

### Poster #3

#### **University of California, Davis Farmer Health Study: 1993-2006**

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**Introduction:** Although California is the leading agricultural state, few health studies have considered the broad range of Californian farmers. The UC Davis Farmer Health Study followed a randomly chosen state-wide cohort with an aim to identify the prevalence and risk factors for acute and chronic disease.

**Methods:** 1,947 California farmers were interviewed by telephone in 1993, with follow-up surveys in 1998 (N=1349) and 2004 (N=866). Sub-studies using pulmonary function testing were completed in 1996 and 2003. Subjects answered questions on farming tasks, environmental exposures, and their health status. Both cross-sectional and longitudinal analyses tested associations between risk factors and health outcomes, adjusting for age and relevant covariates. Death rates were compared between farmers and the general California population.

**Results:** A selection of major findings follow: Farming time in dusty conditions was independently associated with the prevalence of persistent wheeze in 1993 (high dust exposure OR = 1.9, (95% CI = 1.1-3.3), and persistent wheeze was associated with a decline in work ability ( $p=0.0001$ ) in a multivariate model. Those with respiratory symptoms in 1993 significantly reduced time in dust by 14% (95% CI = 7.2-20.7), the symptomless only by 3% (95% CI = 0.5-4.7). Sprains and strains were the most common injury (42.9%). Risk factors for injury include previous injury, medium or high exertion level and workshop activity. Of 1797 tracked subjects, 233 (13%) were deceased by 2005. In 1998, adjusting for age, 35 male deaths were expected while only 22 were observed.

**Conclusions:** Major risk factors exist for farmers, especially with respect to injury and respiratory health. Effective communication of these risks and preventative measures must be the next priority.

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### Poster #4

#### **Farmworker Injury Research To Practice: Farmworker Injury Data Translated Into Occupational Health Training For Migrant Health Center Clinicians**

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**Background:** Results from Northeast Center research indicate that while a substantial proportion of adult migrant farmworker visits to health centers involve a work-related injury or illness, nearly 50% of clinicians report never having had any training in occupational medicine.

**Objectives:** Northeast Center researchers translated an extensive body of migrant farmworker injury and occupational illness data collected over 5 years and 7 states into an occupational medicine training curriculum specifically targeted to farmworkers. A manual developed collaboratively with the Migrant Clinician's Network is the first of its kind in the nation. The current presentation relates to the formative evaluation of this manual.

**Methods:** Interviews were carried out with 8 Northeast migrant clinicians to determine the optimal format and content for daily use. A prototype occupational health-training module was then developed and presented at a conference of migrant health professionals. Once a final draft was approved, a formal evaluation was undertaken to ascertain the level of use and degree of usefulness in a number of Northeastern migrant health centers. The manual was disseminated to 30 providers at several migrant clinics; some providers received a one-day training in its use by an occupational medicine physician, to others with no associated training, allowing researchers to also determine the optimal dissemination method.

**Results:** Important content sections identified by clinicians for inclusion were: Virtual farm visits, including extensive photos and common injuries and conditions (provided in the Commodity Profiles section), Diagnosis and Treatment of farmworker injuries, Cultural Competency, Workers Compensations Forms, Patient Education.

**Conclusions:** Evaluation results indicate that the NEC-MCN Clinician's Manual is useful to Migrant Clinicians,

# **HEALTH & SAFETY IN WESTERN AGRICULTURE:**

## **Research to Practice**



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A black and white photograph of a tall, cylindrical water tower. The word "UCDAVIS" is printed in large, bold, capital letters on the top circular platform. The tower has a lattice-like internal structure made of white poles. It is surrounded by various trees and bushes, with a prominent leafy branch in the foreground on the right side.

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