

STEPPING UP: Making ladder safety a priority rung-by-rung

By MELANIE MESAROS

In 2011, a repair technician was preparing adjustments to an HVAC unit on the top of a one-story building in Northwest Portland.

"There was a metal roof with a slick, sheet metal awning," said Steve Barrett, an Oregon-OSHA safety compliance officer. "The worker took an extension ladder and leaned it against the gradual angle of the awning (55 degrees) and it slipped right out from under him. He fell to the pavement and ended up with multiple fractures to his right leg and ankle."

Barrett said not only was the portable ladder set up improperly (extreme angle), the rubber pads on the feet of the ladder were worn.

OR-OSHA Safety Enforcement Manager Gary Beck said ladder accidents are often the result of a ladder being used improperly.

"We see workers who use a step ladder when it should be an extension ladder," said Beck. "Other times, the ladder is too short or it's damaged in some way, or they try to carry too much when going up."

Despite the fact that ladders are a basic tool for many trades, employees may not be trained on ladder safety to avoid injury. Educating workers on the three-point system is a good place to start, said Beck.

"Workers should always face the ladder when going up or down and have one hand on the ladder," he said.

According to the OR-OSHA rule, portable ladders with any defects such as broken, bent or missing rungs, corroded components, worn feet, etc., must be tagged and put out of service until repaired.

"Sometimes, the right ladder isn't available to a worker or they don't take the time to get the right one for the job," said Beck.

Barrett said improper ladder use is a common citation, particularly in construction.

"I have seen companies use a ladder for something it's not designed for — scaffolding, for instance," he said. "They will place a scaffold plank across a step ladder to hold up the end. If you put a lot of weight on the scaffold, it's designed to hold one person, not the weight of the plank, a person, and all the materials."

Beck said ladder falls are preventable, and employers need to ensure their workers know how to properly use a ladder.

"It's not a bad idea to review ladder safety once a year," said Beck. "It could save a life or prevent a serious injury."

(Editor's Note: Articles on this page are reprinted from the Oregon Safety and Health Resource newsletter published by Oregon-Occupational Safety and Health Division.)



A person climbing a ladder should always maintain three points of contact.

Falling off of a ladder — then and now

By ELLIS BRASCH

Ladder accidents — and their causes — have a curious continuity. Consider this news item:

"Failure to secure a ladder resulted in the death several weeks ago of a telephone lineman. [He] was repairing a drop line, having set up an extension ladder with the middle of it resting over a fence and the top leaning against a fir limb 19 feet above the ground.

"The ladder slipped off the limb when the lineman apparently reached too far out to connect the wires. The bottom of the ladder also slipped [because] it had not been secured. The lineman fell to the ground, dying a day later of a broken neck. He left a wife and two children."

And this quote, in another news item, from an emergency medical responder who tended to a worker critically injured after a fall from a ladder:

"Usually, you won't get hurt that

badly falling off a ladder ... But he must have landed wrong."

The first item appeared in the September 1945 issue of Safer Oregon, a newsletter published by the State Industrial Accident Commission. The emergency responder was quoted in an article published in the Oregonian in January 2012. Sixty-seven years separated these two events, but the causes of ladder accidents haven't changed since John H. Balsley invented "the improved stepladder" in 1862. And that lineman might very well have had the same thought — before he fell from the ladder in 1945 — that the emergency responder expressed in 2012: "Usually, you won't get hurt that badly falling off a ladder."

Every year, more Oregon workers are injured in falls from ladders than from any other elevated surface — including roofs, scaffolds, balconies, and even stairs. They fall from ladders for one (or more) of the following reasons:

- They use the wrong type of ladder for the job;
- The ladder is defective and shifts unexpectedly or collapses;

edly or collapses;

- They set up the ladder improperly and the ladder unexpectedly shifts or slips;
- Their foot slips or they lose their balance when climbing or descending;
- They overreach and lose their balance;
- Something knocks the ladder over;
- They think they won't get hurt badly if they fall.

Of course, you can get hurt just as badly falling off a ladder as you can from falling off other elevated surfaces. It's not the fall that hurts you; it's what happens when you hit the ground.

If you need help convincing skeptical people how ladder accidents happen, you can share summaries of every ladder accident reported to OR-OSHA since 2007 at its website: www.orosha.org/subjects/ladders.html#.U0cYcSje6Ng

Need a quick refresher on how to select, set up, and use a portable ladder? Check out Oregon OSHA's portable ladder app, also available for mobile devices in the Google Play store.

Oregon OSHA's Top 10 violations of 2013

By MELANIE MESAROS

Safety committee and safety meeting violations topped the list of the most cited Oregon OSHA standards in 2013, followed by hazard communication and fall protection violations.

"There are aspects of the list that are disappointing," said Oregon OSHA Administrator Michael Wood. "We've had a safety committee rule for more than two decades. We provide resources and training and yet, it's still the No. 1 issue we cite."

Fall protection violations continue to be the top citation for the construction industry, with 431 violations in 2013 that ranged from improper use of ladders to failure to protect against injury near holes, wall openings, and rooftops. The first-time penalty for a fall violation averaged more than \$1,000 (even with a majority of small employers) because of the potential for serious injury or death. Fall violations also account for the most frequent source of repeat violations on the list.

"There has been some real success when it comes to fall protection, but there hasn't been enough," said Wood. "We need to change the culture that accepts rule violations and occasional penalties. Unfortunately, that culture still exists on some job sites."

Overall, Wood said the list represents a range of issues — some fundamental and some that involve an enforcement of expectations on the part of employers.

"These aren't paperwork violations or trivial. They are protective measures that keep people from dying on the job," he said.

Also notable is the fact that the safety committee standard and hazard communication rule, which requires employers to properly label, store, and assess chemical hazards, are designed to help employees better protect themselves.

"They are important rules, even though in most cases we don't cite them with a penalty," said Wood.

Wood said the list highlights the need for a multi-faceted approach to safety and health in the workplace. He said Oregon OSHA will continue to cite violations that put workers at the most risk. "We are going to focus on the things that can not only injure, but kill people," he said.

TOP 10 VIOLATIONS

1. Safety committees/meetings
2. Hazard communication
3. Fall protection (including ladder violations)
4. Electrical: wiring
5. Fire extinguishers
6. Machine guarding
7. Powered industrial trucks
8. Lockout/tagout
9. Eyewash station
10. Respiratory protection



When setting up a ladder, the angle should be an arms length away when feet are positioned at the base of the ladder.