

## Southwest Center for Agricultural Health, Injury Prevention and Education

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#### What are our priorities?

The Southwest Center for Agricultural Health, Injury Prevention and Education (SW Ag Center) is one of 11 agricultural education, research and prevention centers funded by the National Institute for Occupational Safety and Health. The SW Ag Center recently completed its 4th cooperative agreement period (2011-2016) and entered its 5<sup>th</sup> funding cycle (2016-2021) with new research projects. SW Ag Center works with partners in industry, labor, trade associations, professional organizations, and academia. Significant work has focused on these areas:

- Preventing injuries and fatalities among commercial fishermen
- · Characterizing and preventing injuries among forestry and logging workers
- Reducing pesticide exposure among farmworkers

#### What do we do?

- Conduct regionally relevant, culturally appropriate, multi-disciplinary research
- Support feasibility studies that build capacity and justify further research
- Conduct a robust outreach program that responds to the ongoing and emerging needs of the region

#### What have we accomplished?

- Research found that simple, culturally appropriate training and messaging favorably influence attitudes, beliefs and behavioral intent among commercial fishermen.
- Research data revealed barriers to wearing personal floatation devices (PFD) onboard commercial fishing vessels. Multiple PFD models were tested by fishermen and 36 of the preferred PFD were purchased in 2016 for dissemination to the target community.
- Developed 21 stakeholder-driven, safety and health tailgate trainings for logging and forestry workers. Trainings are used by crew leaders in Texas, Louisiana and Arkansas.
- Performed a detailed search of data sources available to enumerate and characterize log
- What's next?
- Launch a social marketing campaign to motivate commercial fishermen to wear PFDs while onboard vessels to prevent death and injuries from falls overboard.
- Conduct further research on the impact of thermal load on PFD use among fishermen.
- Collect information on cultural/non-cultural work-related behaviors, attitudes and practices that influence slips, trips and falls onboard fishing vessels.

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- Engage a broad network of strategic partners to foster research integration and practical intervention strategies
- Develop and disseminate safety and health information and recommendations
- Utilize evaluation results to monitor progress and guide program improvements

ging workers and specified the surveillance challenges in this sector.

- Tested a sample of Latino adolescents working in agriculture for pesticide metabolites using urine samples. 80% had meta-bolites, indicating they had been exposed to pesticides. Sweat patches, a novel technique for measuring pesticide metabolites, were also found to be useful in a nested feasibility study.
- Helped high school students in South Texas perform a play created by the Environmental Protection Agency to inform their community about pesticide safety. Approximately 200 people were reached.
- Conduct a pilot study to investigate work place risks and exposures among manual and machine tree planters.
- Characterize physical exposures and musculoskeletal symptoms among logging machine operators.
- Launch a 5 year project to reduce pesticide exposure among Latino adolescents through interventions that utilize promotoras, trusted community members who are trained as lay health workers.

### At-A-Glance

The SW Ag Center improves the safety & health of agricultural, forestry and fishing (AFF) workers through research and outreach that leverages diverse strategic partners who represent the regional workforce and AFF production. This snapshot shows recent accomplishments and upcoming work.

The Southwest Ag Center, located in Tyler, Texas, focuses on five southwestern states.



Percent of respondents indicating intent to improve safety behaviors at 3 intervention



Source: Levin JL, et al. (2016) Workplace Safety Interventions for Commercial Fishermen of the Gulf, Journal of Agromedicine, 21:2, 178-189.

# Percent of Latino youth agricultural workers with chemicals in urine



Source: Grzywacz J, Merten M (2015) Feasibility Study Final Report, available online at

http://www.swagcenter.org/files/pdf/merten.grzywacz.outco mes.pdf

