Poster #14

Factors Likely to Influence a New York Farmer's Decision to Retrofit

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Background: Tractor overturns have long plagued U.S. farmers, and are of particular concern in the Northeast where 8.4 of every 100,000 agricultural workers are killed in a tractor rollover, compared to rates of 6.1 to 1.9 in other areas of the country (NIOSH, 1998). Despite the frequency of rollover fatalities, New York farmers appear relatively uninterested in retrofitting tractors currently lacking ROPS (about 17% according to a recent NYCAMH survey), even though many of these same farmers felt a ROPS was important (82%) (Sorensen, 2006). To understand the gap between knowledge of risk and lack of interest in retrofitting, a particularly at risk segment of the New York farming community was selected for a qualitative assessment of tractor safety attitudes. Qualitative interviews (in-depth interviews and focus groups) were conducted with small crop and livestock farmers, who accounted for 90% of New York farmers completely lacking ROPS protection. Factors that influence these farmers disposition towards safety and retrofitting were examined.

Study methods: For in-depth interviews, livestock and crop farmers were selected from commodity association lists, contacted by phone and invited to participate. An effort to include farmers of varying ages was made (20-77 years of age), as well as a variety of farm sizes (29-250 head of cattle/112-1000 acres). A total of 20 interviews were conducted and transcripts were double-coded. Themes raised in interviews were evaluated in three focus group discussions. Codes were grouped into categories and core-categories and in an iterative of process of going from codes to text, a theory regarding factors influential to retrofitting was developed.

Study results: Interview and focus group responses indicate that the biggest barriers to retrofitting in the small crop and livestock community include 1) a lack of perception of personal susceptibility 2) financial concerns which make ROPS a low priority (other machinery they'd like more, not cost-effective for an old or seldom used tractor) 3) lack of time/too many other things to worry about 4) design issues, practicality of ROPS and seatbelts in daily use. Motivators appear to include 1) concern for workers or family using machinery 2) peers 3) visual or daily reminders and 4) a flexible financial assistance program. Application to field practice: The insights gained from interviews and focus groups will be used to inform the development of messages and incentives, which will be released in the farming community in an effort to increase the number of ROPS protected tractors.

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Poster #15

Take- Home Pathways Study

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One of the main concerns of agricultural workers is the possibility of exposing their children and families to the pesticides they encounter in the orchards. Agricultural workers may inadvertently bring pesticides residues from their workplace into their homes through their clothes and shoes. This can be considered as a take-home pesticide exposure pathway. The objective of this study was to characterize the take-home pathway and evaluate intervention to minimize the amount of pesticides leaving the workplace.

This study was conducted from 2003-2005 with agricultural workers, pesticide handlers and thinners, from an orchard in WA State. We looked at workplace factors that could contribute to the take-home exposure route for families through interviews with agricultural workers. We collected dust samples from agricultural workers' homes and commute vehicles. The dust samples were analyzed for organophosphorus (OP) pesticide residues. We investigated three workplace based interventions designed to minimize take home pesticides residues.

The first year, 2003, served as the baseline year to determine the pre-intervention pesticide residues levels for three groups: organic orchard workers, pesticide handlers, and thinners. In 2004, we tested out three interventions to minimize take-home exposure for

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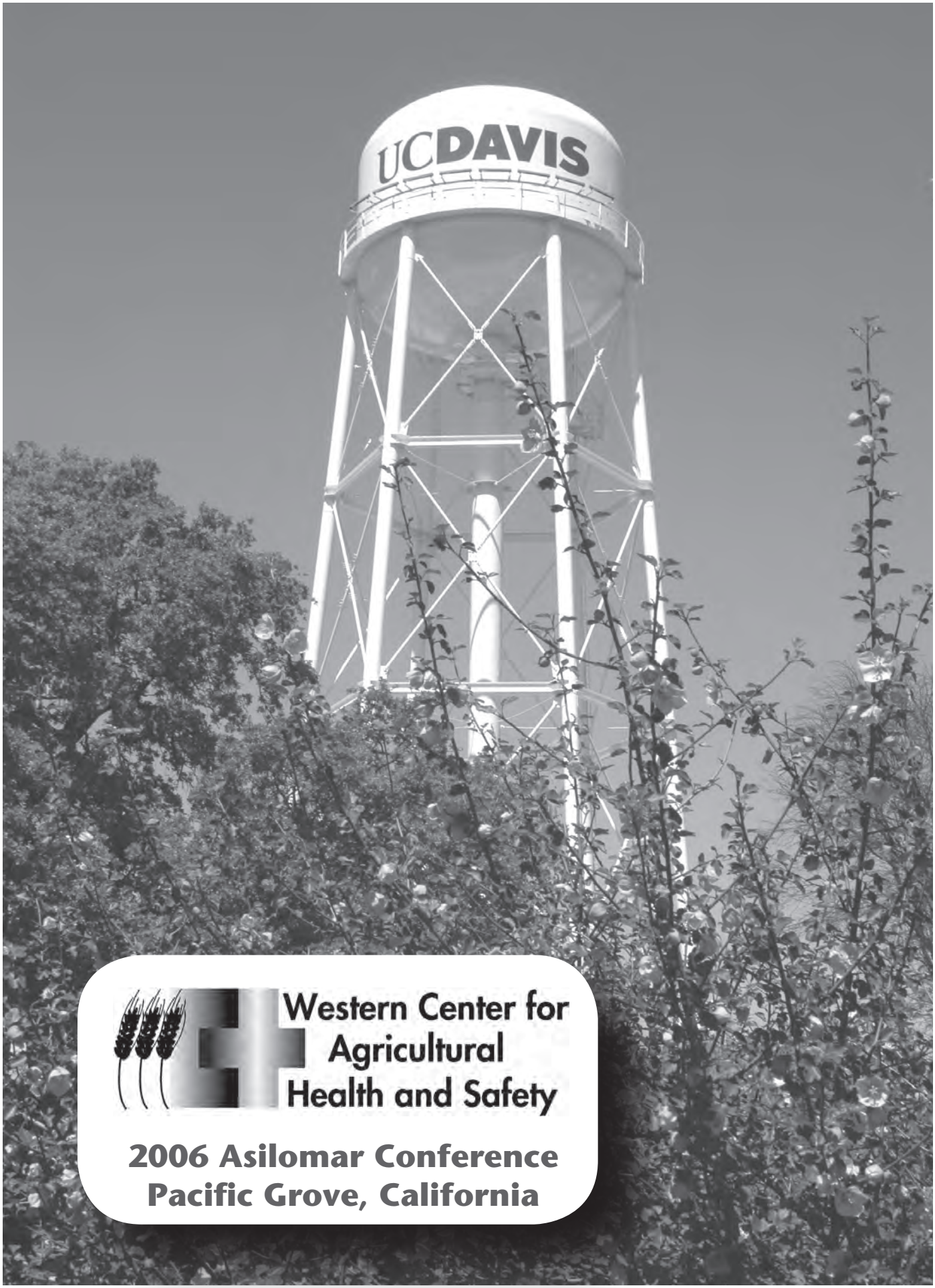

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