



Health and Safety

# RESOURCE

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**6** What you need to know  
about trench cave-ins

**9** Heat stress prevention tips

**19** Going the Distance

Meet Taylor Northwest, a safety  
award-winning construction firm in Bend

# 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.

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## Administrator's Message

- 3 Finding new approaches to protect our most vulnerable

## Don't miss...

- 4 Upcoming workshops and events



## Did you know?

- 5 Oregon OSHA's PESO program helps English-speaking employers train and talk about workplace safety and health with Spanish-speaking workers

## Features

- 6 What you need to know about trench cave-ins
- 9 Heat stress prevention tips

## Ask Oregon OSHA

- 11 Should soil composition be considered when measuring the depth of a trench?

## Short Takes

- 12 Workers' Memorial Scholarship recipient wins national award
- 13 Parkrose High School team wins safety video contest
- 15 Employers across Oregon take a Safety Break
- 16 Owens Corning plant in Gresham earns VPP Merit status

## Safety Notes

- 17 Farm laborer's hand amputated while removing debris from an onion peeling machine

## Going the Distance

- 19 Meet Taylor Northwest, a safety award-winning construction firm in Bend



# Finding new approaches to protect our most vulnerable

by Michael Wood

One of the most challenging groups for us to reach, whether as regulators or as general workplace health and safety practitioners, are those who do not communicate readily in English. Even workers with some basic skills in English are often much more comfortable – and much more capable of dealing with complex issues – in their native language.

We face this issue – particularly in certain industry sectors – with regard to several Asian languages, as well as to those from Mexico and Central America for whom neither English nor Spanish is their first language. But one of the most widespread groups of immigrants who often have limited or no capacity to speak in English are the many Spanish speakers in our workforce. And I know from conversations with many of you that they present a challenge in the workplace, as you must develop more creative and more effective ways to provide training, instruction, and correction of workplace safety issues.

This is also a population that can face particular challenges when their employers are not prepared to do the right thing and are unwilling to fully address the hazards in their workplaces. Knowing what a worker's rights are can be difficult enough for English speakers, as can understanding how to access assistance from Oregon OSHA, the Bureau of Labor and Industries, or the state workers' compensation system.

We have occasionally worked with our partners to provide Spanish-language content in various conferences around the state, and we are increasingly providing Spanish-language training options in our web-based materials. But this November we plan to embark on a new initiative that is both exciting and a bit daunting.

We plan to bring Oregon OSHA's expertise in event planning – the same exceptional capability that makes GOSH and our various regional conferences a success – as well as our increasing capability to provide Spanish-language training (using both our own resources and those available from our many partners)

to put on a conference focusing on issues of particular interest to workers and entirely in Spanish. We have decided that, rather than relying only upon interpretation and translation of the other things that we do, we are going to provide the event in the language of the workers themselves.

More information will come as we nail down the event location and the exact dates. But we are excited to take on this new challenge. And, speaking for myself at least, just a little bit scared. But it is something we have to do.



Oregon OSHA  
Administrator



# Don't miss...

## Education: July-September workshops

### July 10, 2019 • Eugene

8 a.m. Excavation Safety

1 p.m. Forklift Safety

### Aug. 29, 2019 • Salem

8 a.m. Safety and the Supervisor

1 p.m. Safety Meetings and Committees

### Sept. 5, 2019 • Milwaukie

8 a.m. Safety and the Supervisor

1 p.m. Job Hazard Analysis



For more information: [osha.oregon.gov/edu](https://osha.oregon.gov/edu)

For the most recent public education schedule updates: [osha.oregon.gov/edu/workshops](https://osha.oregon.gov/edu/workshops)

To receive registration materials, exhibitor information, or sponsorship information for the 2019 events, contact the Conference Section: [oregon.conferences@oregon.gov](mailto:oregon.conferences@oregon.gov) | 503-947-7411



**September 16 & 17, 2019**

Riverhouse on the Deschutes • Bend, Oregon

This event helps your organization improve workplace safety and health performance. Topics include information for all experience levels.

**Registration opens in late July.**

Cost to attend: \$55-\$210

More information available at:  
**[safetyseries.cvent.com/central19](https://safetyseries.cvent.com/central19)**

*This conference is a joint effort of the Central Oregon Safety & Health Association (COSA), and Oregon OSHA.*



**October 15-17, 2019**

Ashland Hills Hotel • Ashland

Exhibits • Awards • Workshops

**Professional Development and Keynote Speaker**  
**Robin Rose, Author, Trainer and Consultant**

**October 15: Professional Development Workshop**

Leadership, Teamwork & Communication – Tools for Success

**October 16: Keynote**

Safety on the Brain

**[www.soassp.org](https://www.soassp.org)**  
**[osha.oregon.gov/conferences](https://osha.oregon.gov/conferences)**

*This conference is a joint effort of the American Society of Safety Professionals (ASSP), Southern Oregon Chapter, and Oregon OSHA.*



# Did you know?

Oregon OSHA offers PESO, a bilingual program created to help English-speaking employers train and talk about workplace safety and health issues with Spanish-speaking workers.



