

Pilot: Use of Unexpected Events and Management Requiring Conditions in the Training of Workers

FINAL REPORT YEAR 2 of 2 (2019-2021) PI: Kevin Lyons, PhD Associate Professor, Oregon State University

Challenge Forestry work takes place in a natural and largely uncontrolled environment. Traditional logging jobs such as choker setting with rigging crews continue to suffer severe injuries and fatalities. In addition, new logging methods such as tethered ground-based systems are bein introduced where there is little practical experience on which to base risk assessment. Developing guidance on Management Requiring Conditions (MRC) and Unexpected Events (UE) combined with severity ratings will provide valuable information for training and supervision of workers performing these high-risk tasks.

Project Overview This pilot project is developing a novel system, using a simulated environment (John Deere Forest Harvesting Simulators), where workers identify potential safety concerns and assign a severity rating to the safety concerns. This system will uncover factors in risk decision making for new logging workers, informing future safety training programs.

- Findings to Date All participants reported they could understand the simulated incident scenarios, and risk assessment role-play.
 - All participants successfully were able to identify the seniors' MRC, although the severity assigned varied.
 - It was common for lower severity rating for MRCs vs. higher severity rating to the UE. This demonstrates a need to for training in risk assessment.
 - Simulated incident scenarios provide an alternative training environment where workers can gain some experience, over a wide range of incidents, in a short time, and safely.
- Accomplishments Switching to simulated incidents allowed us to present more incident scenarios than would have been possible in the field.
 - Six incidents were simulated.
 - Next Steps Study results will help shape future Northwest logging training programs using simulated scenarios.

Resources (https://bit.ly/OSU-Mechanized-Logging



Lyons K. Hazard recognition and risk assessment by cable logging rigging crews (In Review).