian Creole, and Mixtec as their native language. [4]

^[3] Migrant Farmworkers: Pursuing Security in an Unstable Labor Market,, United States Department of Labor. May 1994

^[4] The National Agricultural Workers Survey. United States Depratment of Labor, 2005.

Elisette's Story



Elisette is a 29-year-old mother of three who has worked in chili, cucumber, and tomato fields. She explains that she had a difficult childhood, as her parents worked long hours as farmworkers. "I never had the support from my mom because she was always too busy working and for her, it was just work, work and [she] didn't care about school."

Elisette emphasizes that her hard work paid off. "I dropped out in 8th grade, but I still went back to get my GED – and I try to show my kids to be different."

While Elisette experienced hardships, such as having her first child at age 15, she decided to turn her life around. She now works as an administrative assistant at iTEch, a community college in Immokalee, Florida.

A variety of health issues plague the migrant and seasonal farmworker population, including dental problems, hypertension, diabetes, cancer, occupational injuries, and communicable diseases.

Dental Problems and Oral Health

Farmworkers suffer up to three times the rate of tooth decay compared to the general population. Cavities are the most common untreated health problem in migrant children. At least one-half of farmworker children have one or more teeth with a cavity. These types of tooth infections can cause severe periodontal problems in adulthood. Lack of knowledge about preventive dental hygiene and access to affordable dental care clinics are contributing causes to dental disease. Gerald Williams, Coordinator for the Farmworkers Job & Education Program at iTECH in Florida, explained that, while a dentist visits the community on a regular basis, his hours often interfere with farmworkers' job schedules. For this reason, it is virtually impossible for those adults and their children to receive care.

Hypertension and Diabetes

Many rural areas do not have healthy foods readily available. Instead of fresh produce, convenience stores sell processed foods that are high in fat and calories. Latinos also have a higher mortality rate from diabetes. Nationally, they are about twice as likely to have noninsulin dependent diabetes than non-Hispanic whites. Latinos are also more likely to have undiagnosed diabetes. About half of all farmworkers are obese, have high blood pressure, have high cholesterol, or suffer from a combination of these conditions. A 2001 study of California farmworkers showed obesity rates are extremely high. For female workers, the study indicated that 76 percent are either overweight or obese. Poverty and lack of access to nutritious foods are likely to blame for the soaring obesity rates. Food deserts, inadequate time to prepare healthy meals, and language and cultural barriers when accessing foods make it difficult to obtain foods that are healthy.

[5] California Institute for Rural Studies. Suffering in Silence: A Report on the Health of California's Agricultural Workers. The California Endowment; Woodland Hills, CA, USA: 2000.

A 2004 report by the Center for Rural Pennsylvania also indicated farmworkers are at an increased risk for heart disease and stroke. The obesity rates contribute significantly to the level of diabetes in the Latino farmworker population [6].

Cancer

Farmworkers are exposed to a variety of carcinogens day-in and day-out as they work, including pesticides, solvents, oils and fumes from agricultural machinery and transportation equipment, ultraviolet radiation from sun exposure, and biologic agents such as human viruses, which have been linked to cancer. Latinos are more likely to die from a variety of cancers than the general population. Farmworkers, who are predominantly Latino, experience diagnosis at later stages than the general population for most cancers. This may be a reflection of poor access to cancer screenings. Farmworkers are also more likely to die from cancers of the lip, stomach, skin, prostate, testes, and hematopoietic and lymphatic systems, such as Hodgkin's and non-Hodgkin's lymphomas. A study of United Farmworkers of America (UFW) members in California found more cases of leukemia, stomach cancer, uterine corpus, and cervix cancers than in the state's general Latino population. Farmworker children, like their parents, are exposed to pesticides in their homes and while they work. They also seem to be at higher risk than adults for developing a variety of cancer, such as leukemia, brain tumors, and non-Hodgkin's lymphoma.

Communicable Diseases and Gynecological Problems

Farmworkers are at a higher risk for contracting a variety of viral, bacterial, fungal, and parasitic infections. Unsanitary working and housing conditions leave farmworkers vulnerable to health conditions no longer considered to be threats to the general public. For example, tuberculosis (TB), while very rare in the general U.S. population, is quite common in the farmworker community.

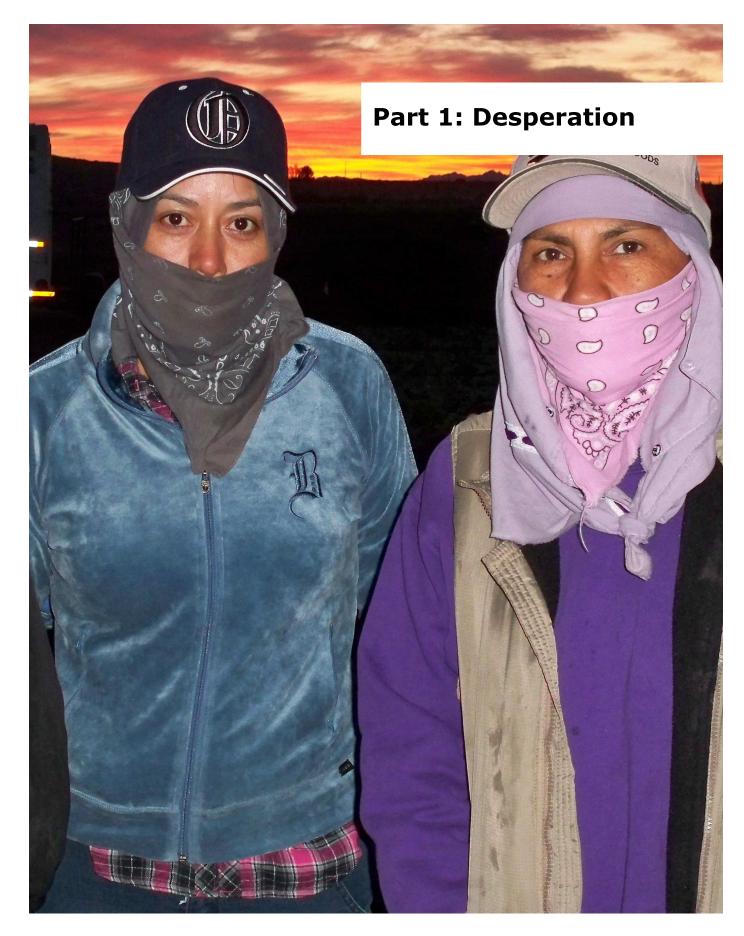
Farmworkers are six times more likely to contract a TB infection compared to the general population [7]. Farmworkers host parasites at a rate up to 59 times higher than the general population, which can lead to further health problems, such as malnutrition [8].

Sexually transmitted infections are also high among farmworkers. Nationally, 0.6 percent of the general population has HIV, while among farmworkers infection has been noted to be as high as 13 percent in some studies. Farmworker women are at especially heightened risk for contracting HIV because of risk factors, such as cultural beliefs about contraception, their partners' visits to sex workers, and lack of educational and prevention services.

^[6] The Health and Nutrition of Hispanic Migrant and Seasonal Farm Workers. Rep. The Center for Rural Pennsylvania, 2004.

^{[7]&}quot;Prevention and Control of Tuberculosis in Migrant Farm Workers Recommendations of the Advisory Council for the Elimination of Tuberculosis." Centers for Disease Control and Prevention.

^[8] Rao, Pamela, et al. "Student Participation in Community-Based Participatory Research To Improve Migrant and Seasonal Farmworker Environmental Health: Issues for Success." *The Journal of Environmental Education* 35.2 (2004): 3-15.



Part 1: Desperation

"There are many poor people. The poor people have to be helped. There are people who have a lot of children. Education is a problem too. Things are really difficult. Many mothers send money back to their home countries...many leave their children behind." -Julia, a farmworker in Immokalee, Florida

Farmworkers experience a variety of mental health problems including stress, depression, and anxiety more acutely than the general public [9]. Endless fear of not being able to make ends meet, occupational hazards, migrating, and the stressors that accompany adjusting to a new culture, living in poverty, and suffering from discrimination all contribute to physical and mental agonies. Stress can lead to headaches, stomach pains, high blood pressure, chest pain, and insomnia or problems sleeping. The emotional problems associated with stress range from depression to panic attacks. Stress may also bring on or worsen certain symptoms of diseases, such as heart disease, cancer, and liver problems. Moreover, individuals with elevated stress levels are more likely to get into accidents or commit suicide.

Stress

A 2007 article in *Policy, Politics, and Nursing Practice,* identifies three main categories of stressors [10]. Each category refers to a specific set of stressors migrants encounter, including instrumental/environmental stressors, social/interpersonal stressors, and societal stressors. These stressors are mediated by certain factors, such as individual psychological characteristics and coping mechanisms, immigration status, socioeconomic status, and level of acculturation. Data also shows these stressors most often manifest in depressive symptoms.