The program includes [bilingual modules](#) designed to be taught in less than 60 minutes. Some modules are guided audio. The program also offers [bilingual 60-second audio messages](#) about job safety. ●

## Quotable

**“Never tell an employee that you’re too busy to listen to their concern. Stop what you’re doing and give the issue your full attention; don’t say it can wait. That would be a sure-fire way to damage your safety culture and put employees at risk.”**

– **Pete Kimbrel**, safety, wellness, and environmental manager for Orenco Systems Inc. The company, with facilities in Sutherlin, Winchester, and Wilbur, Ore., designs and manufactures equipment for on-site and decentralized water and wastewater systems.

# Datapoints

The Oregon Workers’ Compensation Division received notification of 35 compensable fatalities in 2017, six more than in 2016 (29 fatalities), and five higher than the 10-year average of 30.4 fatalities. The number of compensable fatalities in 2017 is the highest since 2008 when 46 workers perished on the job.

## Oregon Compensable Fatalities 2007-2016

Year	WC covered employment	Fatal claims	Fatal rate
2008	1,746,200	46	2.63
2009	1,637,400	31	1.89
2010	1,623,300	17	1.05
2011	1,641,300	28	1.71
2012	1,664,000	30	1.80
2013	1,697,600	30	1.77
2014	1,743,800	31	1.78
2015	1,800,300	27	1.50
2016	1,860,400	29	1.56
2017	1,901,000	35	1.84

*Note: Employment figures are based on Oregon Employment Department data. Fatality rates are the number of accepted fatal claims per 100,000 workers. The 2017 employment and fatality rate estimates are preliminary. Data exclude deaths of workers not subject to Oregon workers’ compensation coverage, such as workers who were self-employed, who worked for out-of-state employers, City of Portland police and fire employees, and federal employees.*

# What you need to know about trench cave-ins

By Ellis Brasch

This month (June 17-21), the National Utility Contractors Association – the leading excavation trade association in the United States – is sponsoring its annual trench safety stand down, which comes at a good time. Five workers died in trench cave-ins across the nation in April.

We've been fortunate in Oregon because fatalities caused by trench cave-ins are still rare events. Nevertheless, it's worthwhile to reflect on how excavation cave-ins happen and what can be done to prevent them. In 2016, a 29-year-old Oregon pipe layer died when he was buried under six feet of dirt in an improperly shored trench. And in 2018, three Oregon workers were injured – one critically – in two separate incidents involving trenches that lacked protective systems. Key factors in all three incidents included the failure of a competent person to inspect the trench daily and ensure that it was safe to enter as well as the employee's failure to recognize the dangers of entering an un-protected excavations, such as trenches, for even brief moments of time.

## What causes a cave-in?

Undisturbed soil stays in place because of the soil's opposing horizontal and vertical forces. When you create an excavation, such as a trench, you remove a section of soil that previously provided the horizontal support. The remaining soil located behind the face of an excavation will eventually move downward, into the excavation. Sometimes this downward movement occurs gradually, creating an inconvenient mess; however, all too often, the downward movement occurs unexpectedly fast in the form of sliding, sluffing or toppling. In addition to factors such as water and vibration, the longer the face remains unsupported, the more likely it is to cave in.

Trench cave-ins can trap victims within seconds and kill them within minutes. A cave-in that contains three to five cubic yards of soil weighs 8,000 to 14,000 pounds – a victim can suffocate in less than three minutes. If the victim survives, the weight of the soil is likely to cause serious internal injuries.





## The importance of a competent person

Because excavation cave-ins are so dangerous, Oregon OSHA's minimum safety rules require employers to designate persons to perform a variety of on-going tasks to ensure that excavations remain safe for employees to work within. Those on-going tasks are assigned to the "competent person" which is defined in the rule's definitions. It is critical to remember that a person is not competent in excavation safety unless they can do two things. First, they must be trained to identify existing and predictable hazards in the surroundings as they relate to excavations. Second, they must have the authority to take prompt corrective measures to eliminate those hazards.



Sergei Butorin/Shutterstock

In fact, it's hard to overemphasize the importance of the competent person, who is responsible for identifying trench-related hazards and taking prompt corrective measures to eliminate them. The competent person's other responsibilities include classifying soil, determining appropriate methods to protect workers from cave-ins, testing for atmospheric hazards, and inspecting the trench at least once a day. Inspections are also necessary after heavy rain or activities such as blasting that may increase the risk of a cave-in.

The competent person's expertise must be backed up by training in soil analysis, trench protection methods, and Oregon OSHA's excavation requirements. The competent person must also have the authority – designated by the employer – to immediately correct trench-related hazards and to order employees to leave the trench until the hazards have been corrected. An employee who is trained and can identify trench-related hazards, but doesn't have the authority to correct them, is not a competent person.

A competent person's responsibilities can be shared by more than one competent person at a site as long as each person understands their respective roles in keeping the trench safe.

