

agricultural workers. In 2005, the study focused on cherry pickers and the intervention selected was the vacuuming of commute vehicles. This intervention had workers vacuumed their vehicles before leaving the workplace. Pesticide residue loads from the home and vehicle were used in the data analysis. The intervention group had lower geometric mean (GM) pesticide loadings than the control group for all three OP pesticides. The azinphosmethyl GM for those who vacuumed at least once during the study was significantly lower ($p=0.03$) than those who did not vacuum their vehicles. More frequent vacuuming of the vehicles resulted in lower GM for most OP pesticide for house and vehicle dust. The vacuuming intervention shows promise in minimizing take-home pathway.

Funding provided by the Agricultural Centers Program of the National Institute of Occupational Safety and Health #5 U50 OH07544-05

Poster #16

In Our Own Voice. Using Social Marketing to Move Research to Practice

Max R. Lum Ed.D MPA.

The National Institute for Occupational Safety and Health (NIOSH) is fully engaged in an effort to maximize the impact of its research, build partnerships and encourage the design of more timely and effective mechanisms to bridge the gap between knowledge and practice. The application of social marketing techniques can be an innovative and opportunistic way to encourage the intervention community on a scale that develops its own momentum and involves the critical partners necessary to effect change and impact. This presentation will feature a brief look at the historical pathway of moving research to practice and where and how these activities can be informed by social entrepreneurs. Case studies involving tractor safety will be highlighted.

Poster #17

Agricultural Hazard and Intervention Effectiveness Research Translated into Practice Through the Community Collaboration for Farmworker Health & Safety

Stacey Viebrock, Lynae Hawkes, John J. May, Northeast Center for Agricultural Health, NYCAMH, Bassett Healthcare, Cooperstown, New York

Background: Previous Northeast Center research has demonstrated that eye irritation is a common agricultural health problem in the Lower Hudson Valley of New York State, and are that ergonomic hazards of blueberry raking in Maine. Research has also shown that injury prevention interventions are more effective and sustainable when developed collaboratively with farmers, farmworker groups and local farm communities.

Objectives: to translate research results regarding specific agricultural hazards in New York and Maine, and results regarding community organizing as an effective intervention method to develop 2 sustainable agricultural health programs.

Methods: Using the Precede/proceed methodology, a community training and organizing program is in its third year in both Maine and New York State. These "intervention development coalitions" have each identified an intervention, and are currently evaluating a pilot implementation. In New York an intervention trial involving 120 participants is in progress to evaluate the effectiveness of conducting eye safety education and distributing safety glasses and saline solution on eye irritation. A coalition member clinician is evaluating the incidence of pterygium among study participants by conducting eye exams of farmworkers.

In Maine, a trial involving 48 participants and eight rake designs is currently underway to understand how different rake designs affect the raker's musculoskeletal symptoms and productivity. End points for this trial include: 1) time to onset of excessive and/or unusual pain; 2) pain intensity; 3) productivity; and 4) worker acceptance of the rake.

Results/Conclusions: results of both of these field evaluations will be presented. The presenter will also discuss process evaluation results from both regions. Undertaken with support from NIEHS grant: 1 R25 OH08144-01.

Poster #18

Air modeling for investigation of community and fieldworker exposure to off-site movement of fumigants: chloropicrin and metam-sodium by-products.

Michael O'Malley, M.D., M.P.H., Terrell Barry, Ph.D.

Between 1992 and 2003 14 episodes of off-site movement of metam-sodium by-products (methyl-isothiocyanate – MITC – and related compounds) were reported in

HEALTH & SAFETY IN WESTERN AGRICULTURE: Research to Practice



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A tall, white, lattice-structured water tower with a rounded top. The words "UC DAVIS" are printed in large, bold, black letters across the top of the tower. The tower is set against a clear sky and is partially obscured by dense foliage in the foreground.

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