

PREVENTING FALL HAZARDS

 What you should know about construction falls

Administrator's message: Proving our value in battle against COVID-19

Video version of Workers Memorial ceremony planned

Resource

Oregon Health and Safety Resource is published every other month by the Oregon Occupational Safety and Health Division of the Department of Consumer and Business Services.

Department of Consumer and Business Services Andrew Stolfi, Acting Director

Oregon OSHA

Michael Wood, Administrator

Resource editor Aaron Corvin Editor Mark Peterson

Designer Angela Van Grunsven

Reprinting, excerpting, or plagiarizing any part of this publication is fine with us. Please send us a copy of your publication or inform the Resource editor as a courtesy.

If you have questions about the information in Resource, please call **503-378-3272**.

For general information, technical answers, or information about Oregon OSHA services, please call 503-378-3272 or toll-free within Oregon, 800-922-2689.





Administrator's Message

3 On the value of workplace safety and health experts in the fight against COVID-19.

Don't Miss...

4 Workshop classes will be held virtually until further notice.

Did You Know?

5 Check out our Spanish-language online training focused on eliminating fall hazards.

Features

- 6 What you should know about construction falls.
- 10 When an on-the-job injury led to a partial amputation, Oregon's Preferred Worker Program helped a fish biologist transition to a new career at an Astoria brewery.

Ask Oregon OSHA

13 Learn about Oregon OSHA's construction-industry requirements for inspecting portable ladders.

Short Takes

11 Workers Memorial Day, April 28 - why it's important.

Incident Alert!

15 The sleeve of a worker's rain jacket was caught in an unguarded rotating shaft.

Keeping Your Distance

17 Resources in the time of coronavirus.



Administrator's message

COVID-19 strains job safety, health practitioners, proves their value

By Michael Wood

3

I am taking a moment to reflect a bit on the challenges that are being faced by many of us in the workplace health and safety community as we navigate the unfamiliar waters presented by the current pandemic. We are being called upon to use the skills we have developed not only in risk reduction, but in communication, in training, in dealing with uncertainty, and in maintaining our focus in challenging times.

In the broadest sense, the current events cannot be described as "unexpected" – indeed, many health and safety professionals have raised concerns about the potential risks due to some new infectious disease for many years. But, to use a slightly different example, even those of us who know the earthquake is coming and are the most thoroughly prepared will still experience an element of surprise and even shock when it occurs. The same is true of COVID-19. Ready or not, the crisis we feared has, at least on some level, arrived.

Workplace health and safety practitioners in a range of workplaces around the state are now being asked to coordinate responses and determine protective measures in arenas that many of you understand only in the broadest terms. Safety directors on construction sites and in machine shops are being asked the best way to assess the risks presented by the presence of multiple employees in the same lunchroom or using shared bathrooms. They are being asked to make determinations, or at least to provide advice, about whether employees need respirators and whether other employees should even be on the job.

Collectively, we are making a difference. The most current projections indicate that Oregon has had some real success in flattening the curve. Now is not the time to let up, and the clear message is that going "back to normal" in the immediate future would be a grave mistake – but we are making a difference!

The events of the past few weeks are anything but normal, and we are learning anew the need for flexibility and for the ability to tailor our responses in the face of an ever-changing situation. And in that context, it is worth reminding ourselves that we all are facing – and will continue to face – an exceptional level of stress (as if the day-to-day work in workplace health and safety didn't provide enough challenges!).

Many of us also face varying levels of medical fragility and the added anxiety that accompanies it. Others have family members or friends who are in crisis. And it can be more challenging to get the help one may need in these days of social distancing and telemedicine.

But we can help one another in a less formal and perhaps more immediate fashion. As we try to balance the day-to-day routine with the exceptional and last-minute demands that come our way in times like this, tensions may rise and frustration with one





Oregon OSHA Administrator

another may grow. That's a good time to remind ourselves that we are truly on the same side. We may be impatient, we may be frustrated, we may face uncertainty – but we also need to offer one another an added measure of grace ... and with it, the readiness to forgive the more frequent distractions and the perceived slights that we may experience.

