



# AgHealth News

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University of California, Davis

## Health & Safety in Western Agriculture conference to take place along the shoreline of Monterey Bay National Marine Sanctuary

The Western states agricultural health and safety conference, Health & Safety in Western Agriculture: Research to Practice, is set for Sept. 20–22 at the beautiful Asilomar Conference Grounds in Pacific Grove, Calif. Sponsored by the Western Center for Agricultural Health and Safety (WCAHS), the Pacific Northwest Agricultural Safety and Health Center (PNASH), and the National Institute for Occupational Safety and Health (NIOSH), the conference includes five thematic sessions focusing on r2p (research to practice). R2p is a recent NIOSH initiative encouraging the transfer and translation of research findings, technologies and information into highly effective prevention practices and products that can be adopted in the workplace.

On-site conference registration, room check-in and poster set up are scheduled to take place after 1 p.m. on Wednesday, Sept. 20. At 6:30 p.m., conference attendees are invited to enjoy a pre-meeting barbecue dinner at 6:30 p.m. at the Asilomar Fire Pit on the beach boardwalk.

On Thursday evening, Sept. 21, conference participants are invited to the Steinbeck Center for a dinner and a tour. The Steinbeck Center presents the life of Nobel Prize-  
(see **Asilomar** on page 2)



Photo by Marc Schenker

*Strawberry pickers in Monterey County.*

## Large-scale agricultural safety and acculturation study taking place in Mendota

By Maria Stoecklin-Marois

Investigators at the Western Center for Agricultural Health and Safety (WCAHS) are conducting a comprehensive study in Mendota, Calif., to better understand and reduce health risks and related illnesses in hired farm workers and their families. The study, titled “Mexican Immigration to California: Agricultural Safety and Acculturation” (MICASA), is taking place in the community of Mendota because of its large proportion of immigrants from Mexico and Central America and very high proportion of agricultural workers.

“Agricultural workers face increased risks of respiratory disease, injuries, musculoskeletal problems, cancer, reproductive disorders, infectious diseases and stress-related mental health disorders,” said

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## Asilomar from page 1

winning author John Steinbeck, his writings and his characters. Different nationalities play an important role in the Steinbeck Center because the author himself saw the Mexican, Chinese, Italian, Portuguese and other ethnic groups as dignified people and important contributors to the community portrayed in his books *East of Eden*, *Tortilla Flat*, *Forgotten Village* and *Cannery Row*. Utilizing diorama, innovative exhibits, changing displays and other media, the wonder and beauty of Steinbeck's creativity is dramatized so that everyone can enjoy and appreciate the author, his works and his environment. The museum houses the original truck, Rocinante, that John Steinbeck drove while writing *Travels with Charley*.



For those who'd like to do a bit more exploring of the Salinas Valley agricultural area and are planning to stay an additional night, an optional post-conference farm tour is offered on Saturday, Sept. 23, for an additional cost of \$30, which includes lunch and transportation.

Originally founded in 1913 as the Western conference center for the YWCA, Asilomar Conference Center is nestled along the shoreline of

the Monterey Bay National Marine Sanctuary on 107 acres of forest and dunes. For more information on what to do and see when leisure time permits, visit [www.visitasilomar.com](http://www.visitasilomar.com) on the Web.

**Dates to remember:** Please register before August 13 to get the lowest conference rate. Abstract submissions must be received by August 20.

For more information on the conference, as well as conference registration details and the hotel registration form, a downloadable conference brochure is available at <http://.agcenter.ucdavis.edu>. If you have questions about the conference and/or abstract submission guidelines, call the Western Center for Agricultural Health and Safety at (530) 752-4050, or e-mail [agcenter@ucdavis.edu](mailto:agcenter@ucdavis.edu).

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## Western Center receives grant to help reduce tractor accidents

**T**ractor accidents, which annually kill more than 250 farmers, family members and farm employees, are the focus of a nationwide effort to reduce these preventable tragedies in agriculture.

The Western Center for Agricultural Health and Safety (WCAHS) is one of 10 university-based research centers collaborating on the research initiative, being supported by the National Institute for Occupational Safety and Health (NIOSH). The \$504,000 grant will allow these centers to study tractor-related incidents and explore new techniques for promoting safer tractor use.

"Tractor-associated injuries and deaths affect every agricultural region of the country," said WCAHS Director Marc Schenker, M.D.,

M.P.H. "These funds allow our center to participate in this nationwide effort from a California perspective, and the results will be relevant to the ways agriculture is practiced in this state."

