

Overview of Agricultural Worker Health Study

California's agricultural output accounts for a third of the country's vegetables and two-thirds of the country's fruits and nuts. California is the leading state for cash farm receipts, contributing over 13 percent of the nation's total agricultural value. The state's 77,100 farms and ranches received a total of \$50.13 billion for their output in 2017, and between 1/3 and 1/2 of all agricultural workers, roughly 500,000 - 800,000, in America reside in California.

Approximately 75% of California's agricultural workers are undocumented. In recent years, the average age of foreign-born agricultural workers has risen due mainly from fewer young immigrants entering agriculture. Overall, the average age of immigrant agricultural workers rose by 3 years between 2006 and 2014, and then by 3 more years between 2014 and 2017. By contrast, the average age for U.S.-born agricultural workers has remained roughly constant over this time. The share of agricultural workers who are women declined in 2006-09, from 20.3 percent to 18.6 percent, but has since climbed to 25.4 percent (in 2017). The fact that the female share fell during the Great Recession and rose during the recovery is consistent with men moving into agriculture as employment in the nonfarm economy declines, and out of agriculture as nonfarm job prospects improve.

Trends in immigration patterns are only one factor impacting the future of the agricultural workforce. Advances in robotics and other technologies promises to fundamentally shift the industry, and with it the demands on the workforce. In addition, climate scenarios suggest that climate change will lower domestic production of corn, soybeans, and wheat relative to the past three decades, thus altering both the composition of the crops and the workforce. The rise of temperatures is likely to pose a serious threat to agricultural workers, especially vulnerable groups such as pregnant women and older workers.

Understanding the health of the agricultural workforce

The more comprehensive assessment of California agricultural workers, the California Agricultural Health Workers Survey (CAWHS), was conducted in 1999. The study's publication, *Suffering in Silence*, concluded nearly 70 percent lacked any form of health insurance, and one third of males said that they had never been to a doctor or clinic in their lives (half had never been to a dentist). Since that time, there have been a number of studies looking at the specific health conditions, finding higher levels of gastric cancer in California Hispanic agricultural workers in the citrus fruit industry and among those who work in field treated with different pesticides and herbicides, rates of obesity and diabetes, high blood pressure, and other chronic conditions. Only 34% of agricultural workers report having had a past-year dental visit due primarily to lack of dental insurance, and the vast majority reported a perceived dental need. And recent studies have reported an increase in heat related problems including headaches, dizziness/fainting, respiratory problems, vomiting, and exacerbated high or low blood pressure.

In addition, a number of recent studies have identified the lack of access to healthcare a contributor to poor health. The barriers to accessing healthcare include a lack of health insurance, inability to pay, language barriers, long waiting times, and rushed encounters with providers. Studies also suggest that many agriculture workers try home remedies first, and only seek western medical care

when they conclude that these home remedies were ineffective. Access to routine health services was improved when there was support from indigenous interpreters at clinics. Access to care was also facilitated by peer-led health education and coaching via charlas (talking circles) and promotora-led education interventions. Undocumented agricultural workers' households were roughly half as likely to use Medicaid as documented households, and undocumented households' participation was especially responsive to the presence of children.

Despite the focus in recent years on the health of agricultural workers and access to care, there has been no comprehensive study addressing agricultural worker health since the initial CAWHS study. Given the changes that have occurred over the past 20 years in the working conditions on farms, including changes in crop mixes, technology, climate change, and pesticide use, and the changes in the access to care with the advent of the Affordable Care Act, we propose to conduct a comprehensive study on agricultural health in California. The aim of the study will be to assess the health of agricultural workers using comparable measures to those used in the initial farm study, but extend that previous study by focusing on the long term health of agricultural workers, the extent to which agricultural workers can access high quality health care, and the extent to which the workforce is prepared to meet the changing demands. The information developed by this study will be used to develop effective policy and healthcare interventions that will improve the lives of agricultural workers in California and beyond.