I am not telling you anything you don't already know. As I said when I wrote similar words to Oregon OSHA staff a few weeks ago, I may be writing as much for my own benefit as anything else. But sometimes it is worth repeating those truths we already know. The work we do as occupational safety and health practitioners is important. It truly matters, at times in life and death terms. But the people doing that work are also important. And we do the work best when we support one another.

These may not be the times to offer one another a hug, or even a handshake. But, as we encounter one another during our day-to-day work, we can and should offer a kind word or two. And we should take a moment to check to see how those around us are really doing, and whether there is anything we can do to help.

Be safe. Be healthy.



Don't miss.....



Education:

Workshop classes will be held virtually until further notice.

A minimum of five registrants is needed to hold a virtual workshop.

Registered participants will receive an email if a cancellation is necessary.

Register and attend

Using the secure online registration portal, you can find classes. The workshop schedule changes every three months.

For more information, visit the classroom workshops page.

Find more information about education resources by visiting Oregon OSHA's education and training page.

For more information: osha.oregon.gov/edu

For the most recent public education schedule updates: osha.oregon.gov/edu/workshops To receive registration materials, exhibitor information, or sponsorship information for the 2020 events, contact the Conference Section: <u>oregon.conferences@oregon.gov</u> | 503-947-7411 | <u>osha.oregon.gov/conferences</u>



Oregon OSHA has launched a free <u>Spanish-language online training</u> <u>course</u> to help employers and workers fulfill the agency's requirements to eliminate fall hazards, prevent falls, and ensure that workers who do fall do not die.

The course, "Fundamentals of Fall Protection," is designed to supplement employers' fall protection training programs.

Visit more <u>Spanish-language courses</u>. Learn about the <u>PESO program</u>. Learn about Oregon OSHA's <u>education and training services</u>.

Quotable

"The program has accelerated our transition from a reactive to a proactive approach in regards to the health and safety aspects of our work. As an example, we have applied the coaching provided by the consultants to identify, analyze, and communicate hazards derived from our operations more efficiently."

 – Pedro Molina Sanchez, safety and regulatory affairs lead for Corvallis-based Valliscor LLC, on completing the company's first year in Oregon OSHA's Safety and Health Achievement Recognition Program (SHARP).

Datapoints

The Oregon Workers' Compensation Division received notification of 35 compensable fatalities in 2018, the same number of workplace fatal accidents as in 2017, and nearly six higher than the 10-year average of 29.3 fatalities.

Vehicles were the source of about 48 percent of the compensable fatalities in 2018.

SOURCE of injury or disease	2018 fatalities	Percent of total
Vehicles	17	48.6
Machinery	5	14.3
Person, plants, animals, and minerals	5	14.3
Structures and surfaces	5	14.3
Tools, instruments, and equipment	1	2.9
Other sources	2	5.7

Trucks were the source for 11 of the 17 vehicles involved in fatal accidents, three of which involved semi-trucks.

Note: Due to rounding, percents may not sum to 100.

What you should know about construction falls

Features

By Ellis Brasch

"You can drop a mouse down a thousand-yard mine shaft and, on arriving at the bottom, it gets a slight shock and walks away," wrote biologist J.B.S. Haldane in his 1926 essay, "<u>On Being the Right Size</u>." Of course, we humans aren't so lucky thanks to gravity, our larger size, and our fragile skeletons.

All falls have one thing in common – an ending point. The ending point is typically a *lower level* at most construction sites. But falls to the *same level* are also frequent and the consequences can be just as serious a fall to a lower level.

Falls to a lower level – consider using 'ladders last'

Falls to a lower level account for more than half of all fall-related accepted disabling workers' compensation claims in the construction industry – a fact that you've probably heard many times. But, if you think that most of those fall-related injuries are from roofs, you are wrong.

Every year, more Oregon construction workers are injured in falls from ladders than from any other elevated surface – including roofs, scaffolds, balconies, and even stairs. In fact, falls from ladders are the leading cause of all fall-related injuries in the construction industry.