Many farmworker women interviewed shared stressors they experience in their everyday lives. Their concerns ranged from worrying about being able to feed their children, to feeling like an outsider as the only dark-skinned family in a predominantly white, rural town. Farmworkers face numerous sources of stress, such as job uncertainty, poverty, social and geographic isolation, intense time pressures, poor housing conditions, intergenerational conflicts, separation from family, lack of recreation, and health and safety concerns.

Instrumental and Environmental Stressors

These types of stressors relate to the difficulties in obtaining goods and services for day-to-day life due to poverty, language barriers, poor housing, unemployment, or dangerous work conditions. Farmworker women deal with these types of stressors on a daily basis as they struggle to earn money, live in substandard housing, and work around dangerous chemicals and equipment. As a result of these factors, farmworker women worry about even the most basic necessities.

^[9] Dodge, Rebecca. Prevalence of Anxiety and Depression in Mexican Migrant Farmworkers: A Review of the Literature (2009) Pacific University.

^[10] Caplan, S. "Latinos, Acculturation, and Acculturative Stress: A Dimensional Concept Analysis." *Policy, Politics, & Nursing Practice* 8.2 (2007): 93-106.

Elvira's Story



Elvira is a 45-year-old mother of four children, who range in age from 8 to 24 years old. She explained the stressors farmworker women encounter are vast and range from policy issues to health issues.

"We have a lot of worries," she said during the focus group held in Immokalee, Florida. "One of the main worries right now is that many women lack documentation, which is really important for everyone, men and women. Women also used to be able to receive operations to not have children for free. Now it's not free anymore."

Farmworker women experience a variety of issues that individually would be plenty to deal with for a person. Compounding matters, the stressors which include insufficient earnings to feed the family, worries about occupational hazards, racism, sexism, and many others, can be detrimental to their health.

When asked about the source of the stress farmworker women face, a 19-year-old farmworker from Florida named Neira explained, "Money to pay the bills, food." Another issue worrying many farmworker women is the nature of the work they do. Elvira, a 45-year-old farmworker and mother of three in Florida, explained that the most prevalent problems are related to occupational health.

"You get a lot of rashes, a lot of allergies, a lot of pain. Your face gets spotted. My face is completely discolored because of the work." Elisette, a 29-year-old farmworker and mother of three, said she is also primarily concerned with occupational health hazards. She shared with staff that her brother-in-law had become sick while working in the fields.

"He was here not even half a year and he got so sick he had to go to the hospital," Elisette said. "He was dehydrated and, with all the chemicals and stuff, he passed out at the field and they took him to the hospital."

Social and Interpersonal Stressors

These types of stressors relate to changes in relationships and cultural norms, such as loss of social status, family cohesion, and family support, as well as the occurrence of conflict between different generations living in the same household. Many families are broken apart through migration, with children often staying behind in their home country while one or both parents seek employment opportunities in the U.S. Inside the country, families may separate during different harvest seasons. In this situation, fathers might travel north while the mothers stay behind with the children.

Elvira explains, "We have a lot of worries. One of the main ones is that now the women are concerned because they lack documents. That is something that is quite important for everyone, men and women."

The other women in the focus group agreed with her. Many families are what is referred to as "mixed status," or families in which some members have documents to live in the United States and others do not.

Societal Stressor

Societal stressors are related to how one is treated by society. Stressors include discrimination and stigma related to immigration status, as a result of the current political climate. Many people suffer because of the disempowerment they feel as a result of their association with a particular social group. In the case of migrant and seasonal farmworker women, these stressors are amplified by living in poverty, not speaking English, and being dark-skinned.

Farmworker women are exposed to societal stressors regularly. The discrimination can be so grave that many farmworkers avoid certain areas of the country or return to their home countries all together. Some of the farmworker women mentioned that many farmworkers stopped migrating to Alabama from Florida for fear of mistreatment. Alabama is thought to have the toughest anti-immigration law in the country, requiring police officers to investigate a person's legal status if they have "reasonable suspicion" the person is residing in the United States without proper documentation during routine legal stops.

Farmworker women are also frequently subjected to verbal abuse by male crew leaders and supervisors, which creates a stressful work environment for female workers.

Language limitations and lack of formal education also lead to further stress. Not being able to understand their surroundings or communicate with authorities causes great distress among farmworker women. This has become an even bigger issue as more and more indigenous women migrate to the United States, who speak a variety of indigenous languages and are typically unable to communicate in Spanish or English. This causes added isolation and discrimination.

While worrying about their own lives, farmworker women also worry about the lives of their families and children. One study showed that farmworker mothers who had child care support available to them were less likely to become depressed than mothers who did not have such support. A farmworker from Florida named Rosalba described the problem of depression among farmworker mothers during one of the focus groups:

"They suffer especially because they work and they have kids," explained Rosalba. "Sometimes they don't know if their kids are ok, both [women who have their kids here or in Mexico]. They worry about not having food or having money to buy things for their kids. Sometimes they go to the store and the kids say 'Mom I want this, mom I want that,' and you're like, 'I don't have any money!"

Depression

Farmworker women experience high levels of anxiety, depression, and suicidal thoughts, because of the stressors they face. Clinical depression is often characterized by symptoms that interfere with a person's work, sleep, and everyday life, such as fatigue and loss of appetite. One study of Mexican-American farmworkers found that almost 40 percent experienced depression, compared to 18 percent of the general population [11].

Carmela's Story



Carmela, a 32-year-old farmworker woman and mother of one, spends many evenings at the headquarters of the Coalition of Immokalee Workers (CIW). Carmela is always worrying about her brothers and other family members. When asked her biggest worry, she answered: "Not being able to work, because I have children. I have my brothers that are sick in Mexico...my younger brothers are incapacitated. I have to earn for them." She told AFOP Health & Safety Programs staff of a time when she felt the most scared and depressed. It was shortly after one of her brothers traveled from Mexico to join her in Florida. Work was hard to come by and neither of them was able to make enough money to eat. One morning her brother said to her, "Don't worry, if you would have left me there [in Mexicol I would have died from hunger. Here I can die from hunger next to you." (Carmen's story continued on page 26)

The role of caretaker often falls on farmworker women. Many of the women experience these mental health problems because they are charged with not only worrying about their own lives, but also the lives of the family that surrounds them, especially their children. Ruby, a farmworker woman from California, described how the extremely long hours typical of farm work interfere with her bonding with her children.

"First of all, you don't have time to be with the children; that is the main thing," she said. "You work and work, and [then] you get home to eat dinner. They want to go to sleep already because it's already late. You just don't have time for them."

In fact, most farmworker women worry much more about their children's happiness and health than about their own well-being. The main reason stated for why they experience anxiety, worry, and depression was that they usually arrive home so late they are not able to spend time with their children. Other primary concerns were related to traveling up north each year along the migrant stream and worrying whether they will have enough money to pay the bills and buy food for their families.

These women often carry a substantial burden on their shoulders while receiving little or no support from their partners and living in areas that provide little or no services to them. Studies have shown that lack of family cohesion, dissolving family ties, fear of deportation, and poverty rank among the highest factors influencing the mental health of farmworker women [12]. Many men travel to the United States to earn money as farmworkers to send back to their families in their home countries. More and more women now travel to the United States, either by themselves or with their husbands and their families, according to the World Bank.

^[11] Hiott, Ann et al. "Migrant Farmworker Stress: Mental Health Implications." The Journal of Rural Health 24.1 (2008): 32-39. [12] ibid.

In some cases, the women leave children, aging parents, or other dependents behind in their home countries in order to improve the lives of their loved ones. The burden and stressors related to making enough money to survive not only affects the workers, but also directly affects their far-away family members. Not making ends meet for oneself is difficult, but the guilt and stress associated with not having the ability to provide for one's children and aging family can be overwhelming.

Lower self-esteem, greater family dysfunction, less effective social support, greater hopelessness, higher acculturative stress, and more depression are risk factors related to the contemplation of suicide among farmworker women. The same study also found family dysfunction, ineffective social support, a sense of hopelessness, and high acculturative stress are related to high depression.