For its part in the initiative, WCAHS will be working with NIOSH agricultural centers in Colorado, Iowa, Kentucky and North Carolina to determine the costs of injuries to tractor operators who are involved in overturn accidents and highway collisions. They will also identify who bears the expense of tractor injuries and accidents, using recently collected



*Old tractor with no rollover protection (ROP)*

data on the frequency and severity of injuries related to tractor overturn accidents. This will yield information on the financial losses that could be averted by either retrofitting existing tractors or replacing them with equipment that protects

(See **Tractors** on page 6)

# National Occupational Research Agenda (NORA) plans for next decade

**F**or the past 10 years the National Occupational Research Agenda (NORA), established by the National Institute of Safety and Health (NIOSH), has served as a framework to guide occupational safety and health research—not only for NIOSH but for the entire nation. Before NORA, no national research agenda existed in the field of occupational safety and health (including agriculture), and no research agenda in any field had captured such broad input and consensus. Numerous partners, including workers, professional organizations, organized labor, employers, researchers, health professionals, government officials and elected representatives provided significant input to address future issues in workplace safety and health.

From December 2005 to March 2006, NORA hosted townhall meetings in cities around the country to seek input from individuals and organizations on important occupational safety and health issues,

such as diseases, injuries, exposures, populations at risk and needs of the occupational safety and health system. All meetings discussed regional issues, and some focused on specific sector topics. Input was also requested on the types of research and partners needed to make a difference. This input will be used to create research agendas for the next decade.



to provide new comparability in statistics about business activity across North America.

“The first nine years of NORA have demonstrated the importance of strategic research partnerships in providing safe and healthy workplaces. NORA now seeks to build on past successes while preparing for new challenges in designing research to address the 21st Century workplace,” said John Howard, M.D., director of the National Institute for Occupational Safety and Health (NIOSH). “I am committed to keeping NORA vibrant and responsive to ongoing changes in the U.S. workplace, and look forward to the increased synergy that our efforts working together will create.”

The NORA Web site, at [www.cdc.gov/niosh/nora/](http://www.cdc.gov/niosh/nora/), offers an electronic feedback form where you can describe the challenges that you perceive, and offer insight on how the occupational safety and health community can address them.

## Correction

An article featuring Justice Cruz Reynoso in the Fall 2005 (Vol. 14 No. 4) issue of the WCAHS newsletter mistakenly indicated that the short-handled hoe could legally be used in organic agriculture. In fact, the short-handled hoe and other short-handled hand tools are prohibited for weeding and thinning in all commercial agriculture in California (California Code of Regulations, Subchapter 7, Group 3, Article 13, Section 3456). We regret any confusion this error caused.

In partnership with the National Safety Council, NIOSH celebrated the success of the first decade of NORA and launched its second decade at the NORA Symposium 2006 on April 18–20, in Washington, D.C. Through plenary speakers, awards, presentations of scientific results and workshops, NIOSH presented its next decade of NORA which will use a sector-based approach to better guide research results to improved practice in workplaces.

Agriculture is one of the eight NORA sector groups that will be utilized. The sector groups are based on the North American Industry Classification System (NAICS). The NAICS was developed jointly by the United States, Canada and Mexico

*“I am committed to keeping NORA vibrant and responsive to ongoing changes in the U.S. workplace, and look forward to the increased synergy that our efforts working together will create.”*

—John Howard, M.D.

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**Mendota** from page 1

Marc B. Schenker, M.D. M.P.H., director of the Western Center for Agricultural Health and

Safety (WCAHS) at UC Davis and principal investigator of the study. “Our study will assess exposure to dust, toxic chemicals, and other agricultural-related risk factors

In the second stage, the field team visited each dwelling and obtained information on the individuals residing there. At each address, the enumerators obtained a list of all individuals in the household, their relationship to the head of household (spouse, adult child, parent, sibling), age and gender of all individuals, those who were engaged in farm work, nationality, and number

The Mendota-based field team includes Kathleen O’Connor, field coordinator with the UC Davis Department of Public Health Sciences, and eight interviewers. Dr. O’Connor and the interviewers all live in Mendota and the surrounding areas. Currently, the field team is conducting interviews with the heads of household and spouses of 400 families that were enumerated in Mendota. Participants include men and women between the ages



MICASA field team with Dr. Schenker. From left, Elma Espinoza, Alex Cervantes, Ana Cervantes, Kathleen O’Connor, Marc Schenker. Not pictured: Analuz Giron Torres, Rosie Valdovinos, Verence Andrade Dolores Aceves, Jose Zavala and Israel Rosalys.

that contribute to disease and will also develop recommendations to improve farm worker health.”