The causes of ladder accidents haven't changed since John H. Balsley invented "the improved stepladder" in 1862. Workers fall from ladders because:

- They used the wrong type of ladder for the job.
- The ladder was defective and not repaired or put out of service.
- The ladder was set up improperly and tipped over.
- · Their foot slipped when they were climbing or descending.
- They overreached and lost their balance.
- Something knocked the ladder over.



There is also a perception among many workers that if you're only climbing a few feet above the ground, you won't get hurt if you fall. You can get hurt just as badly falling off a ladder as you can from a fall off any other elevated surface, regardless of the height.

If you have employees who use ladders, make sure that a *competent person* (see "Putting it all together" below) has trained them so they know how to use ladders, are aware of ladder hazards and ladder capacities, and know Oregon OSHA's requirements for the ladders they use. Also, consider adopting a "ladders last" policy, which requires employers and employees to consider safer alternatives to ladders – such as aerial lifts – when they are feasible.

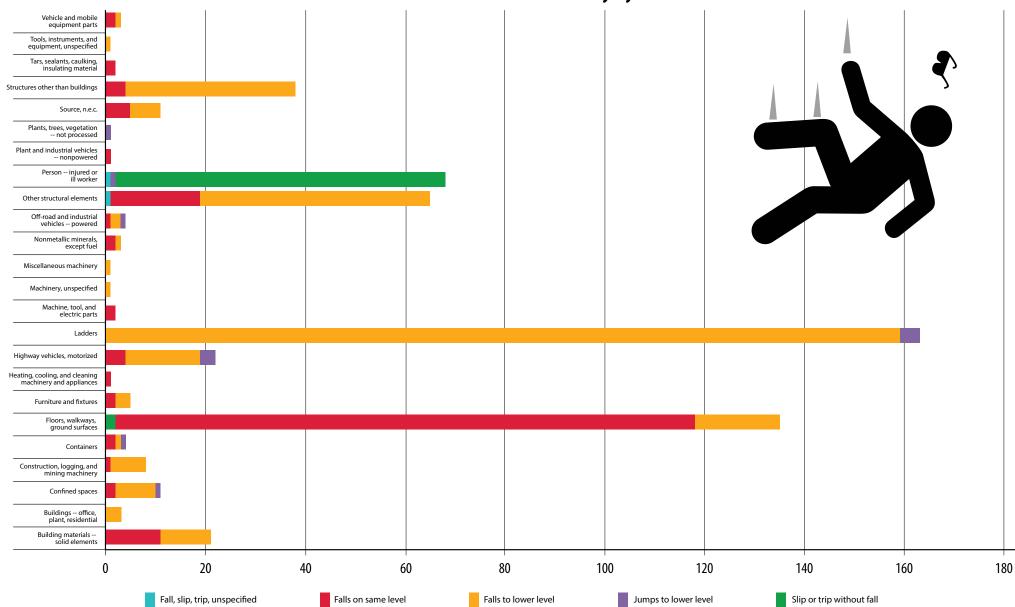
Falls to the same level – walking has its own risks

While ladders are the source of injury for a majority of falls to a lower level, floors and walkways are responsible for most falls to the same level. That fact might seem obvious, but it's easy to forget that walking has its own risks – slips and trips.

Slips generally start with a sudden, unexpected loss of traction. Trips start with sudden, unexpected increase in resistance. In both cases, the result is a temporary loss of balance. When you don't regain your balance quickly enough, the consequence is a fall. It's also important to remember that slipping and tripping









hazards present an even greater risk for those who have an existing injury or a disability.

Common causes of slips include wet or oily floors and flooring that lacks the same degree of traction in all areas. Common tripping hazards include clutter in walkways, poor lighting, uncovered cables, and wrinkled carpeting or rugs.

To help prevent slips and trips:

- Clean up spills promptly.
- Keep work areas, passageways, and stairs free of debris.
- Cover cables or cords in walkways.
- Replace burnt-out light bulbs promptly.
- Replace worn flooring.

