



Western Center for Agricultural Health and Safety • University of California, Davis

WCAHS' Planning Retreat determines 2014 objectives

Researchers, staff and stakeholders, including growers, professional associations, government and non-government agricultural representatives met on Sept. 18 for WCAHS' Strategic Planning Retreat. Retreat objectives included solicitation of input from the group of 35 about the center's current and potential outreach, training and research projects.

Center Director Marc Schenker, M.D., MPH, welcomed participants and gave a NIOSH update. He introduced Cal/OSHA Chief Ellen Widess, J.D., who discussed agricultural personnel transport – the need for better regulation, education and enforcement; and the California heat standard.

Two 90-minute panel presentation/discussion periods included a facilitator and three speakers each.

Engineering Technologies: Potential Impact to Labor

Facilitator *Stavros Vougioukas*, assistant professor in the UC Davis Department of Biological and Agricultural Engineering, presented an overview of his work with the mechanization and automation of specialty crops in high-value crop production.

Ken Giles, also a UC Davis professor in the Department of Biological and Agricultural Engineering, discussed his passion – unmanned aerial vehicles (UAVs), or “drones.” Giles suggests feasibility of commercial UAVs for aerial spraying lies in specialty crops in small, complex environments.

Tony Turkovich, of Button & Turkovich, commented on the value he sees for UAVs/drones today, specifically with irrigation of his company's 6,000 acres. He explained that “grower reality” centers on: 1) heat illness prevention standards and their unrealistic application for every farming situation. For example, regulatory rules are designed for crews, but growers deal with not only

crews, but also irrigators – spending sometimes only minutes in a location, then into the pickup and off to another location; and 2) a responsibility that is totally on the employer, when all the employer can do is train and write disciplinary actions.

Bill Krycia, MPH, CIH, regional manager for Cal/OSHA Enforcement, briefly touched on several concerns: the use of seat belts; falls and accidents (machinery and trees); under-evaluation of tractor transportation units; and the safety issues of night work.

WCAHS' Planning Retreat continued on page 2

WCAHS welcomes Zanobini as its newest EAB member

Chris Zanobini is the CEO of Ag Association Management Services Inc. (AAMSI), based in Sacramento. He has accepted the invitation to serve on WCAHS' EAB, having participated in the previous two WCAHS annual Strategic Planning Retreats with acclaim.

In his role as CEO, Zanobini oversees all operations for AAMSI and serves as the lead for California Grain and Feed, California Seed, California Pear Board, Cherry Board, the Kiwifruit Administrative Committee, and the California Association of Nurseries and Garden Centers. Throughout his career, Zanobini has served in many roles with industry groups, including California Grown, the World Apple and Pear Association, the Ag Issues Forum, the Ag Export Council, the Alliance for



Food and Farming, the California State Fair Ag Advisory Committee and Future Farmers Foundation. Prior to his role in organizational leadership, he was director of floral sales for Dierberg's Markets in St. Louis, MO, and as general manager and owner of wholesale and retail flower operations in California.

Zanobini graduated from UC Davis, with a degree in plant science and an emphasis in agricultural management. He holds a masters degree in business administration, emphasizing marketing and management, from the UC Davis Graduate School of Management.



Engineering Technologies Panel: Standing, from left, Bill Krycia, Stavros Vougioukas, Ken Giles, and Tony Turkovich.

Preventing Heat Illness: Engineering and Behaviors

Facilitator *Philip Harber, M.D., MPH*, professor of public health at the University of Arizona College of Public Health, and WCAHS EAB member, pointed out that heat/heat illness means different things to different people and groups. "You can train people, but will they be motivated? Will they do it?" he asked. He added that multidisciplinary centers, such as the WCAHS, must also be trans-disciplinary, using team science.

Uwe Reischl, a professor in the Department of Community and Environmental Health at Boise State University, presented his work on developing a light, relatively inexpensive vest that reduces the sun's impact for outdoor workers. He is currently field-testing the vest in Modesto, Calif., with a group of farm workers.

Patty Rominger, safety and compliance officer for Rominger Brothers Farms, explained the company's process in reach-



Heat Illness Prevention Panel: From left, Patty Rominger, Uwe Reischl, Phil Harber, Guadalupe "Lupe" Sandoval.

ing a successful shade structure and fresh water compliance. They found it necessary to build a 24-person shade structure and also provide individual umbrellas to work-

ers. They learned that conducting daily trainings and reminders about the effect of heat stress in the field during the summer months have significantly improved worker compliance. "They get it," she said.