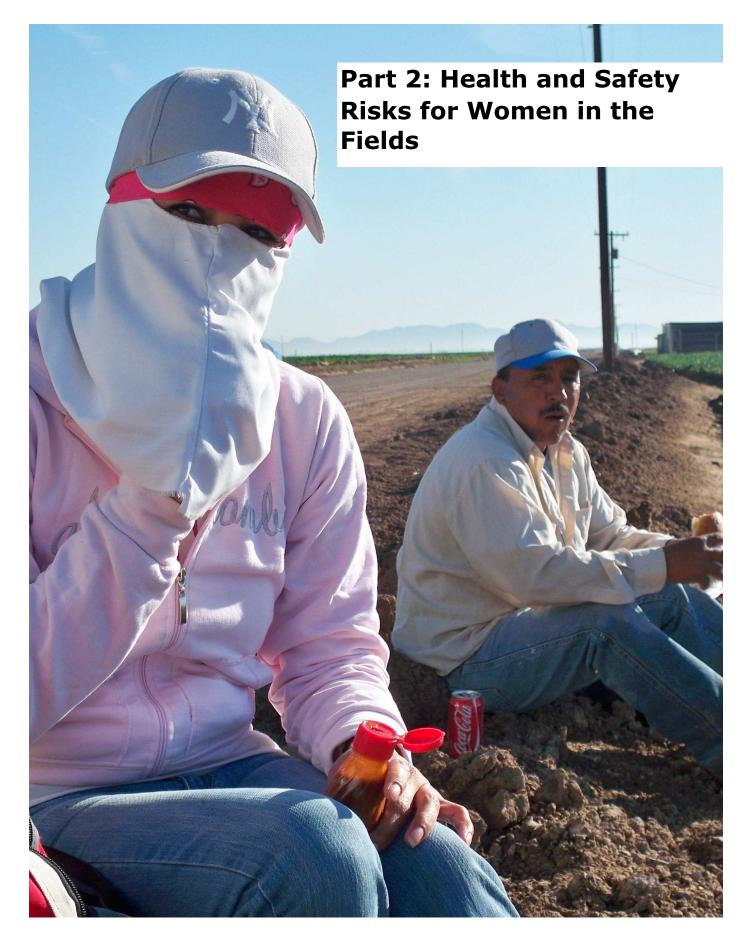
Trauma

Undocumented farmworker women may also suffer persistent trauma from their experience crossing the border. As they travel to the United States to work, many women are robbed, beaten, and raped at the hand of ruthless human traffickers known as *coyotes*. In general, all farmworker women are at risk concerning sexual harassment while working in U.S. agricultural fields. This is a common experience according to numerous sources, including *Cultivating Fear*, a recent Human Rights Watch report on the subject, and was further confirmed in the AFOP interviews. These experiences can cause severe trauma that manifests as depression and physical pain, which may result in damaged relationships with their partner, husband, and families.

Consequences

Stress has been linked to a variety of physical and mental ailments, such as headaches, depression, cancer, insomnia, skin disease, cardiovascular disease, an under active immune system, and can exacerbate other pre-existing conditions like HIV/AIDS. Many diseases linked to stress manifest from increased stress-related hormones in the body, such as adrenaline and cortisol. Stress can cause an insufficient immune response, which can make one more susceptible to the common cold, herpes, a variety of cancers, and HIV/AIDS [13].

^[13] Cohen, S., D. Janicki-Deverts, and G. E. Miller. "Psychological Stress and Disease." JAMA: The Journal of the American Medical Association 298.14 (2007): 1685-687.



Part 2: Health and Safety Risks for Women in the Fields

Farmworker women have one of the most dangerous jobs in the country. They endure exposure to pesticides and extreme heat, work alongside heavy machinery, use razor-sharp tools, and engage in repetitive, backbreaking tasks. Despite the hazards involved in farm work, labor protections for agriculture have lagged far behind those in other sectors. In this light, it is little wonder agriculture consistently has a higher fatality rate than nearly any other industry. In some cases, women are uniquely susceptible to the occupational injuries and illnesses associated with agriculture, such as pesticide poisoning and heat stress.

In 2010, there were 31.5 on-the-job fatalities for every 100,000 crop workers in the United States. This is even higher than the fatality rate for such dangerous industries as mining (27.2 deaths per 100,000 workers) and construction (9.5 deaths per 100,000 workers) [14]. The federal government reports that nearly 1,500 crop production workers died on the job between 2005 and 2010 [15]. This number does not include premature deaths from occupational illness; a farmworker who dies of a cancer believed to be related to pesticide exposure, for example, would not be counted in the official statistics.

Farmworkers frequently encounter pesticides through direct contact with the chemicals, contact with pesticide residue on treated crops, and the drifting of pesticides into areas where they are working or living, which can cause short-term and long-term health problems. Also, farmworkers work long hours in extreme temperatures day-in and day-out, often with little or no access to fresh water to hydrate. Having to engage in repetitive tasks and lift heavy containers full of produce wreak havoc on their bodies. Bending over or scooting on their knees for hours on end harvesting crops that grow low to the ground, such as strawberries, squash, and cucumbers, can cause painful musculoskeletal problems. Lifting heavy buckets of produce and straining to pick fruits from high tree limbs can also have similar consequences. According to the CIW, one Florida farmworker can carry up to two tons of tomatoes during a single work day.

Pesticide Exposure

Pesticides are chemicals used to kill or control weeds, insects, rodents, snails, or other pests. The women who AFOP Health & Safety Programs staff interviewed, identified pesticide exposure as one of the most important occupational health hazards they confront in the fields. Carmela, for example, a 32-year-old farmworker in Immokalee, Florida, explained that "more than anything else, we have problems with pesticides. Sometimes they put us to work right after they've sprayed the pesticides. And this is bad for us because when we go in the field and start working with the plants, it gets in our eyes. It makes your head hurt too."



A farmworker woman in California listening to a health and safety training.

In the United States, pesticide users apply in excess of one billion pounds of the chemicals each year, three-quarters of which is used in agriculture [16]. A large body of research links many pesticides being used to a wide range of adverse human health effects. The severity of health problems among farmworkers depends on a variety of factors, including the particular chemicals used in the pesticide, the duration and quantity of exposure, and individual factors such as genetics. Typical effects of short-term exposure can include skin and consciousness, or death.

Examples of effects from long-term exposure include cancer, infertility, birth defects in offspring, and Alzheimer's disease.

Farmworkers are often exposed to pesticides through residues on plants. Many do not even realize they are being exposed because the residues are often odorless and colorless. When a farmworker comes into contact with the residue, toxic chemicals absorb through her skin and enter her bloodstream. Pesticide drift is another pathway of pesticide exposure for farmworkers, most often the result of aerial spraying. It is more injurious to workers, as it results in a high level of exposure at one time, which can cause immediate health problems. Ruby, a farmworker from California, explained that it is often difficult to avoid. "[The growers] don't let you know and don't put up a sign [when spraying]," she said.

While farmworker women make up about 22 percent of the workforce, they make up 39 percent of workers experiencing acute pesticide poisoning [17]. The farmworker women we interviewed complained they often experienced headaches and eye irritation when pesticides were sprayed near their worksites. A 2012 American Journal of Industrial Medicine study showed farmworker women experience a rate of pesticide-related illness and injury twice as high as that among male farmworkers. Usually pesticide illness occurs as a result of drift from an application site, as well as contact with a treated surface. Women are also more likely to be sprayed as part of a larger group of people, compared to men. The discrepancies in numbers between male and female farmworkers are not easily explained. It is possible that women report pesticide illness more often compared to men.

Women also tend to work more in fruit and nut crops, which are the sites of more pesticide-related injuries, compared to tree fruits for example, which have less pesticide injuries and are dominated by a male work force.

Long-term pesticide exposure for farmworker women can have a substantial effect on reproduction. Studies have linked pesticide exposure to reduced fertility in women and increased likelihood of miscarriage, stillbirth, and birth defects affecting a child's face and limbs. While there is currently not enough evidence to conclusively link pesticide exposure to breast cancer, one study found that farmworker women exposed to two commonly used pesticides –malathion and 2,4D – were more likely to develop breast cancer than unexposed women [18].

The U.S. Environmental Protection Agency's Worker Protection Standard (WPS) requires growers to protect farmworkers from pesticide exposure. Growers must notify workers when they are spraying and prohibit workers from entering the fields during that time. They must restrict access to the sprayed area for a given period, dependent on the chemical, after the pesticide is applied to let the chemicals break down. They are also required to provide pesticide safety training to all farmworkers before they come into contact with treated crops and every five years thereafter. Finally, the Occupational Safety and Health Administration (OSHA) requires growers to provide sinks and toilets for workers on farms with more than 10 workers, which helps lessen the risk of contamination.

Unfortunately, growers often fail to comply with the law and endanger their workers' health as a result. Studies of farmworkers have shown low levels of compliance with the WPS. One study of 102 mothers in Texas who worked in the fields found less than half of the women had been given a pesticide safety training in the previous five years. The same study found many of the women worked without sinks and toilets nearby or available at all. According to data collected by AFOP from thousands of farmworkers across the country who received pesticide safety training, 68 percent had not been trained in pesticide safety previously. Furthermore, 80 percent of participating farmworkers did not have the EPA certification showing they were trained, which is required by law.

Several of the women we interviewed for this publication also stated they had never received training. The women also noted they have experienced inconsistent notification of pesticide applications in the fields where they were working or were sometimes put to work immediately after spraying.