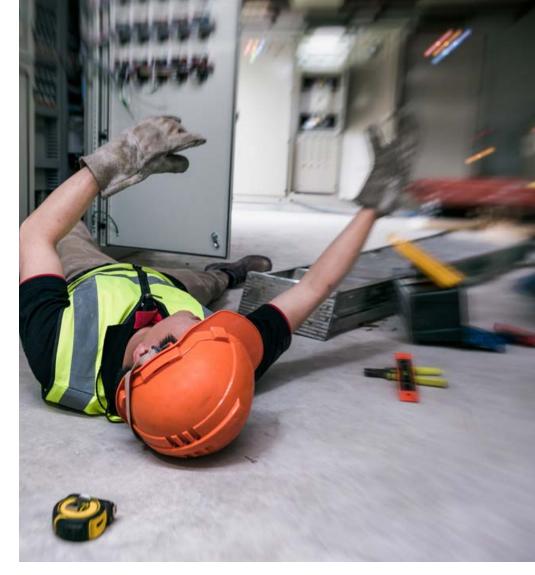
Putting it all together - how to prevent falls at your site

Here are seven key ways to reduce the risk of falls at your workplace.

- 1. Make fall prevention part of your overall safety program and ensure everyone has a role to play in preventing falls.
- 2. Enforce safe practices with on-the-job supervision. Supervisors should:
 - Verify employees have been trained in all aspects of their jobs and can safely perform their work.
 - Periodically review the safety performance of each employee.
 - Instruct, retrain, or discipline employees who are not working safely.
 - Closely supervise new employees after they have been trained.
 - Require employees to demonstrate they can work safely before permitting them to work independently.



- 3. Prepare a safety policy. Your company should have a written safety policy that reflects commitment to a safe and healthful workplace and summarizes management and employee responsibilities for keeping the workplace safe.
- 4. Designate competent and qualified persons. A *competent person* is a person who can identify existing and predictable hazards where employees work and who has authority to correct the hazards promptly. A *qualified person* supervises the design, installation, and use of horizontal lifeline systems and fall-restraint and fall-arrest anchors.
- 5. Plan to prevent falls. Consider these factors when you plan your job:
 - Which areas of the construction project are most likely to have fall hazards and what can you do to control them?
 - · What tasks could expose employees to falls?
 - Are working surfaces structurally sound and stable?
 - How will floors, walkways, and ground surfaces be kept free of slip and trip hazards?
 - How will employees access and move about the structure to do their jobs?
 - Will guardrails and covers for holes meet Subdivision 3/M requirements?
 - Are there existing anchors for arrest and restraint systems? Do they meet Oregon OSHA's <u>fall protection requirements</u> for the construction industry?
 - Have employees been trained to use ladders properly?
 - Will other contractors' employees be exposed to falls after your employees finish their work?
 - Who is responsible for ensuring that fall protection, such as guardrails and covers, are replaced if they have been removed to finish a job?



- 6. Train your employees how to prevent falls. They may not be familiar with fall hazards at a new job site or know how to protect themselves until they are trained. A competent person must do the training.
- 7. Use equipment that eliminates fall hazards. Whenever possible, use equipment such as guardrails, covers, and restraint systems that will prevent employees from falling to a lower level.



Tapping into a new career

When an on-the-job injury led to a partial amputation, Oregon's Preferred Worker Program helped a fish biologist transition to a new career at an Astoria brewery

By Aaron Corvin

Josh Allison's career was set.

As a fish biologist for the Oregon Department of Fish and Wildlife, he enjoyed being outdoors and appreciated the camaraderie of tackling projects with colleagues.

"I loved my job," he said. "I would have gladly retired from that."

But an on-the-job accident capsized his life, requiring the amputation of his right leg below the knee. It closed off his previous career and forced him to figure out another path.

With family and friends in his corner rooting for him, a desire to carve out a new career, and help from Oregon's Preferred Worker Program, Allison unlocked a new job opportunity.

Overseen by the Oregon Workers' Compensation Division (WCD), the Preferred Worker Program encourages re-employment of qualified Oregon workers who have permanent disabilities from on-the-job injuries and, because of those injuries, are unable to return to their regular work.