Heat Illness Prevention Breakout Session. From left, facing camera: Marc Schenker, Bill Krycia, Alejandro Castaneda, Tony Turkovich, Lupe Sandoval, Patty Rominger. Standing: Jose Gutierrez. Seated, backs to camera: Diane Mitchell, Deborah Bennett, Anne Katten, John Packham, and Roberto Funes Abrahao.

Lupe Sandoval, managing director of California Farm Labor Contractor Association, stated that Cal/OSHA needs more enforcement and increased outreach activities. He addressed workforce factors, including dealing with an immigrant workforce, possible health complications, lack of training, workers lack of power, and the fact that so many are unaware of Workers Compensation. "The reality is workers will risk health for immediate monetary gains," he said.

Lunch was followed by three 60-minute breakout sessions: 1) Industry-university collaborations; 2) Engineering/ergonomic impacts; and 3) Heat Illness Prevention

The groups reconvened to present their reports, followed by review and discussion by the all participants. Prioritization of the ideas and suggestions for WCAHS concentration for its NIOSH grant year three was concluded within a session consensus-building exercise called "Voting with Dots."

California leading the nation in reducing VOC emissions in agriculture

By Brian Leahy, Director of the California Department of Pesticide Regulation

When it comes to agricultural pesticides, California has drastically improved safety and efficacy over the last few decades. The impressive improvements were due in large part to education, technology and mitigations. It has often resulted in more protection for residents and growers alike.

Many agricultural pesticides are applied by licensed professionals or by individuals who hold private applicator certificates. Farmers and applicators have invested large sums of money to purchase advanced technology that reduce drift and increase efficiency of application. And mitigations put in place by the department or the county agricultural commissioner place limits on the quantity, area and manner of application to reduce pesticide problems.

This kind of progress takes collaboration, cooperation and enforcement.

For example, as you know, volatile organic compound (VOC) emissions from many sources such as consumer products, industrial processes, as well as pesticides, can combine with other substances in the air to form ground-level ozone (smog). This can damage lung tissue, cause respiratory illness, and harm farm crops.

California is leading the nation in implementing measures to reduce ozone and Governor Jerry Brown has an unwavering commitment to improve California's environment, including its air quality. Reducing emissions of VOC in agriculture plays a small but significant role in reaching this goal.

Reducing VOC emissions continued on page 4

Western Center for Agricultural Health and Safety outreach highlights

Agricultural safety featured on new YouTube channel

The best agricultural safety videos are one click away on the new YouTube channel, “U.S. Agricultural Safety and Health Centers,” www.youtube.com/USagCenters. The channel is a joint project of the 10 agricultural centers funded by the National Institute for Occupational Safety and Health (NIOSH).

“Extension agents/educators, agricultural science teachers, producers/owners/operators, first responders and agricultural families would all find value in the videos,” says project leader Amanda Wickman, Southwest Center for Agricultural Health, Injury Prevention and Education (Texas). Videos can be used during job orientation, safety and health education, 4-H meetings, high school or college classes. One benefit of YouTube is that videos can be accessed from a mobile device to conduct tailgate trainings in the field.

For comments, more information or to suggest ideas for additional videos, please contact Teresa Andrews at terandrews@phs.ucdavis.edu or Jose Gutierrez at jcgutierrez@phs.ucdavis.edu.

Occupational Health and Safety Week at the Mexican Consulate in Sacramento

Again this year WCAHS participated in the annual Occupational Health and Safety Week hosted by the Mexican Consulate in Sacramento. Outreach staff distributed agricultural health and safety material and conducted two presentations on heat illness prevention, including workers’ rights under the Cal/OSHA heat law. The presentations took place in the Consulate Conference Room, and more than 100 people received information.

Guide to Developing a Workplace Injury and Illness Prevention Program in Agriculture

As part of WCAHS collaboration with LOHP’s Worker Occupational Safety and Health Training Program (WOSHTEP), Teresa has been working on a guide to help agricultural workplaces develop their own effective Injury and Illness Prevention Program (IIPP) in compliance with the Cal/OSHA requirement §3203. The lack of an IIPP is one of the most common CalOSHA citations growers receive. This new guide, which will be available soon, includes background information, tools and an IIPP template. A key

collaborator in the development of the guide has been the California Farm Labor Contractor Association.

