

Rigging crew members suffer some of the highest rates of severe job-related injuries in the United States. The following loggers, doing cable yarding work, were injured or killed because they were not in the clear when standing too close to the turn and rigging — including lines, chokers, butt rigging, and carriages. Here's what happened in each scenario:

- A choker setter and a rigging slinger were presetting and hot-setting turns of logs. They had set a turn of logs near the cable lines, and the rigging slinger retreated to a logged-off area to the south. The choker setter retreated to the north side of the lines, dropping his chokers near logs to be choked, and moved farther out of the way. The turn hung-up, and a log upended and struck the choker setter, who had returned to the chokers.
- A rigging crew was moving a skyline during a road change. As the haulback line pulled the skyline into position, the rigging chain connecting the haulback to the skyline broke. The chain struck the block that the haulback was running through and hung up, causing the block to be pulled into lead with the corner block. This caused the waist line to suddenly and violently move, striking a worker standing next to the waist line.
- Two workers were picking up a road line preparing to change roads. They choked several logs and blew the go-ahead whistle to send the turn to the landing when one of the logs swung around and hit them.
- A worker was presetting chokers on a turn of logs when the rigging slinger blew the go-ahead whistle.
  The worker was struck by one of the logs in the turn.

- A rigging slinger and hook tender were setting chokers and had contacted the Yoder operator to yard logs to the landing. As the choked logs started to move, the longest one winged into lead and struck an alder log. The alder log narrowly missed the rigging slinger and struck the hook tender fatally in the head.
- A three-man rigging crew was setting chokers in a thinning unit while working both sides of the lines. The rigging slinger hooked up a turn of logs consisting of two tree lengths and one 35-foot bucked log that was choked about 12 feet from the end. He blew a go-ahead signal while he was walking away from the turn to clear out. As the turn moved ahead, the 35-foot log got hung up on a stump, swung toward him, and struck him in the head and shoulder. He was knocked unconscious and sustained serious shoulder injuries.

All these victims were too close to the rigging and not standing in the clear while the work was under way. Oregon OSHA defines in the clear as "a position within the work area where the probability of hazardous contact with vehicles, machines, falling trees, moving logs, rootwads, chunks, material, rigging, and equipment is minimized by distance from the hazards or use of physical barriers, such as stumps, trees, terrain, or other objects providing protection."

# How to prevent accidents caused by crowding the rigging

**Plan the work and control hazards.** All operations at a logging site must be planned, and the supervisor must evaluate and control potential hazards before



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work begins. Hold prework safety meetings to discuss site conditions and hazards. Determine which logging method is best for the rigging crew to get in the clear.

Know what "in the clear" means. Before giving the "go-ahead" signal on a turn, all rigging crew members must move to an area that is in the clear by moving to the side and behind all the logs in the turn. The person in charge of the rigging crew must be a competent person and know where "in the clear" is for any given situation.

You are not in the clear unless you are out of the swing radius of the longest log in the turn. This means the length of the log, plus the length of the choker, plus any line deflection that could occur, plus a safety factor (a few extra steps you should always take to be sure you're safe).

**Don't be complacent!** When you work in the woods, beware of your surroundings and of anything that could turn or move or roll toward you and stay out of the bight of lines under tension. The decisions you make can affect your life.

**Don't take chances!** Don't leave to chance something you have the ability to control.

**Watch out for one another!** Your co-workers rely on you for their safety just as you rely on them. If you see an unsafe condition, bring it to their attention.

**Supervisors, heads up!** The safety of those you supervise is your first priority. Inexperienced workers rely on you for their survival, and your actions reflect the safety values of the company.

# Visit Oregon OSHA

### **Workers**

Your employer cannot retaliate against you for reporting a workplace health or safety concern or violation. For more information about your rights, visit the Oregon OSHA website.

# Safe practices

- Stay in the clear of all lines, rigging, and chokers until all movement has stopped. Swinging chokers, hooks, and rigging must be lowered to the ground.
- Stay alert to the moving turn and be ready to signal "stop" if a hazard develops.
- Make sure that everyone on the rigging crew is able to predict how the lines will move, how the logs will move, and what to expect from other crew members.
- Before giving the go-ahead signal, the crew must identify the logs that will move and make sure that they are in the clear of any unbucked or tree-length logs.
- Keep the landing crew informed where the rigging crew members are at all times.
- Face the work and the hazards. Stay alert, and watch the turn all the way to the landing.
- Never position yourself below anything that could be dislodged when the turn is yarded free.
- Be sure all unstable logs, rootwads, rocks, or other objects that could roll or slide into the work area are removed or stable before work begins.
- Avoid heavy turns that increase the chance for hang-ups; heavy pulling strains the rigging and tower, and may result in catastrophic failure.
- The risk of a swinging log increases when logs are choked with long ends. Choke short ends whenever possible.

## Resources

- ➡ Division 7/C, Planning, First Aid and Work Conditions
- ➡ Division 7/J, Yarding, Processing, Signaling and Communications
- Oregon OSHA Yarding and Loading Handbook

Hazard alerts provide information on hazardous materials, equipment, or practices. For more information, contact the Oregon OSHA Standards and Technical Resources Section at 503-378-3272 or 800-922-2689 (toll-free), or visit our website at osha.oregon.gov.