The program focuses on small- to medium-size businesses. Funded by worker and employer contributions to the Workers' Benefit Fund, the program equips injured workers with the resources to return to safe, productive work and provides employers with financial incentives to bring such workers on board.

"Often a job goes beyond a paycheck, it can be a social system and part of a person's identity," said Sally Coen, acting administrator for WCD. "To be able to help someone connect with a new profession helps them re-build their community and identity in addition to financial security."

Last year, WCD approved more than 1,500 contracts enabling services to be used by designated preferred workers.

For Allison, the program has helped the 37-year-old embark on a new career as the sales distribution manager for Reach Break Brewing in Astoria, where the downtown is home to a flourishing brewpub scene.

Allison has come a long way.

In 2011, he was walking in a stream, conducting field work, when he lost his balance and broke his right ankle. "I came in hard on it," he said.

He endured years of multiple surgeries and doubt about what would come next. "The hardest thing was just being immobilized and not being able to do much," he said.

The injury would never heal. It got to the point where, if Allison was to move on, he had to accept losing his leg below the knee. Which is what he did. "I was ready for it," he said.

Likewise, he was ready to adapt. He underwent the physical therapy necessary to incorporate his prosthetic. He moved forward.

As Allison adapted to a permanent disability and the job restrictions that come with it, he received a notice in the mail about the Preferred Worker Program.

He was also giving a lot of thought to something else: The hobby he'd long been passionate about – home brewing in his garage – could become his new full-time job.



"I love the process," he said of concocting just the right brew. "Coming up with an idea, a recipe, brewing, the fermentation – and then getting to enjoy that final product."

The Preferred Worker Program further cleared the path for Allison to join Reach Break Brewing. His new job as sales distribution manager removed some, but not all, of the job duties that are outside restrictions from his doctor that include squatting, kneeling, and crawling. He was also limited to lifting a maximum of 50 pounds, 25 pounds if the lifting was frequent.

Allison must travel to bars, brewpubs, and like-minded businesses to market the company's products. That includes lifting and arranging kegs and product samples, and retrieving empty kegs.

The brewery didn't have a vehicle for this type of work, which posed challenges to Allison's work restrictions. The Preferred Worker Program remedied the situation, providing a work van and making certain modifications.

These changes included the program's purchase of a keg hand truck that allows Allison to bring full kegs to and from the work van without lifting outside his restrictions.

Occasionally, Allison must also do other tasks beyond sales, including maneuvering and stacking pallets of kegs inside a small warehouse. The company rented a forklift for this task, but it was not a long-term solution because of the cost.

Under the Preferred Worker Program, a long-term solution emerged: a pallet stacker. It replaced the forklift and saved valuable warehouse space. It allows pallets to be moved with little use of force and runs an electrical motor to stack pallets.

"It is about finding ways to break down barriers for an injured worker," said Brian Nease, worksite modification consultant for the Preferred Worker Program. "Without this new equipment, Josh would have been forced to manually stack the pallet and its contents, which is outside his restrictions." Other program-led modifications are under way. There's an educational component, too. Allison will attend Portland State University's craft brew business program. The focus is multi-faceted: Sustain Allison's return to the labor market, achieve efficiencies, save money, and – with Allison working on sales and marketing – help Reach Break Brewing grow its business.

For Allison, it's all part of continuing to move forward with his life. The Preferred Worker Program, he said, "opened up opportunities and helped facilitate a positive transition."



Learn more about the Preferred Worker Program: www.oregonpwp.org

Ask Oregon

We are a small residential construction contractor and our employees use fiberglass stepladders on most of our construction and remodeling projects. What are Oregon OSHA's requirements for inspecting fiberglass stepladders?

Oregon OSHA's ladder requirements for the construction industry say that all portable ladders must be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use [See 1926.1053(b)(15)]. A competent person is a person designated by the employer who can identify existing and predictable hazards where employees work and who has authority to correct the hazards promptly.

All stepladders should be inspected for:

- Missing or damaged slip-resistant feet, shoes, or other load-bearing surfaces.
- Damaged side rails, steps, rungs, and cleats.
- Loose fittings.
- Contamination from oil, grease, and mud.
- Properly working spreader bars.
- Damaged braces.
- Damaged pail shelves.



