

---

## Agriculture/Farming

### P05

#### Title: **Safety perceptions and PPE provision of thoroughbred farm representatives**

Authors: Jessica Clouser, Jennifer Swanberg, Henry Bundy

Objectives: Agriculture, particularly animal agriculture, is one of the leading industries for occupational illness or injury. Although some of the inherent risks associated with working in agriculture may be well understood by farm operators, safety behaviors do not always follow. Few studies have looked at the relationship of managements' risk perception and subsequent provision of personal protective equipment (PPE) in large animal operations. This qualitative study aimed to describe: 1) the risk perceptions of thoroughbred farm management representatives, 2) the personal protective equipment (PPE) provided by farms, and 3) the factors that influence farms' provision of personal protective equipment.

Methods: Thirty-five representatives from 26 farms participated in a 1-4 hour, face-to-face, semi-structured interview covering topics such as farm characteristics, workforce demographics, work organization factors (e.g., job tasks, scheduling practices), perceived risks associated with horse work, and perspectives and provision of PPE. Constant comparative analysis was utilized in order to ground emergent themes in the original text of the transcripts and themes were culled and democratically agreed upon by team members in weekly meetings.

Preliminary Results: Representatives of thoroughbred farms identified the horse as the most hazardous exposure and horse-related tasks as the most dangerous tasks on thoroughbred farms. Despite this perception, PPE designed to protect against the horse (e.g., helmets, vests, steel-toe boots) was not as commonly provided to workers as PPE designed for non-horse related tasks (e.g., gloves and safety glasses). Factors influencing farms' provision of PPE included: 1) differences in farm size/context, 2) the belief that workers were most important agents in their safety, 3) management's lack of confidence in horse-related PPE's efficacy, and 4) the perception that risk could never be eliminated.

Conclusions: Provision of PPE was limited by management's poor perceptions of its efficacy relative to other factors. Future research is needed to understand workers' perception of risks associated with thoroughbred farm work and strategies to minimize exposure to these risks.

### P06

#### Title: **Fatal and non-fatal injuries among tree care workers in Washington State**

Authors: Christina Rappin, Todd Schoonover, Randy Clark

Objectives: According to the Census of Fatal Occupational Injuries, an average of 80 tree care workers were fatally injured each year in the U.S. between 1992 and 2007. The objectives of this study were to identify high risk tasks and describe the nature and burden of fatal and non-fatal injuries among tree care workers in Washington State.

Methods: Worker fatalities occurring during tree care operations were identified using Washington State Fatality Assessment and Control Evaluation (FACE) surveillance data. Case data was used to determine the most frequent types of fatal injury events, and decedent's industry and occupation.

Injured worker claims from the Washington Workers' Compensation system were characterized using industry, injury event, injury type, paid time loss days, and claim costs for workers in the "tree trimmers and pruners" occupation.

Narrative text from injury claims and fatal case records was examined to determine the activities being done at the time of the incident.

Results: Between 1998 and 2014, there were 28 fatalities among tree care workers. The most frequent fatal injury events included falls (50%), struck by falling object (20%), and electrocution (18%). Landscaping services industry workers accounted for 89% of fatalities. Most fatalities occurred during tree removal (50%) or tree trimming/pruning (36%).

Between 2009 and 2013, there were 633 injury claims among tree trimmers and pruners. The majority of injuries were to workers in either the agriculture (primarily in apple and other fruit farming) or landscaping services industries. The most common injury events were falls (38.5%), contact with objects and equipment (28.1%), and bodily reaction and exertion (26.2%). Injury event varied by industry: agriculture workers were most frequently injured by falls (53%); landscaping workers by contact with objects and equipment (39%). Median days of paid time loss was highest for falls (38). Median claim cost was highest for injuries caused by contact with objects and equipment (\$14,642).

Conclusion: Tree care workers face risks for occupational injuries and fatalities that vary by industry, indicating a need for industry-specific prevention measures. Narrative text of injuries is

# NOIRS

National Occupational Injury Research Symposium

# 2015



**May 19-21, 2015**  
Camp Dawson Training Center  
Kingwood, West Virginia

U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention  
National Institute for Occupational Safety and Health