One key goal of the study is to create a community-based sample of farm worker families living in the community of Mendota. To accomplish this goal, an enumeration of households in randomly selected census blocks was conducted in the summer of 2005. In the first stage of the study, the Mendota field team mapped all dwellings, including all housing, temporary housing, informal structures and vehicles in which individuals were living.

of children under 18 years living in the household. Households with no hired farm workers were mapped, but not enumerated. In all, the field team enumerated 2,441 individuals, living in 751 households in Mendota. Of these, 85.8 percent were currently engaged in farm work—66 percent were men and 34 percent were women. More than half were Mexican born (55 percent), 35 percent were from Central America (primarily El Salvador and Honduras), and 10 percent were born in the United States.

*One key goal of the study is to create a community-based sample of farm worker families living in the community of Mendota.*

of 18 and 55 years who identify themselves as Mexican, Central or South American, have been engaged in farm work for at least 45 days in the last year, and reside in Mendota at the time of the baseline interview. The interviewers are collecting information on demographics, occupational and environmental risk factors, diet and obesity, food handling practices, food security, acculturation, smoking status, and health outcomes, including respiratory health, injuries and musculoskeletal problems, mental health and reproductive health.

Over the summer of 2006, the field team will conduct lung function tests among adult participants to

**(Mendota** continued on page 5)

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**Mendota** *from page 4*

assess respiratory symptoms. Colleagues at UCSF will also assess oral health and provide dental exams for the women and all children in each participating household.

In the fall of 2006, investigators will begin interviewing women about children aged 5-12 in the household, with a focus on diet, obesity, respiratory health, and agricultural work. Additionally, a short questionnaire will be administered to the older children (10-12 years) primarily asking about diet and physical activity.

Through this study a Community Advisory Committee was formed, composed of community representatives, county health department officials, local health professionals, and farm worker advocates. The advisory committee provides an avenue for advice and feedback to the UC Davis investigators and the local research team about the community and any concerns that might arise during the course of the study. It also affords the opportunity to share progress, study results and develop appropriate strategies for disseminating information within the community. The advisory committee meets two to three times per year in Mendota and is chaired by Don Villarejo, founding executive director of the California Institute for Rural Studies.

The investigators hope that the study will provide a better understanding of the health needs of hired farm workers as well as producing scientific information that can be used to design intervention programs and data that will serve as a basis for influencing public policy to target the needs of this underserved population.



*Downtown Mendota*



**S**andra Freeland (above right, with her daughter Joanna) joined the Western Center for Agricultural Health and Safety on Feb. 13, after spending the last nine years on campus, most recently as assistant to the vice chancellor of university relations and the associate vice chancellor of government and community relations at UC Davis. She grew up Sandra Martinez in Winters, Calif., within one of the many families from the Almeria area of Spain that immigrated to this area in the early 1900s. Sandy has two daughters, Joanna and Gina; a son, Adam; and two granddaughters, Baylee and Scarlett. She comes to WCAHS with an educational and professional background in project and office management, as well as years of childhood agricultural experience cutting apricots, packing peaches, working on the family almond hauler and, as an adult, suckering grape vines on her own Mendocino County vineyard. Sandy can be reached by e-mail at [slfreeland@ucdavis.edu](mailto:slfreeland@ucdavis.edu).



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**Tractors** *from page 2*

the driver in the event of a rollover accident.

UC Davis has a long history in research aimed at preventing tractor-related injuries and deaths. In 1956, a research team including UC Davis agricultural engineer Coby Lorenzen designed and successfully tested the first agricultural tractor rollover protective structure. Such structures, when used with seatbelts, have proven effective at virtually eliminating fatalities and serious injuries. However, it is estimated that half of the approximately 4.7 million agricultural tractors in the United States lack rollover protective structures.

In addition to the cost assessment to be conducted by WCAHS and

its partner centers, other research funded through this new initiative will include:

- testing community-based social marketing related to tractor safety at 36 sites across the country; including in the Davis area, assessing the impact of changes in rollover protective structure standards, regulations and technology on the future availability of such devices;
- exploring possible financial incentives to retrofit tractors with rollover protective structures; and
- creating a database of potential partners to help guide the planned national campaign and launching an intranet to

aid communication about tractor safety among the research centers.

For more information on the tractor accident study, call Sandy Freeland at (530) 752-5253, or send an e-mail message to [slfreeland@ucdavis.edu](mailto:slfreeland@ucdavis.edu).

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