Any ladder that is damaged or defective must be clearly and immediately tagged "Do Not Use" and be removed from service.

Fiberglass ladders are also susceptible to a condition called fiber bloom, which results when the reinforcing fibers in the ladder's side rails become exposed, typically after a few years of use. High humidity and exposure to strong sunlight can accelerate the condition.

Fiber bloom does not significantly affect a ladder's strength, but it will affect the appearance and may cause users mild discomfort when the exposed fibers penetrate their skin.

A blooming ladder can also become electrically conductive. Fibers that bloom can hold moisture, especially after rain. A blooming ladder, once damp, can conduct up to half the voltage it comes in contact with, causing a conductive chain that could potentially electrocute the user.

Regular pressure washing (at moderate psi) and waxing with a commercial nonslip paste wax will protect the ladder and reduce the potential for fiber bloom. To keep the ladder in top condition, periodically coat it with two to three coats of acrylic lacquer with an airless sprayer and store it where it is not exposed to ultraviolet light.

Short take

April 28: Why it's important

Editor's note: In light of the public health crises triggered by the coronavirus outbreak, Oregon AFL-CIO, which coordinates the annual Workers Memorial Day ceremony, will conduct a video version of the event on Tuesday, April 28.

Forty-nine years ago, the AFL-CIO declared April 28 as Workers Memorial Day to honor workers who died on the job. It was 1970 and an estimated 14,000 U.S. workers had died that year "exposed to the hazards of the industrial age."

Congress had just passed the Occupational Safety and Health Act, which became effective April 28, 1971, the official birthday of OSHA and the National Institute for Occupational Safety and Health (NIOSH).

Following the precedent set by the AFL-CIO, in 1985, the Canadian Union of Public Employees and the Canadian Labor Congress set April 28 as an annual day of remembrance for Canadians who died on the job.

Six years later, in 1991, Canadian parliament passed legislation that made April 28 Workers Mourning Day.

By 1996, the international trade union movement had established April 28 as the International Commemoration Day for Dead and Injured Workers, and the effort to commemorate fallen workers became a global phenomenon. In 2003, the International Labor Organization – a United Nations agency – became involved in the April 28 campaign and created the World Day for Safety and Health at Work and World Day Against Child Labor to end child labor. The ILO set ambitious goals of ending all forms of child labor by 2025 and making all working environments safe by 2030.

There were 5,250 fatal work injuries recorded in the United States in 2018, according to the U.S. Bureau of Labor Statistics' most current published data – a 2 percent increase from the 5,147 reported in 2017, but 8,750 fewer deaths than were reported in 1970. April 28 serves as a reminder that we must never forget those who have died because most workplace injuries and illnesses are preventable.

"Protect our rights. Speak up for safe jobs," the theme for this year's Workers Memorial Day, reinforces the mandate of the mandate of the Occupational Safety and Health Act: that every worker has a right to a safe workplace. "When workers are punished for speaking up against unsafe working



conditions, everyone's safety is at stake," said Richard L. Trumka, president of the AFL-CIO, in a March 16, 2020, letter addressed to AFL-CIO member unions.

In years' past, Oregonians who died on the job were recognized at a ceremony held at the Fallen Workers Memorial outside the Labor and Industries Building in Salem. However, this year's devastating impact of the COVID-19 public health crises means that coming together in person to remember workers who have lost their lives is not possible.

Nevertheless, Oregon AFL-CIO, which coordinates the ceremony, will move forward with a video version of the ceremony, which will occur on Tuesday, April 28.





What happened?

The sleeve of a worker's rain jacket was caught in an unguarded rotating shaft.

How did it happen?

A 46-year-old worker on the employer's sanitation crew was assigned the task of cleaning the surface of the "cull" conveyer belt, which fed product to a second conveyer that joined it at a 90-degree angle. The task involved scrubbing the belt while it was stopped and then rinsing the belt with a hose to remove the debris while the belt was moving. The employer provided the worker with a rain jacket so she would stay dry.

