

OREGON FATALITY ASSESSMENT AND CONTROL EVALUATION

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Center for Research on Occupational & Environmental Toxicology

Fatality Investigation Report

OR 2005-39-1



Logging worker killed while riding on step of skidder

SUMMARY

On October 20, 2005, an 18-year-old skidder operator at a logging site was killed when he fell off a moving skidder while riding as a passenger on an access step outside the cab. At the end of the workday, the operator and a coworker were responsible for fueling the chipper at the landing site, and were using a skidder to go to retrieve the fuel truck, located about 750 feet away up a dirt skid road. The operator rode on the step outside the cab – which is not intended for passengers – holding onto handrails on the door and rear of the cab for support. The skidder was running in second gear at half throttle on nearly level ground. The two skidder operators were talking during the



This stock photo of a skidder model like the one in this incident shows the step outside the cab where the operator was standing to hitch a ride.

ride, until the coworker noticed his passenger did not respond. The coworker discovered the operator lying in the road behind him, about three-quarters of the way to the fuel truck. The victim had been crushed by the right rear wheel of the skidder. The coworker alerted other workers onsite and basic first aid was attempted. The victim died at the scene shortly after the arrival of first responders from the local fire department.

CAUSE OF DEATH: Severe head trauma

RECOMMENDATIONS

- Never ride as a passenger on a machine unless an appropriate seat and operator restraint system is available.
- Employers must develop a formal training process for operators of mobile machinery, including written documentation and regular evaluation.
- Employers must demonstrate a commitment to safety and encourage employee participation.

Keywords: Logging Machine Related Publication Date: December 6, 2007 This report is public information – free to copy

INTRODUCTION

On October 20, 2005, an 18-year-old skidder operator at a logging site was killed when he fell off a moving skidder while riding as a passenger outside the cab. OR-FACE received notification of the incident the following day from Oregon OSHA. This report is based on information in the Oregon OSHA report.

The company was hired to skid and chip about 500 acres of pre-cut lodge pole pine. Along with other machinery, the crew used two grapple skidders and a portable chipper for the operation. Four employees were onsite at the time of the incident.

According to Oregon OSHA, the company did not maintain several required elements of a safety and health program as described in the Oregon forest activities safety regulations. Lacking were monthly safety meetings, documented employee training on machinery, supervisor responsibilities, hazard identification and control, job site safety inspections, employee involvement, and evaluation of employee work practices.

The skidder operator had been trained to operate the skidder by the supervisor at the worksite, who was also his father. The operator had 3-4 months of experience on the equipment. The operator's coworker, operating a second skidder, was also 18 years old, and had about 1 year of experience operating a skidder. Riding on the access step outside the machine operators' cab was a common practice at the worksite.

INVESTIGATION

On the day of the incident, the skidder operator arrived with the logging crew about 5:30 a.m. At the end of the day, about 4:30 p.m., he parked his skidder next to the portable chipper at the landing site. His final job was to fuel the machinery. The fuel truck was located about 750 feet away, up a 1% grade dirt skid road. He hitched a ride on a second skidder, operated by his coworker, to retrieve the truck and return to the landing site.

The operator rode on an access step outside the cab – which is not intended for passengers – holding onto handrails on the door and rear of the cab for support. The skidder was running in second gear at half throttle on nearly level ground. The two skidder operators were talking during the ride, until the coworker noticed his passenger did not respond. The coworker discovered the operator lying in the road behind him, about three-quarters of the way to the fuel truck. The victim had been crushed by the right rear wheel of the skidder. The coworker alerted other workers onsite and basic first aid was attempted. The victim died at the scene shortly after the arrival of first responders from the local fire department.

RECOMMENDATIONS/DISCUSSION

Recommendation #1. Never ride as a passenger on a machine unless an appropriate seat and operator restraint system is available.

This incident emphasizes the hazard of riding as a passenger outside the cab of a machine. Oregon Forest Activities rules specifically prohibit riding as a passenger on a machine when an appropriate passenger seat and operator restraint system is not available (OAR 437-007-0700(5)). Riding outside the operator's cab on any mobile machinery poses a serious hazard of falling off and being run over by the wheels as in this incident, or being struck by the machine. Approaching a skidder or other mobile machinery while it is in motion poses similar hazards so stay at a distance from operating mobile machinery, unless you are securely restrained in the operator's seat.

Recommendation #2. Employers must develop a formal training process for operators of mobile machinery, including written documentation and regular evaluation.

A comprehensive training program for operators of mobile machinery includes formal training, on-the-job training, and workplace observation by the employer. Employers in forest activities must keep written records to document safety training and regular evaluation of worker performance. A written procedure, including a predesigned checklist, helps to ensure that both the trainer and the trainee understand and follow all relevant safety requirements. A periodic formal assessment by the employer helps to maintain awareness of safe practices, and provides indicators of training effectiveness and inappropriate work habits. New workers in particular should be closely supervised and receive frequent reinforcement for safe work practices.

Review of the manufacturer's operation manual in the training process is required (OAR 437-007-0705(2)). In this case, review of the operation manual would have underscored the prohibition against riding as a passenger outside the cab of the skidder.

Recommendation #3. Employers must demonstrate a commitment to safety and encourage employee participation.

Employers must demonstrate a commitment to safety, principally by authorizing a competent person at a logging site to ensure that workers safely perform their assigned tasks (OAR 437-007-0105 & 437-007-0110). The employer must also conduct onsite safety surveys, hold pre-work safety meetings, and require employees to report safety and health hazards (OAR 437-007-0130). Daily pre-work "toolbox" or "tailgate" safety meetings are an ideal venue to review operator safety on mobile machinery.

A general culture of safety, including monthly safety meetings and free communication among workers, is critical for a successful safety program. Employers, supervisors, and workers should all be actively involved in and feel responsible for the overall safety of work activities.

References

Occupational Safety and Health Administration. *Logging eTool*. Online resource: www.osha.gov/SLTC/etools/logging/mainpage.html

Oregon OSHA. (2005). *Safety committees for the real world*. Available online: www.cbs.state.or.us/external/osha/pdf/pubs/2341.pdf

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Oregon Fatality Assessment and Control Evaluation is a project of the Center for Research on Occupational and Environmental Toxicology at Oregon Health & Science University. OR-FACE is supported by a cooperative agreement with the National Institute for Occupational Safety and Health, Division of Safety Research (U60/OH008324), through the Oregon Worker Illness and Injury Prevention Program, Oregon Public Health Division.

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