## Know the ABCs of trench stability

Because soil and rock characteristics affect the stability of a trench, a competent person must conduct visual and manual tests to determine the type of the soil at the site. There are three basic types of soil that affect the stability of a trench:

- **Type A:** very stable. Clay is an example.
- **Type B:** less stable than Type A soil. Crushed rock, silt, and soils that contain an equal mixture of sand and silt are examples.
- **Type C:** less stable than Type B soil. Gravel and sand are examples.

## The importance of protective systems: sloping, benching, shoring, and shielding

The basic methods for protecting workers from cave-ins are sloping, benching, shoring, and shielding. The appropriate method depends on factors such as soil type and water content, the trench depth and width, the nature of the work, and nearby activities that could increase the risk of a cave-in. The competent person has the responsibility for considering these factors and for determining the appropriate protective system.

There is a common misconception that protective systems are not required if a trench has a depth less than four feet; however, a protective system is required unless a competent person in excavation safety determines through an examination of the ground that the excavation shows no indication of a potential cave-in. Such indications include tension cracks, water accumulation, budging, sluffing, heaving, squeezing or subsidence.

## Getting in and out of a trench

A trench that has a depth of four feet or more must have a stairway, ladder, or ramp that is within 25 feet of workers; if conditions in a trench become hazardous, workers' safety may depend on how quickly they can climb out. A competent person must design any structural ramps that are used to enter and exit the trench. Structural ramps used in place of steps must have a non-slip surface. A competent person must also evaluate compressed earth access ramps that workers use to enter and exit the trench.

## Keeping spoils away from the trench

Excavated soil, called spoils, can cause a cave-in when piled too close to the edge of a trench. So can heavy equipment. Keep spoils and equipment at least two feet away from the edge of the trench. When possible, use vertical shores or shields that extend above the top of the trench to restrain spoils. When it's not possible to meet the two-foot setback, move spoils and equipment to another location.

## The danger of water accumulation

Water makes soil unstable. Workers can't enter trenches when water has built up unless they are protected from the increased risk of a cave-in. Protection includes specialized support systems and water removal equipment. A competent person must inspect the trench and monitor methods used to control water accumulation. ●

## Contributing factors in three Oregon trench cave-ins

Oregon OSHA has investigated one fatality and two injury-accidents involving trench cave-ins since 2016. The table below highlights the contributing factors.

Why the trench collapsed – contributing factors	May 2016 1 fatality	Jan. 2018 1 injury	Apr. 2018 2 injuries
A designated competent person did not classify the soil in the trench with at least one manual test and one visual test.	X	X	X
A designated competent person did not inspect the trench, adjacent areas, and protective systems daily and after rain or other conditions that could increase the risk of a hazard.	X	X	X
Appropriate sloping, shoring, or shielding were not used to protect employees who worked in the trench.	X	X	X
Employees were not protected from loose rock or soil that could fall into the trench.	X	X	X
Employees had not been trained to do trench-related work.		X	X
A designated competent person did not monitor the methods used to control water from accumulating in the trench.		X	X
Employees were allowed to enter a trench that showed signs of water accumulation and were not protected from the risk of a cave-in.		X	X
Surface water or runoff was not diverted away from the trench.			X
Trenches that had a depth of four feet or more did not have a ladder or other means of safe access within 25 feet of employees.	X		
Materials and equipment used for protective systems at the trench site were not chosen based upon soil analysis, trench depth, and expected loads.	X		
Spoils, equipment, and tools were not at least two feet from the edge of the trench.	X		



# Heat stress prevention tips

By Aaron Corvin

As the dangers of working in high heat loom, Oregon OSHA urges employers and workers to focus on prevention. That includes regularly providing water and breaks in the shade, and gradually adapting workers to hot environments.

The call to address the hazards of working in high heat is part of an [emphasis program](#) maintained by Oregon OSHA. The program includes a review of employers' plans to deal with heat exposure, especially from June 15 through Oct. 1 of each year. The program applies to both outdoor job sites and indoor workplaces where potential heat-related hazards may exist. Exposure to heat can lead to headaches, cramps, dizziness, fatigue, nausea or vomiting, and even seizures or death.

As part of its prevention campaign, Oregon OSHA offers the following information, tips, and tools to help employers and workers prevent heat-related illness.

## Tips for prevention

Here are some tips for preventing heat-related illness:

- Perform the heaviest, most labor-intensive work during the coolest part of the day.
- Use the buddy system (work in pairs) to monitor the heat.
- Drink plenty of cool water (one small cup every 15 to 20 minutes).
- Wear light, loose-fitting, and breathable clothing (such as cotton).
- Take frequent short breaks in cool, shaded areas – allow your body to cool down.
- Avoid eating large meals before working in hot environments.
- Avoid caffeine and alcoholic beverages (these make the body lose water and increase the risk of heat illnesses).



AzmanL/E+/Getty Images

## Heat stress and its signs

Heat stress happens when your body is no longer able to control its internal temperature. Heat stress can lead to heat exhaustion and heat stroke. The symptoms of heat exhaustion include dizziness, headache, rapid pulse, nausea, and vomiting. The symptoms of heat stroke include high body temperature, confusion, and convulsions. Heat stroke can be fatal.



## What to do when symptoms appear

To help those suffering from **heat exhaustion**:

- