North Carolina
Farmworker Health Facts

Farm labor ranks as one of the top three most dangerous occupations in the United States. In addition to hazards in the fields, farmworkers and their families face unique burdens on their physical and mental health. North Carolina's leading industry is agriculture, yet farmworkers are among the most underserved residents in the state.

Occupational Risks

Injuries on the Job: Injuries in farm work commonly result from repetitive movements and stooping with few breaks, operating dangerous equipment and carrying heavy loads. Farmworkers suffer from high levels of heat stress, musculoskeletal pain and respiratory illness. At least one in four farmworkers report having been injured on the job in their lifetime,[1] and the fatality rate for farmworkers in NC is higher than the national average.[2]

Chemical and Nicotine Exposure: Farmworkers endure the highest rate of toxic chemical injuries and skin disorders of any workers in the country.[3] Nausea, vomiting, cramping and itchy/burning eyes are known short-term effects of acute pesticide poisoning while long-term health effects of pesticide exposure include cancer, neurological disorders, miscarriage, memory loss, and depression.[4] Skin conditions such as dermatitis are not only linked to pesticide exposure but to the handling of other chemical agents and plants. Nationwide, nearly half of farmworkers report having skin rashes.[5] Green tobacco sickness, or nicotine poisoning through the skin, is experienced at least once in a growing season by 24% of tobacco workers.[6] In just one day, workers can absorb the amount of nicotine found in 36 cigarettes.[7]

Extreme Conditions: Farmworkers often labor in adverse weather conditions, including extreme temperatures, rain, and the hot sun.[8] Nationwide, environmental heat is responsible for claiming the lives of 423 workers between 1992-2006; in NC, heat stroke killed seven farmworkers within a five-year period.[9,10]

Poor Field Sanitation: Employers who have ten or fewer workers are not required by law to provide access to toilets and clean water during the long work day, and some employers ignore existing field sanitation regulations.[8] Workers have resorted to hand-washing and drinking water from irrigation ditches and ponds containing run-off from pesticide-ridden fields when there is no other water source.[8]

Substandard Housing: A lack of clean facilities for food preparation, bathing after work, and washing laundry, plus a susceptibility to pesticide drift from nearby fields, exposes farmworker families to the "take-home" affect of pesticides.[4] Researchers found increased levels of pesticides in NC farmworker children compared with the general population.[4] Lack of clean water is the likely cause of very high rates of parasites and gastrointestinal infections among farmworker families.[11] Overcrowded housing is common and increases the risk of infectious diseases and other health problems.[8,12]

"Farmworkers feed the world. I think if everybody knows the importance of farmworkers they will want to keep them healthy."

--Guillermo Noguera, Health Outreach Coordinator, Columbus County, NC

General Health Issues

Chronic Illness: Farmworkers suffer from higher blood pressure compared with the general public, especially for men and women aged 20-44.[13] This puts them at increased risk for heart disease and diabetes.[5]

Food Insecurity: Nearly five out of ten farmworker households in NC cannot afford enough food for their families.[14]

Women's Health: Nationwide, less than half of pregnant women in farmworker families interviewed in 2000 had received health care during their first trimester.[15]

Children's Health: 53% of children in migrant farmworker families in Eastern North Carolina have an unmet medical need, and the need is proportionally higher for preschool aged children.[16]

Infectious Diseases: Nationally, farmworkers face six times the risk of other groups of contracting tuberculosis.[17] The high incidences of HIV and other sexually transmitted diseases in farmworkers are attributed by some to isolation, poverty, and limited knowledge about how a disease is transmitted.[5]

Oral Health: Dental problems present a serious unmet health need for farmworkers and their children. Nearly one-third of NC farmworkers in a study sample have missing and/or fractured teeth, but only one in five had seen a dentist within the past year.[18]

Mental Health: Nationally, 40% of farmworkers are depressed and 30% experience anxiety.[19] Causes of strain on mental health include isolation, limited social support, separation from family members, job and financial stress, poor housing and unhealthy working environments.

Barriers to Care

Of the more than 150,000 farmworkers in the state, less than 20% receive health care.[12, 20] The health needs of the state's farmworker families persist due in part to several barriers, most of which are non-financial. 20% of farmworkers in Eastern NC lack information about where to go for health care.[16]

Frequent Mobility: About one-third of farmworkers change residence over the summer, moving within and out of the state for employment.[21] Mobility is a barrier to receiving long-term care and time-sensitive health services such as prenatal care for women and treatment for chronic illness.

Transportation: In Eastern NC, 80% of farmworker families with children lack transportation.[16] Many do not have a driver's license or car insurance and are often dependent on their employer to drive them to medical facilities.[22]

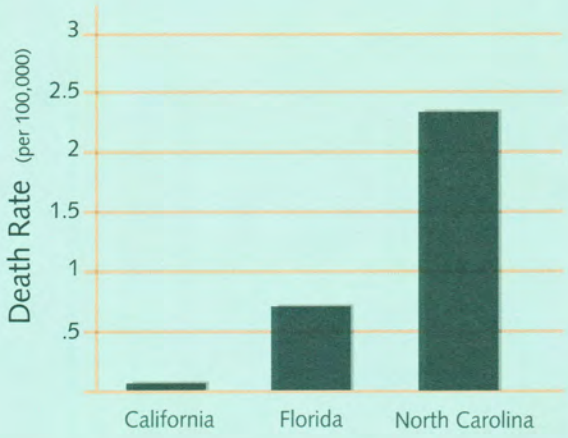
Language: The majority of NC farmworkers are Spanish-speaking (94%),[12] and the primary language for at least 10-15% of workers in NC is an indigenous language.[5] Few health delivery sites in NC have adequate Spanish language resources, let alone the capacity for other languages.[18]

Heat Fatalities Among Farmworkers

in three major agricultural states (1992-2006)

Between 1992-2006, there were 423 reported worker deaths from environmental heat in the U.S. 24% of these were in agriculture and related industries.

Source: Morbidity and Mortality Weekly Report (2008). *Heat-related deaths among crop workers, United States, 1992-2006.*



Insurance: 85% of farmworkers in the U.S. have no health insurance, and nine out of ten children in farmworker families are uninsured.[15] The majority of these workers do not qualify for social services because of immigration status, even though many live significantly below the federal poverty line.[5]

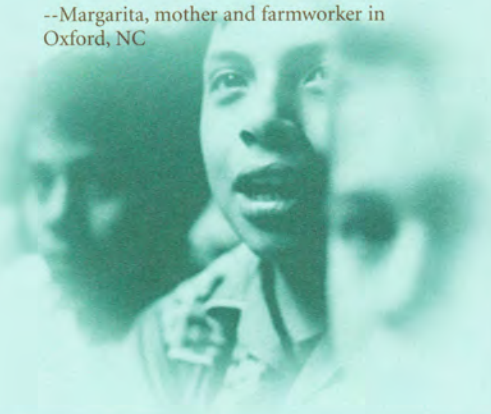
Workers' Compensation: The majority of NC farmworkers are not covered by workers' compensation. Only agricultural employers that hire H2A workers or more than ten employees are required to provide the coverage.

Fear: Anti-immigrant sentiment may prevent workers from getting treatment for illness or injury, necessary follow-up attention, or routine health care.

Culture: Cultural beliefs and perceptions of the U.S. health care system might cause a delay in farmworkers seeking medical care and some discrepancies in types of treatment.[5]

"Many farmworkers come for the first time, and don't know there is a clinic, don't know there is a health outreach worker who can help them…It's very important, not just for one person but for the whole community."

--Margarita, mother and farmworker in Oxford, NC



Sources 1 Mines, R., et al, 2001; 2 US Dept of Ag, 1999; 3 Natl Institute for Occupational Safety & Health, 2004; 4 McCauley, L. et al, 2006; 5 Arcury,T. & Quandt, S., 2007; 6 Arcury, T. et al, 2001; 7 Hipke, M.E., 1993; 8 National Center for Farmworker Health, n.d.; 9 MMWR, Centers for Disease Control & Prevention, 2008; 10 Mirabelli, M.C. & Richardson, D.B., 2005; 11 Cielselki, S.D. et al, 1992; 12 Triantafillou, S.A., 2003; 13 Villarejo, D. et al, 2000; 14 Quandt, S. et al, 2006; 15 Rosenbaum, S. & Shin, P., 2005; 16 Weathers, A.. et al, 2004; 17 MMWR, Centers for Disease Control & Prevention, 1992; 18 Quandt, S.A. et al, 2007; 19 Hovey, J.D. & Magaña, G.G., 2000; 20 Larson, A., 2000; 21 Quandt, S.A. et al, 2002; 22 National Agricultural Workers Survey 2001-2002, US Dept of Labor. Full citations available at www.ncfarmworkers.org.
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