Health & Safety Fair at Joe Serna Chapter School in Lodi

On Sept. 20, WCAHS representatives distributed agricultural health and safety materials and conducted a presentation on heat illness prevention to more than 50 parents of the Joe Serna Chapter School in Lodi. After the presentation, More than 100 children visited the WCAHS table to receive information on the same topics. The children particularly enjoyed turning the Quiz wheel to win prizes that included pens, bandanas, water bottles, boxes of coloring pencils, and measuring tapes. To get a prize, children had to respond correctly to questions related to the topics.



Children at the Health & Safety fair in Lodi.

North American Agricultural Safety Summit in Minneapolis

On Sept. 25- 27 in Minneapolis, the 7th Annual Agricultural Safety Summit brought together agribusinesses, public servants and researchers to discuss new agricultural technologies, achievements in resolving emerging issues and strategies for filling gaps, as well as setting priorities for the future. Drs. Marc Schenker and Fadi Fathallah, Victor Duraj and Teresa Andrews attended the summit.

Teresa also had the opportunity to meet with the other nine NIOSH ag centers outreach specialists and researchers. This was the first meeting of the NIOSH outreach specialists and researchers to discuss best practices and effective strategies for reaching stakeholders. This outreach workgroup will continue dialog to optimize results.

Furthermore as part of CalEPA, DPR is committed to environmental justice, which means reducing environmental impacts on California communities most burdened by pollution. For a number of years now, DPR's regulations to reduce the emissions from fumigant pesticides have been in place. More recent efforts have focused on reducing VOC emissions from non-fumigant pesticides products especially those that pertain to the San Joaquin Valley ozone nonattainment area.

Starting in November 2013, new regulations to reduce emissions from these products will go into effect in Northern California. These regulations apply to high-VOC products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen when used on certain crops in the San Joaquin Valley ozone nonattainment area. The restrictions will apply between May and October.

DPR took these steps because these products and their application to certain crops are among the highest pesticide VOC contributors in the San Joaquin Valley. Additionally, DPR has determined that use of low-VOC products for these pesticides and crops are feasible and will ensure that the specified goal will be consistently achieved. The regulations do not apply to low-VOC products containing the four active ingredients or to products containing any other active ingredients.

DPR believes that pesticide use in the agricultural community can be mitigated to address some air quality issues that California communities face. Taking small steps today may prevent huge consequences in the future. These new VOC regulations are included in a number of things that DPR and Cal/EPA are doing to protect against communities burdened by pollution.

DPR has produced some useful fact sheets and webpages on the VOC regulations. Please visit http://www.cdpr.ca.gov/docs/emon/vocs/vocproj/reduce_nonfumigant.htm



DPR Director Brian Leahy (white cap) and staff visiting orchards.



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Calendar

Monday, December 2, 2013, 4:00 – 5:00 p.m., C.H.E.

“Does the growing demand for meat globally fuel climate change?” **Frank Mitloehner**, Professor of Animal Science, UC Davis, and WCAHS Investigator

Monday, January, 13, 2014, 4:00 – 5:00 p.m., C.H.E.

Annual WCAHS Graduate Student Presentations, **Alondra Vega**, Epidemiology, “Taking a second look at heat illness in MICASA, Follow-Up 2”; and **Candace Spier-Bever**, Entomology, “Alpacas do more than make wool, they contribute to exposure monitoring”

Monday, February, 3, 2014, 4:00 – 5:00 p.m., C.H.E.

“Respirator Training Module for Pesticide Handlers & Applicators,” 2012 Seed Grant, **Lisa Blecker, M.S.**, Pesticide Safety Education and UC ANR Pesticide Coordinator – West Campus UC Integrated Pest Management Program

WCAHS Seminars are held in C.H.E. on Old Davis Road

Join the AgHealth e-mail listserv

The Western Center for Agricultural Health and Safety's AgHealth e-mail discussion group is open to anyone interested in agricultural health and safety. We welcome and encourage participation by posting comments or questions about agricultural health and safety. Subscribe at the WCAHS homepage: <http://agcenter.ucdavis.edu>, click on “AgHealth email List.”

NIOSH National Institute for Occupational Safety and Health

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