Ivonne, a farmworker in California, told AFOP staff, "They're not allowed to spray where you're working, but I remember when I was working in the cotton field and they sprayed the other side of the field and the pesticide drift would come and get on you anyway."

^[18] Mills, Paul, and Richard Yang. "Breast Cancer Risk in Hispanic Agricultural Workers in California." *International Journal of Occupational and Environmental Health* 2 (2005): 123-32.



A farmworker woman in California listening to a health & safety training.

Despite evidence of low compliance, growers rarely incur fines for failing to follow the WPS. The law is rarely enforced because state enforcement budgets are small and their agencies are severely understaffed. Additionally most farmworkers are unaware of their rights under the WPS.

As mentioned previously, AFOP's data indicates 68 percent of farmworkers trained in WPS had not been trained before, and that 81 percent of farmworkers did not have the EPA certification showing they were trained, as required by law. In another study, EPA interviewed 488 farmworkers and found that 85 percent had never heard of the WPS. Of those who had heard of the standard, a majority was unable to describe it properly [19]. Even those workers aware of their rights are unlikely to report violations to their state regulatory agencies because they do not know whom to contact, fear retaliation by growers, or may be apprehensive about contacting government agencies if they are undocumented. Language may also be a barrier; some states do not have hotlines staffed by Spanish-speakers.

Heat Stress

Heat stress is another common occupational hazard among farmworkers, explains Julia, who is a farmworker in Florida: "You go in to work and the first thing you do is sweat. You work a lot and it affects your vision. The powder on the plants burns your eyes. And there are people who can't bear the heat. They faint."

[19]Larson, A. C. "An Assessment of Worker Training Under the Worker Protection Standard." Washington, DC: U.S. Environmental Protection Agency (2000).

Carmela's Story Continued



Workers are supposed to be trained in pesticide safety within five days of beginning work. Carmela, however, was never trained in pesticide safety until a year ago, when she arrived to the Coalition of Immokalee Workers (CIW) headquarters.

"Sometimes, when we work and they start spraying...your eyes get very red," Carmela said. When asked if the workers are warned before pesticides are being applied, as they are supposed to according to the Worker Protection Standard (WPS), she responded, "Sometimes yes, sometimes no. When they put up the sign that says you can't enter because of the pesticides...I don't think that it's respected here, because the contractors will just go in and say: Let's work! There was a moment when my head really hurt, but I held it in. I told three contractors 'Mv head hurts a little bit' and he brought me Tylenol."

In 2008, a 17-year-old farmworker named Maria Isavel Vasquez Jimenez was tying grape vines at a vineyard in California's Central Valley when she collapsed from heat exhaustion. Because her supervisor prohibited breaks longer than a few minutes, Vasquez did not have time to reach the nearest water cooler, a 10-minute walk away, as temperatures soared to nearly 100 degrees Fahrenheit.

California is one of the only states with a heat stress prevention regulation, requiring access to shade, rest breaks, and drinking water. These rules did not help Vasquez on that day. The farm labor contractor eventually brought the teen to the hospital where her internal body temperature was found to be a life threatening 108 degrees Fahrenheit. She never regained consciousness and died two days later. While waiting in the hospital, Vasquez's 19-year-old fiancé discovered that his partner had been two months pregnant.

Heat-related illnesses and fatalities are all too common farmworkers. **Environments** with among high temperatures, high humidity, and no shade pose the most danger. In general, women and men have the same biological response to heat stress, but pregnant women are more susceptible to its perils. Heat stress also increases the risks of miscarriage and birth defects. The Centers for Disease Control and Prevention identified 102 heat-related deaths among workers in the agricultural sector between the years 1992 and 2006 [20]. This figure is likely an undercount, as it only includes cases in which a doctor explicitly referenced heat stroke on a worker's death certificate.

Workers are at the greatest risk of heat-related illness in the first couple weeks of work because their bodies are not yet adjusted to laboring in high temperatures. Health risks can be reduced by limiting work hours during this period. Workers can also decrease the likelihood of heat stress by taking breaks in the shade, drinking six ounces of water every 15 minutes, and avoiding alcohol and caffeinated beverages.

[20] Luginbuhl, R. C. et al. "Heat-related Deaths Among Crop Workers-United States, 1992–2006." MMWR Morb Mortal Wkly Rep 57.24 (2008): 649–653.



A farmworker woman in California. Farmworkers often wear bandanas to cover their faces from the sun.

Unfortunately, heat stress prevention is often outside of farmworkers' control. In many cases, farmworkers are prohibited from taking sufficient rest breaks or, if they are paid piece rate, do not take them because long rest breaks cut into their already meager wages. Farmworkers regularly report that they are either not provided any drinking water or the water is contaminated.

Trinidad, a farmworker woman in Kettleman City, California, told us, "It doesn't taste like water should. It has a chlorine taste. We end up bringing our own water because the supervisors bring us dirty water."

The most common sign of heat stress is the appearance of small red dots on parts of the skin. Hot working conditions can also cause cramps due to loss of body salts and fluids. When a worker's body temperature exceeds 100.4 degrees Fahrenheit with symptoms including headache, nausea, confusion, weakness, irritability, and heavy sweating, the person is said to be suffering from heat exhaustion. A worker suffering from heat exhaustion should stop working and leave the heat.

The most severe heat-related illness is heat stroke. This occurs when the body temperature exceeds 104 degrees Fahrenheit. Heat stroke can result in confusion, seizures, loss of consciousness, and death. A worker suffering from heat stroke needs immediate emergency medical attention.

Even when farmworkers recognize the signs of heat stress, they are frequently reluctant to take measures to protect their health because they do not want to jeopardize their employment.

"Oftentimes workers will not say they feel sick, because if you simply say 'my head hurts, I don't feel well' they'll stop hiring you," Ivonne, a farmworker in California and mother of four explains. "People make do because they need to work.

OSHA is the federal agency charged with protecting workers from heat stress and most



The short handled hoe, or *el cortito*, causes excruciating back pain to the workers who use it.

other occupational hazards. While there is no federal heat stress prevention regulation, the law recognizes all employers have a "general duty" to maintain a workplace free of recognized hazards. In practice, OSHA has limited ability to enforce heat stress requirements. The agency only cites a few employers each year for heat-related violations, such as not having fresh water to drink for the workers. The states of Washington and California have specific heat exposure regulations for outdoor workers and are able to protect workers more frequently as a result. Enforcement budgets are though, and there are many barriers small. preventing workers from reporting unsafe conditions to government agencies.

Musculoskeletal Disorders

Throughout the 20th century, farmworkers in California were forced to use short-handled hoes that measured just 24 inches in length. The workers gave the tool the unaffectionate nickname of *el cortito* – the little short one.

In order to use the hoes they had to bend over so far that it caused many of them excruciating back pain. After an advocacy campaign and a law suit, the state of California finally banned the short-handled hoe from the fields. The use of the short-handle hoe is now illegal in most of the states, although you still find farmworkers using it, especially in south Texas and in New Mexico.

Although use of the short-handled hoe has been prohibited, farmworkers continue to face injuries related to the hours they spend each day bending and stooping, lifting heavy objects, and engaging in repetitive motions. Their work causes damage to tissue and joints in the limbs, shoulders, neck, and back. The resulting medical problems, referred to as "musculoskeletal disorders" (MSDs) in medical literature, often result in chronic pain for farmworkers. One study of 200 disabled farmworkers found that back pain and other work-related musculoskeletal disorders caused the disability in 35 percent of the individuals [21].

In a national survey of farmworkers, 15 percent reported experiencing musculoskeletal pain every day for at least one week during the previous year. This number rose to 19 percent for those who had been farmworkers for more than nine years [22].

^[21] Villarejo, D, and S L Baron. "The Occupational Health Status of Hired Farm Workers." Occupational medicine (Philadelphia, Pa.) 14.3 (1999): 613–635.

^[22]Steege, A. L., S. Baron, and X. Chen. Occupational Health of Hired Farmworkers in the United States: National Agricultural Workers Survey Occupational Health Supplement, 1999. DHSS (NIOSH) Publication No. 2009-19. 2011.

Guadalupe, a 54-year-old farmworker woman from California, describes the lasting and painful consequences of working on her knees for years while picking lettuce, explaining: "That is why my knees no longer work. I worked in the lettuce fields." Proudly, Guadalupe adds, "I worked harder than a man. I beat them! All the men would watch me, wondering how I could work so much."