Two-thirds of the cull conveyer belt was enclosed and not accessible. However, the worker was standing adjacent to the uncovered part of the belt; she would clean one section at a time while it was stopped – which took between 10 and 30 minutes – and then shout over to her supervisor, who would start the conveyer so she could rinse the belt. This was necessary because her supervisor would not let her use the conveyer's start-stop switch, which was 30 feet from where she was standing.

As she was rinsing the moving belt, her rain jacket got caught in a protruding rotating pulley shaft that was part of the conveyer system. She screamed to her supervisor for help. The supervisor, who was doing another task at the time, ran over Employer Fresh fruit processor. Worker Laborer, female, age 46. Incident A sanitation crew worker injured her right hand and arm while she was cleaning a conveyor belt. Issue Clothing caught in an unguarded rotating shaft.



The corner where the two conveyers met. The worker was standing on the inside of corner facing the conveyer belt on the right side of the photo. Note: The employer installed the emergency start-stop switch on the right after the incident.

to the conveyer's start-stop switch, turned off the conveyer, then went to see what happened to her

She was standing up and holding her right arm. The supervisor called 911 and emergency responders took her to a local hospital where she was evaluated and scheduled for surgery to repair damage to her hand, wrist, and lower arm.

Findings

- The unguarded pulley shaft was located in an area accessed only by the sanitation crew when they were cleaning the conveyer belt.
- Until a week before she was injured, the worker would walk over to the start-stop switch to turn the conveyor off and on when she was cleaning the belt. However, the procedure changed when her supervisor told her that only he was authorized to use the startstop switch. This decision left her standing near the exposed shaft and required her to make verbal requests to the supervisor, who would start and stop the conveyer for her. (The employer later fired the supervisor who made the decision.)
- The employer's initial investigation of the incident was based only on a short conversation with the injured worker (there were no witnesses). The employer's review of the incident (after Oregon OSHA's inspection) listed two causes: The pulley shaft was unguarded and the conveyer belt was moving while the worker was rinsing it.



The worker's rain jacket was caught in this exposed pulley shift.

 The employer had overlooked the unguarded shaft; the facilities manager said, "I never noticed that [shaft] before, otherwise it would have been guarded just like all the others are."

Violation

437-004-1970(4)(b) - **Division 4, Farmstead equipment:** All revolving shafts, including projections such as bolts, keys, or set screws, were not guarded by protective shields, location, guardrails, or fences.

16

Keeping your Distance Resources in the time of coronavirus

Normally, Oregon OSHA publishes a regular feature in Resource called Going the Distance.

But these are not normal times.

In light of the public health crises triggered by the coronavirus outbreak, Oregon OSHA has stepped up its enforcement and education activities as part of a larger statewide effort to stop COVID-19 in its tracks.

As we move forward, employers and workers may be struggling to understand how to keep their workplaces safe and healthy. They may be seeking reliable information, advice, and guidance.

As a result, Oregon OSHA offers this special page – what we're calling "Keeping Your Distance" to reflect the call to follow social distancing guidelines – filled with links to online documents, tools, and connections.

<u>These resources</u>, including <u>Spanish-language con-</u><u>tent</u>, are aimed at helping you navigate turbulent times:

Interim guidance for Oregon OSHA related to COVID-19:

Includes certifications, monitoring, and training; agriculture labor housing; and safety committees and meetings

- Learn more
- Source document





Scope of Oregon OSHA COVID-19 activity

- Online Q&A
- Source document

Construction contractors – job health and safety resources

- Online information
- Source document

Oregon OSHA <u>consultation</u> <u>services</u> – free and confidential

- Includes safety, health hazard assessments
- Recommendations to control and eliminate hazards
- Written program evaluation
- Industrial hygiene services
- Training on health and safety topics
- Assistance with safety and health programs

Oregon OSHA technical staff

 Our experts can answer questions and help you understand how to apply our rules to your workplace

More State of Oregon resources

Oregon Health Authority – <u>COVID-19 updates</u>



Federal OSHA resources

Includes: <u>Ten steps</u> all workplaces can take to reduce risk of exposure to coronavirus

CDC resources

 Includes resources for businesses and employers

•