

Worker Health And Safety Context In Key Oregon Industries: Construction, Forestry, And Commercial Fishing

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Moderator: Laurel Kincl

TOPIC/TARGET AUDIENCE: Environmental and Occupational Health; Community Health; Worker Safety

ABSTRACT: Commercial fishing, forestry, and construction are key industries that employ thousands of Oregonians. This panel highlights worker health and safety research being conducted at Oregon State University within these three industries and will be moderated by Dr. Laurel Kincl.

Dr. John Garland will discuss, "State of the Oregon Primary Forestry Sector (logging and forestry services): Past, Present and Future Outlooks", and highlight progress made in accident and fatality occurrence as well continuing research on work health related issues and room for future worker safety improvements.

Dr. Laurel Kincl will present on, "Advancing Injury Prevention in the Construction Industry with Research to Practice Partnerships". Dr. Kincl and her colleagues developed and are testing a novel masonry apprenticeship training program. Funded by CPWR- the Center for Construction Research and Training, the Safety Voice for Ergonomics (SAVE) program combines ergonomics with soft skill training in speaking up about safety.

Dr. Viktor Bovbjerg will discuss, "Non-fatal injuries in the west coast Dungeness crab fleet", and highlight findings from a survey of Dungeness crab crews in 10 US west coast ports before and during the 2015-16 season. Fishermen indicated whether or not they had suffered an injury in the previous year which required medical care, lost work time, or modifications to work activities. Fishermen also described the nature of the injuries, and the circumstances during which the injury occurred.

OBJECTIVE(S):

- Describe the status of the work in the primary forest sector and assess whether they have an opportunity to contribute to health and safety improvement
- Demonstrate safety research to practice in action in the construction industry.
- Describe health and safety of construction workers
- Describe the unique working conditions of commercial fishing industry
- Demonstrate the need for injury prevention in the Dungeness crab fleet.

PANEL ABSTRACT 1: Title: State of the Oregon Primary Forestry Sector (logging and forestry services): Past, Present, and Future Outlook

Dr. John J. Garland, PE, Consulting Forest Engineer, Affiliate Professor, Department of Environmental and Occupational Health Sciences, U. Washington, Professor Emeritus, Forest Engineering, Resources and Management, Oregon State University

Public health and safety professionals can better understand opportunities to improve the lives of stakeholders in the primary forestry sector (logging and forestry services) by a review of the past, present and future circumstances for the sector. Nationally logging is the number one industry in rates of fatalities and has been in the top three industries for forty years. Forestry services has hazards of working in steep terrain, dangerous chainsaws, chemical exposure and other hazards. Oregon's forestry sector has made progress over time in accidents and fatalities. However, little is documented about work health issues like Lyme disease, cumulative trauma, and work-related diseases. Forestry work is characterized by being Difficult; Dangerous; Dirty and Declining. Workers are characterized as aging, suffering cumulative damages and with increasing Hispanic participation. Research and improvements are currently underway with support of NIOSH through the National Occupational Research Agenda and academia/research organizations. Future improvements in forestry work will come from new technologies of lighter, safer tools and equipment, new technologies to put workers in machines rather than on the terrain, robotics and autonomous systems, and information technologies. Opportunities exist for health and safety professionals to contribute to future improvements

PANEL ABSTRACT 2: Title: Advancing Injury Prevention in the Construction Industry with Research to Practice Partnerships

Kincl LD, Hess JA, Weeks DL, Anderson DA, Heller B, Houser RP, Palmer NE, Anton D

Work-related musculoskeletal disorders are prevalent in construction trades, and particularly among masons. Many construction workers, especially apprentices, have limited training on ergonomic principles and appropriate strategies to respond to unsafe work. Local occupational health and safety researchers are engaging with a unique Masonry Research to Practice (R2P) Partnership to develop and test a novel apprenticeship training program. Funded by CPWR- the Center for Construction Research and Training, the Safety Voice for Ergonomics (SAVE) program combines ergonomics with soft skill training in speaking up about safety. With input from the Masonry R2P Partnership from the inception of the project, researchers have access to key stakeholders. Insights from focus groups were used to develop the topics, educational videos, testimonials, written educational activities and examples. Pilot testing with apprentices and instructors was key to refine SAVE materials. To test the effectiveness of SAVE, the involvement nationally of apprenticeship training centers is essential. The history, challenges and successes of this R2P project will be discussed. Engagement of key stakeholders is essential for the successful development of relevant and effective apprenticeship training to teach soft safety voice skills in concert with applied ergonomic principles.

PANEL ABSTRACT 3: Title: Non-fatal injuries in the west coast Dungeness crab fleet

Booth GC, Bovbjerg VE, Syron LN, Vaughan AM, Dunlop KM, Miller KI, Jacobson KR, Lucas DL, Kincl LD

Background and Objective: Non-fatal commercial fishing injuries can be life altering, limiting mobility, income, career span, and quality of life. Identifying work tasks and equipment associated with injury can inform injury prevention efforts.

Methods: We surveyed Dungeness crab crews in 10 US west coast ports before and during the 2015-16 season. Fishermen indicated whether or not they had suffered an injury in the previous year which required medical care, lost work time, or modifications to work activities. Fishermen also described the nature of the injuries, and the circumstances during which the injury occurred.

Results: Of 414 respondents, 77 (18.6%) reported a total of 108 injuries during the previous year. Of those injured, 73 (67.6%) reported injuries resulting from handling fishing gear, with relatively few injuries occurring in transit, anchored, or in port. The most commonly reported injuries were lacerations (25.9%) and sprains/strains (24.1%); there were also nine fractures (8.3%). Forty-eight injuries (44.4%) required modification or limitation of work tasks.

Conclusions: Approximately one in five Dungeness crab fishermen reported at least one fishing-related injury during the previous year, the vast majority gear-related. Efforts aimed at safer equipment and work tasks could yield substantial injury prevention impact

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