Studies of multiple industries have found that women are more vulnerable to MSDs when they are doing the same task as men. There has not yet been enough research on the issue in the agriculture industry, but one study found women were more likely to sustain any type of injury (including MSDs) among farmworkers being paid piece-rate. Piece-rate pay promotes faster work because wages depend on the workers' production level. It may be a risk factor in developing MSDs. Aside from the short-handled hoe ban in California and some other states, there are no MSD prevention regulations to protect farmworkers. Training can help prevent MSDs to some extent, particularly when it comes to teaching workers to lift heavy objects without straining their body. Most of the MSD preventions, however, depend on the employer to provide ergonomically designed tools, containers, and other equipment.

Limited Rights, Limited Health Care Access

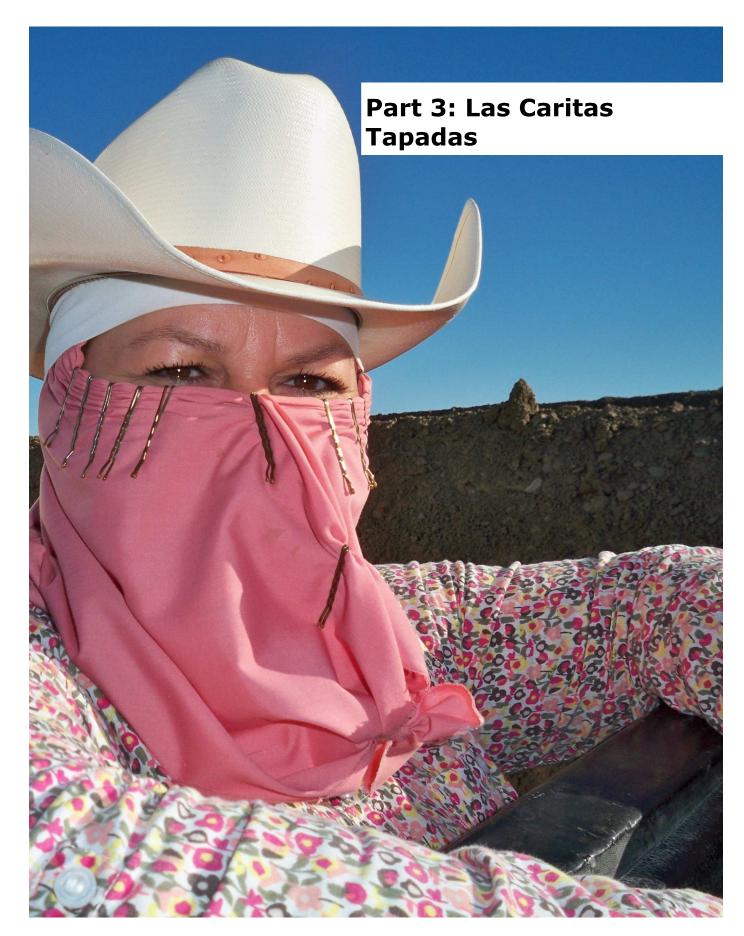
Health and safety protections for agriculture lag far behind those for other industries. This problem is compounded by the many barriers to health care access farmworkers confront, should they suffer occupational illness or injury. In nearly all industries, workers injured on the job are eligible for workers' compensation. In agriculture, 13 states exclude farmworkers from workers' compensation requirements entirely. An additional 25 states offer only limited workers' compensation coverage to injured farmworkers [23]. If agricultural employees suffer an on-the-job injury and must stop working for a long period of time, they may have no source of income and no way to care for their medical needs.

Farms that employ fewer than 10 employees and have not had an active temporary labor camp in the last year are exempt from "enforcement of all rules, regulations, standards, or orders under the Occupational Safety and Health Act." Additionally, workers in other industries are offered at least some protection from retaliation when they raise health and safety concerns to their employer. The National Labor Relations Act prohibits employers from firing or taking other punitive action against workers if two or more raise concerns about conditions on the job, but it does not apply to agriculture. OSHA is also charged with protecting workers who raise health and safety concerns, but these legal protections are often weak, and as mentioned before do not apply to all workers.

Only a handful of these cases each decade lead to worker reinstatement, back pay, or other compensations. Undocumented workers, who represent a large part of the agricultural workforce, are in many cases ineligible for reinstatement or back pay.

Finally, when farmworkers suffer occupational illnesses or injuries, they are likely to confront barriers to accessing medical care. A national survey found 51 percent of farmworkers believed health care was difficult to obtain in the United States; of all farmworkers surveyed, 64 percent had not seen a doctor in at least two years [24]. Nationally, Americans visit the doctor four times a year, on average, according to the National Center for Health Statistics. Poverty, constant relocation, immigration status, and rural isolation all act as barriers to health care access.

[24] Steege, A. L., S. Baron, and X. Chen. Occupational Health of Hired Farmworkers in the United States: National Agricultural Workers Survey Occupational Health Supplement, 1999. DHSS (NIOSH) Publication No. 2009-19. 2011.



Part 3: Las Caritas Tapadas

This goes out to the females,
This is called a tribute to the covered faces.
I will now dedicate my song
with all respect to those ladies
the workforce that hide their faces
and we can see from the early morning hours.

They work the same or sometimes better with the same grip as a man. I would like to send greetings to all. For each one, without knowing her name.
Yuma Arizona, I will leave them to you.

El Rodino, composer from Yuma, Arizona

Farmworker women wear protective clothing in the fields for two purposes. Long pants and shirts with long sleeves, wide brimmed hats, boots, and bandannas that cover their faces are worn to protect workers from the heat and pesticides, but they also serve to make the women look less feminine and less attractive to the prying eyes of other farmworkers and crew leaders. In Arizona, female farmworkers are often referred to as "caritas tapadas" or "covered faces," which is a reference to the bandannas the women use to cover their faces.

According to an extensive study of farmworker women in California's Central Valley by the Southern Poverty Law Center, 80 percent of women had experienced sexual harassment compared to half of the general female U.S. workforce [25]. The same study found the factors that make farmworker women most vulnerable to these abuses are language barriers, extreme poverty, isolation, and discrimination. According to a new report about farmworker women and sexual abuse by Human Rights Watch, "hundreds of thousands of immigrant farmworker women and girls in the United States face a high risk of sexual violence and sexual harassment in their workplaces because U.S. authorities and employers fail to protect them adequately." Because of the many barriers they face, such as fear, poverty, lack of transportation, lack of resources, and shame, most farmworker women will not come forward to get help.

Agriculture is a male-dominated work environment in which more than three-quarters of the workforce are men and 42 percent are unmarried [26].

^[25] Bauer, Mary and Mónica Ramírez. 2010. Injustice on our Plates: Immigrant Women in the U.S. Food Industry Montgomery, AL: The Southern Poverty Law Center

^[26] The National Agricultural Workers Survey, United States Department of Labor, 2005.

While most worksites in Mexico and Central America are gender segregated, women work alongside men in the fields in the United States. They do every job imaginable from hoeing to planting and harvesting. Farmworker women work alongside large crews of men in remote areas, commonly hidden away by leafy brushes and plants. The nature of the work typically requires them to work in vulnerable and exposing physical positions, such as bending over and crouching. Lack of bathrooms also puts the women further at risk, as they then have to relieve themselves near their work sites in public.

Widespread Sexual Abuse

In the 2012 Human Rights Watch report *Cultivating Fear*, sexual abuse and harassment farmworker women experience is defined as "unwanted touching, pressure to engage in sexual relations, and verbal harassment." [27]. Some women face abuse at the hands of the men they work alongside, while many others face abuse by supervisors and crew leaders. The latter abuse reflects the imbalance of power between workers and their employers, crew leaders, and supervisors.

A 1995 report by the U.S. Equal Employment Opportunity Commission (EEOC) uncovered disturbing details about the power plays that occur inside America's agricultural fields. It indicated that hundreds, if not thousands, of women are forced to have sex with supervisors to get or keep jobs every year. The study found that one company's fields in Fresno, California were commonly referred to as *el fil de calzon* or "the field of panties" because the crew leaders and foremen had raped so many women while they worked. On the East Coast, the situation is just as grim. A 1989 article in Florida reported farmworker women often referred to the fields as the "green motel" since sexual harassment and assault were so common there [28].

Farmworker women confront obstacles to reporting abuse, including fear, shame, lack of information about their rights, lack of available resources to help them (such as culturally and linguistically sensitive support groups and educational organizations), poverty, cultural and/or social pressures, language barriers and, for some, their status as undocumented immigrants. Few farmworker women ever come forward to seek justice for the sexual harassment and assault they have suffered.

Silence

Many of the women interviewed for this report shared stories of other women they knew, never themselves, who had to submit to sexual favors to keep their jobs or not be punished by being demoted to the worst earning positions. They noted that women who did not submit to crew leaders' sexual advances sometimes faced retaliation. They explained that as punishment, the boss may place the woman farthest away from the truck collecting the harvest, which means it will take her longer to get to and from her rows resulting in her earning less money.

[27]Human Rights Watch, Cultivating Fear: The Vulnerability of Immigrant Farmworkers in the US to Sexual Violence and Sexual Harassment, 95 (2012).

[28] Margo Harakas. "Tales of the Green Motel." The Sun Sentinel, February 12, 1989.

A 1995 study by Maria Lopez-Treviño explains while women are willing to admit sexual harassment is a problem, they are uncomfortable admitting that they have been harassed themselves [29]. Often it is only the women who have been the most severely harassed and degraded who are willing to come forward. For the others, inappropriate comments, unwanted touching, leering, and even rape by fellow workers and supervisors are just an ordinary part of working in the fields.

Many farmworker women, including those interviewed for this report, do not understand the concept of sexual abuse and sexual harassment as it applies to them. To them, it is merely another burden to bear, another trauma to deal with, another hurdle to cross, just as the many other issues they face on a daily basis. Carmela shared a story of a coworker who suffered sexual advances from an older man she called "the grandpa," but had to continue working in the field.

"She was harassed while we were working in South Carolina," shared Carmela. "We were harvesting tomatoes and I asked her what was wrong. Normally, she enjoyed working in harvesting tomatoes. 'Nothing', she said, 'I just feel discouraged.' She was working really slowly. 'The grandpa crossed the line; he wanted me to go with him. He said he would give me money, that I should leave my husband.' That was the father of the boss who crossed the line with her."

Many farmworker women are unable to speak English or communicate the issues they are confronting to authorities. Lack of education is another factor that inhibits women's ability to speak up against their perpetrators. Illiteracy silences the women and often makes them unaware of their rights.

Immigrant women are often socialized in their home countries to be subservient to men. When they come to the United States, their socio-economic status continues to reinforce that gender-based marginalization. Consequently, when men take advantage of them, especially when those men are in a position of authority, they are uncomfortable or afraid to speak up. Undocumented farmworker women are virtually powerless against heinous sexual attacks from their crew leaders and supervisors. Fear of deportation can be a major factor in why farmworker women do not talk to authorities when experiencing sexual harassment. Instead of risking deportation, they stay silent about injustices committed against them.

U visas can provide relief to those undocumented farmworker women who have experienced sexual abuse. This type of visa allows victims of a crime to reside and work in the country. While the federal government only makes 10,000 of these work authorizations available each year, farmworker women could use the U visas to report sexual abuse knowing that they and their dependents would be safe from deportation.

[29] Rodriguez, Rachel. "The Power of the Collective: Battered Migrant Farmworker Women Creating Safe Spaces." Health Care for Women International 20.4 (1999): 417-26.

Julia's Story



Many women did not want to share personal stories about sexual abuse in the fields, but Julia, a farmworker in Florida, recounted verbal abuse she endured while working.

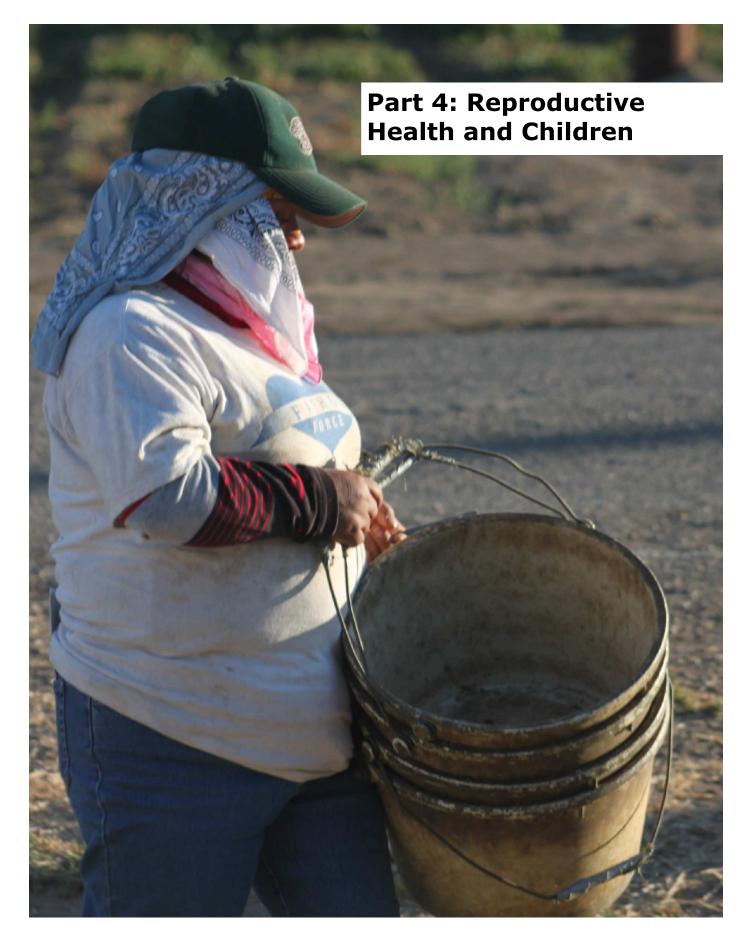
"There were those men who wanted to abuse women. They wanted to. But not me. They did say things to me...but I don't let them [touch me]." These sexual acts are often not singular events, but rather perpetrated against many women who are working in the fields. One perpetrator; often times a supervisor, foreman, or crew leader; can terrorize an entire group of women farmworkers with sexual advances, verbal abuse, and sexual assault.

She also recalled a case where a crew leader grabbed a married woman inappropriately. When her husband found out she explained that "many ugly things happened," and that "the crew leader got killed by the farmworker."

Verbal abuse is also quite common in the fields. Carmela shared that while working in South Carolina, she was yelled at and insulted on a regular basis. Julia, a farmworker from Immokalee, also experienced verbal abuse. "Abuse, like scolding, still exists," she said. "If they see a person who cannot defend themselves they go against them [sic]. A person who doesn't know how to speak well for example, they do it to them. That still exists."

All workers, regardless of immigration status, have the right to protection from sexual harassment in the workplace.

Most women farmworkers feel compelled to live with the abuse. They are too afraid to report crimes committed against them because of stigma, out of economic necessity, and in some cases, fear of deportation, but the emotional and physical consequences of widespread abuse cannot be ignored.



Priscilla's Story



Priscilla, a 21-year-old mother and farmworker in Florida, told AFOP Health & Safety Programs staff she had two children by the time she was 19-years-old.

"It just happened," she explained, "And I'm not with their dad."

Luckily, even though she had to continue working in the fields while she was pregnant to make ends meet, her father was a supervisor. He made sure that his daughter was not directly exposed to toxic chemicals while she worked.

"There was [sic] sometimes he wouldn't let me work," Priscilla explained. "[Especially] on days when they had [sprayed] the pesticides. Even [with] not being exposed to pesticides, the work continues to be dangerous for pregnant woman since repeated bending and heavy lifting can also damage the child."

Part 4: Reproductive Health and Children

Strenuous labor, frequent bending, lifting, and crouching, as well as extreme heat can harm pregnant farmworker women and their fetuses. Yet, quitting work is often not an economically viable option for them. Their families, both at home and abroad, depend on what little income they earn. All of the farmworker women participating in the interviews who have children worked while they were pregnant. Most of the women continued to work up until their eighth or ninth month of pregnancy.

A host of studies have linked agriculture work to birth defects. For example, studies conducted in the United States suggest children conceived during the spring have higher rates of birth defects than children conceived during any other season, especially in agriculturally productive regions of the country. Paternal employment as a pesticide applicator and maternal employment in agriculture has also been associated with rates of malformation, especially malformation, in which a child is born with missing or malformed arms or legs [30]. Malformations in the development of the spinal cord or brain, such as spinal bifida, which can result in lifelong paralysis, and anencephaly, which usually leads to death within the first hours of life, have also been linked to pesticide exposure in farmworkers.

Studies have found links between neural tube defects and home use of pesticides, living near agricultural fields, paternal exposure to pesticides, and maternal occupation as farmworker during early pregnancy. Many currently used pesticide compounds are endocrine disrupters, which have been linked to genital malformation. A number of studies in Europe have found a link between a high incidence of hypospadias, in which the urethra is abnormally placed on the penis and/or cryptorchidism, which refers to the absence of one or both testes, with exposure to agricultural pesticides or a parent's employment in agriculture.

[30] Schwartz, D. A., and J. P. LoGerfo. "Congenital Limb Reduction Defects in the Agricultural Setting." American Journal of Public Health 78.6 (1988): 654-58.

Carmela, who shared her experience of working during her pregnancy, told staff, "I was working in pumpkin fields and I had to bend over all day. I had a lot of [health] problems because the baby was slipping down too far. I [still] worked for two more months, until I was eight months pregnant."

Julia, one of the farmworker women from Florida, also shared a story of an individual who was born with birth defects as a result of pesticide exposure. "I have a friend who was born without his feet. He was born that way, because before they fumigated with a pesticide that was much stronger," she said. "Now the company doesn't allow pregnant women to work."

While some growers do not allow pregnant women to work in the fields out of fear of legal repercussions if the baby is born with health problems, not allowing a woman to work because she is pregnant is not legal. A 1991 lawsuit, UAW v. Johnson Controls Inc., prohibits the discrimination against women who are pregnant or of child-bearing age from being excluded from jobs that can expose the worker to harmful chemicals.

As breadwinners and financial caretakers, most of these women cannot afford to take added time off. Many women hide their pregnancies to continue working and minimize the duration they are without an income. As one farmworker woman put it, "The bills don't wait; the house doesn't wait; the children don't wait."

Miscarriages and Stillbirths

Reproductive health and children's health is of great concern for farmworker women. Many aspects of agricultural work, including prolonged standing, strenuous bending, overexertion, dehydration, pesticide exposure, and poor nutrition increase the chance of miscarriages, premature delivery, fetal malformation, and problems developing after the child is born. Infant mortality among farmworkers is twice that of the national average. Occupational exposures as well as lack of prenatal care can cause serious health problems for mother and child. One study in California showed 24 percent of women in question had at least one miscarriage or stillbirth [31]. Maria, a farmworker who was interviewed from California told staff, "I lost a baby in November. I was pregnant. I don't know what happened. I was working. The doctor told me that I just lost the baby. I don't know why."

^[31] Hansen E, Donohoe M: Health issues of migrant and seasonal farmworkers. Journal of Health Care for the Poor and Underserved 14(2):153-164, 2003.

Maria's Story



Maria Saucedo is a 44-year-old farmworker from Kettleman City, California. When you ask Maria how many children she has, she will say four, two dead and two who lived. Maria suffered a miscarriage just last year. The other child who died was her daughter Ashley, who lived only 10 months after being born with serious birth defects.

"She was born dead. They had to revive her and that's when they took her to Madera to the hospital. They returned her to me the next day, but she was going to die at any moment. Two days. Three Days. Nobody knew. She started eating and I brought her home, but was waiting for her to die at any moment. I stayed up all night with her because I didn't know if she would be dead when I would wake up... or if she would stay asleep. I was so anxious for almost 11 months. I was with her constantly because I just didn't know. I put a tube in her stomach so that she could eat. Two ounces every three hours, and she would get so full because Ashley was so small. When she would get full, it would come back up and the tube would come out. Then you had to remove it and sterilize it."

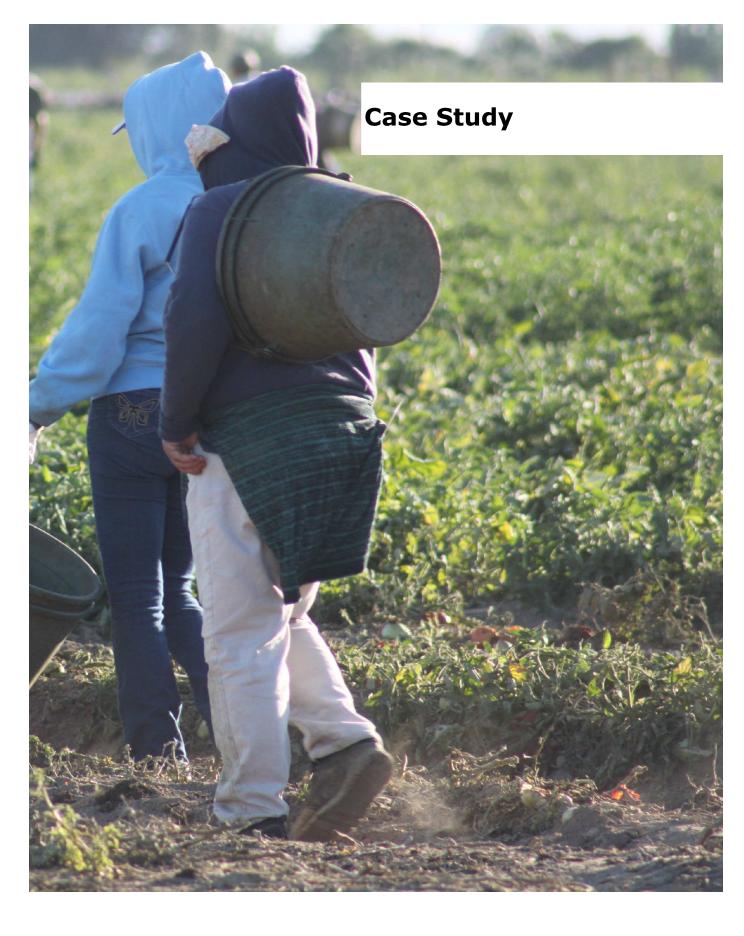
Dangerous Developmental Issues

Growers have become especially careful about pregnant women working in the fields in Florida after baby Carlitos, the child of farmworkers, was born without arms or legs. His mother and two other pregnant farmworker women were exposed to pesticides after they were told to re-enter a field that had just been sprayed with pesticides, before the restricted entry interval. His family successfully sued the company for damages. They are now able to live in a comfortable house and provide for their son. As Elisette, a farmworker interviewed in Florida, shared, "I know one lady whose baby was born with no arms or feet. They gave her a house to help her out, or to keep her quiet."

Other women also shared personal experiences and problems with their children's development and health. Vindiana from California spoke of the emergency heart surgery her child needed to undergo when she was barely one week old.

"She is now two years old," she said. "If they hadn't operated [on] her she would have died. She has two little holes in her heart and one big one in the middle. She is okay now, but she will need two more operations." Her friend, Maria also had a baby with birth defects. Her child, Ashley, only lived 11 months. (To learn more about her experience, read the Case Study on page 41.)

Carlitos and Ashley were born on opposite sides of the country. While the birth of a child should be a joyous occasion, both of their mothers shared the horrifying experience of looking on as doctors tried to revive their babies. Carlitos, whose family lives in Florida, was born without arms or legs. Ashley, who was born near Kettleman City, California, was born blue and unresponsive. In her short life, she lived for only 10 months, she suffered from severe birth defects, both mental and physical. Carlitos and Ashley, born miles apart from each other had this in common: both were born into farmworker families.



Case Study

"[People ask] why do you fight? [I say] why not? Who will do it if not you? I get very sad when I hear about these women whose children have died. I say, thank God that my daughter is healthy, but I get very sad when I hear about what is happening to these people. A solution has to be found. At the very least I know that when I die, I will die happy because I know I tried to do something about this." -MaryLou a 61-year-old former farmworker in Kettleman City, California

The women of Kettleman City, California are fighting for their lives. In the past couple of years, more than 15 children were born with birth defects ranging from heart problems to cleft palates. The women believe they know the cause of their children's illnesses, yet the women say, no one seems to be listening. Kettleman City residents are exposed to dangerous pesticides day-in and day-out. They are exposed as they work in agriculture; their homes are covered in pesticides through drift from nearby fields; and the air, water, and soil all around them is likely contaminated from toxic waste at a dump nearby.

AFOP has learned in interviews with farmworker women in Kettleman City that every participants' children suffers from asthma and allergies, and that many people have died from cancer. Many of the women have miscarried or given birth to children with serious health problems, including birth defects. In a small community of 1,500 migrant and seasonal farmworkers, where nearly half of the residents live below the poverty line, the losses are overwhelming.

The residents are not only exposed to pesticides while they work, they can also smell them in their homes. Pesticide drift settles on their backyards, children's toys, windows, and cars. Pollution in Kettleman City's two municipal wells, which according to the EPA are contaminated with elevated levels of arsenic and benzene, is forcing the residents to buy expensive bottled water for their families. The women interviewed said in the morning when they turn on the faucet, the water looks brown and smells of rotten eggs. According to an article in the *Mother Jones*, there are projects in the works to build a massive natural gas power plant nearby, as well as to deposit 500,000 tons per year of sewage sludge on farmland a few miles from the town [32]. If that was not enough, more than 100 trucks emitting diesel fumes drive by this small community every day.

These environmental hazards alone would likely be enough to make a community ill. Unfortunately, there is more. Waste Management Inc., the nation's largest waste-disposal company, operates a hazardous waste dump three miles from town. The Kettleman Hills landfill is the biggest toxic waste dump west of Alabama, where another Waste Management facility is located. It is also in a low-income community whose residents are mostly minorities.

[32] Leslie, Jacques. "What's Killing the Babies of Kettleman City?" Mother Jones. N.p., n.d. Web. 10 Oct. 2012. http://www.motherjones.com/environment/2010/07/kettleman-city-toxic-birth-defect-cluster.

The toxic waste site in Kettleman Hills accepted 356,000 tons of hazardous waste in 2009, which includes tens of thousands of chemical compounds such as asbestos, pesticides, caustics, petroleum products, and PCBs, which are now illegal and have been linked to cancer and birth defects [33].

Kettleman City is a perfect example of environmental racism. In America's cities and rural communities, it is more often minority and low-income families who suffer the health consequences of a toxic environment. Environmental racism is not a new concept. It was first described by the Council on Environmental Quality's "Annual Report to the President" in 1971, in which the relationship between race, income, and risk of exposure to pollutants was explained. The report opened the eyes of many people who started fighting back. In the 1980s, African-Americans began organizing campaigns against dangerous pesticides that farmworkers were being exposed to; lead poisoning among children in cities; and the zoning of toxic facilities, landfills, industrial complexes, and incinerators in their communities. People also started fighting against the placement of large numbers of nuclear waste dumps proposed on Native American reservations. Two influential studies, one by the U.S. General Accounting Office (USGAO) and the other by the United Church of Christ, also found that African-Americans and other people of color were more likely to live close to hazardous waste sites and facilities than whites. While these injustices have been going on for decades, these same battles still continue.

Maria, a farmworker whose daughter, Ashley, died from complications of birth defects after 10 short months of life, told how the California Department of Health came into her home after investigating the relationship between the toxic chemicals in the environment around Kettleman City, and her daughter's death.

"They said we have done all the studies and we see that everything is fine," Maria shared. "Everything is perfect. I was crying and they asked why I was crying, and I told them, how dare you tell me everything is fine if children are being born with birth defects, when children are drying? How dare you tell me that nothing is going on! How?"

Unfortunately, proving that chemicals in the environment cause these defects is difficult. To find a chemical culprit for the birth defects would require identifying known, dangerous, toxic chemicals in the air, water, and soil. It would also involve finding the pathways those chemicals have into the residents' bodies, such as through the water they drink, through pesticide drift, and through skin absorption while they work.

^[33] Jacques, Leslie. "What's Killing the Babies of Kettleman City?" Mother Jones. N.p., n.d. Web. 10 Oct. 2012. http://www.motherjones.com/environment/2010/07/kettleman-city-toxic-birth-defect-cluster.

Because Kettleman City is so small, state officials are unlikely to deem a large-scale epidemiological study worth the cost. The women interviewed said they are willing to undergo any scientific test to get to the bottom of the problem. Some scientists are calling for a different kind of study, one that looks at the cumulative impact on these impoverished communities of color. Looking at the effects, chemical by chemical, pathway by pathway, does not accurately take into account the environment in which the residents of Kettleman City live. Instead, studies should look at the environment holistically and take into account everything from polluted air and water, to poverty, occupation, poor health care, and proximity to hazardous facilities.

The California Environmental Protection Agency is conducting an assessment of Kettleman City, providing great hope for its residents. Even though right now the odds are stacked against them, the mothers are not ready to give up. Guadalupe, a 54-year-old mother of three, says that the women of Kettleman City would never give up.

"We will not stop. If they think that we will, they are wrong. Until the last day we will go on. We will fight. They should know we will not give up. Until that last day that I am able, I will go on," she promises.





Conclusion

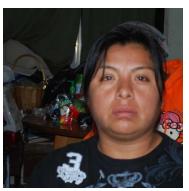
The farmworker women interviewed had many ideas about what could improve their lives, as well as the lives of their families. The following quotes are responses to two questions AFOP Health & Safety Programs staff posed during the focus group interviews. "What can be done to help farmworker women in the U.S.?" and "What do you want the general public to know about the lives of farmworker women?"



Neira, who is 19 and from Florida, says she would like people to know that many farmworker women struggle to make enough money to support their families. Simple things like money to purchase food and pay bills is often hard to come by. Furthermore, many young girls, in her experience, become pregnant at an early age. Immigration reform, would solve many of these problems, according to Neira.



Guadalupe, a 54-year-old farmworker and mother of three, says all she wants is justice. "Justice so that the county looks at the reality of what is happening here. That there will be justice and that it won't be hidden away. I am a person who doesn't like injustice. I love justice. For all the pain that is being imposed on us. For all the deaths that are happening. For everyone who is sick. They should come and knock on our doors to see how much cancer there is and how many people are dying as we speak. Right now there are people sick in bed. And while the country is doing nothing. I have asked [the government] to do a study to know the truth, but they don't want to know the truth because they don't care. Because we are Hispanic."



Ivonne, a farmworker in California with four children, says she wants the men and the supervisors to realize that they are women who can't do the same work a man can. She also wants people to know about what happens to older farmworkers. "I have my parents, both are sick," she shared. "My dad still has to work even though he is sick. If they stop working there is no way of taking care of them. There are no programs to help them."



Trinidad, a 50-year-old farmworker from California with three children, says she wants clean water in the fields. She explains that right now they are only given "putrid" water, and that supervisors expect "a lot of work with very little water."



MaryLou is a 61-years-old farmworker from Florida with one daughter. She lives in a community where the tap water is full of benzine, a petroleum distillate that is flammable, and arsenic. Professionals come into her town and say arsenic and benzine cause cancer, but government bodies tell her that everything is fine. She explains, "I still suffer here. I want them to know that the women from this town are fighters. They ask us why we fight. [I say] why not? Who else is going to do it if not us? I get very sad when I hear stories about the women who have lost babies. I say, thank God my daughter is healthy. A solution has to be found. When I die at least I will know that I have done something."



Maria, who lost her daughter Ashley to birth defects says, "What I want is that my daughter's death is not in vain. I want people to say, 'What happened with Ashley? What happened to her?' And that the children here are not born with birth defects anymore. And [I want others to know] that people keep dying from cancer, and that something needs to be done about it, please! It is urgent. We are in red letters: DANGER! Please, it's urgent! Urgent! Urgent! There are no other words: urgent!"



Rosalba from Florida says: "What I would like is for people that work in the cucumbers and tomatoes [to] have in the back of the truck water that [farmworkers] can actually drink. Good, cool water that is not too hot or that they don't have to wait until they finish their row to drink. And, you know, make sure [that] when they finish that one row, they would take a break. They always try to hurry up and keep working, working, working because ...yes, they want to earn more money, but they have to take care of their health."

Recommendations

Eliminating health disparities and improving the health of farmworker women requires an approach beyond focusing on the health status of the individuals. It requires a focus on the entire population and its surroundings. Adverse health effects come from all types of stressors. Social, economic, cultural, and environmental conditions need to be considered in order to improve their health statuses. To improve the lives of farmworkers it is important for stakeholders to go beyond just public health policy; education, housing, transportation, labor, commerce, treasury, agriculture and education also need to be addressed because they have direct and indirect health impacts on the nation's farmworker population.

- Living wages are fundamental to decreasing stressors farmworker women experience on a daily basis. Under the current piece-rate system farmworker women make an average of \$11,250 per year, which is not enough to support their families.
- When policy makers address the risk of pesticides, they should assume chemicals are dangerous to human health unless scientific evidence clearly shows otherwise. Policy makers should also make efforts to continue to phase out the most hazardous pesticides, including those found to be endocrine disrupters and carcinogens. Integrated pest management and pest control methods that do not involve pesticides, should be promoted to reduce the use of these toxic chemicals.
- Create programs to provide affordable day care for all working families with young children to ensure the children do not have to come into the fields with their mothers. This will protect the children's health and alleviate the mothers' stress regarding their children's care.
- Increase buffer zones between fields and labor housing, schools, and community centers to mitigate the dangers of exposure through pesticide drift.
- Increase educational and outreach efforts for farmworker health and safety with more resources allocated to the enforcement of existing health and safety labor practices. This includes both education about specific health topics, and formal education for farmworkers and their children.
- Many barriers complicate access to health care for farmworkers, including lack of health clinic staff who understand the language and the culture of the individual, the low rate of health insurance coverage, deficient transportation, and insufficient financial resources. Furthermore, there is a lack of research on farmworker health and how to improve it. Increased access to health care will improve the health of farmworkers in the

United States and decrease the everyday stress they face. Mobile health care units and migrant health clinics would also improve health outcomes among farmworkers.

 Researchers should study farmworkers specifically. Most current studies look at farm owners only, or are small in scale and not nationally representative.

What you can do:

- 1) Share these women's stories.
- 2) Join the women of Kettleman City in their pursuit of justice (for more information on how, please contact stackl@afop.org).
- 3) Demand fair labor when making food choices. Know where your food comes from and the labor practices of the companies you support. Prioritize organic and fairly traded agricultural products whenever possible.
- 4) Read the AFOP blog at www.afop.org (http://www.afop.org), and stay up to date by visiting our Twitter page (@AFOPHealth) and our Facebook page (AFOP Health & Safety).
- Ask the members of AFOP to speak at your organization, school, or place of worship. For more information contact schroeder@afop.org.
- 6) When given the opportunity, thank farmworkers for their necessary and important labor.

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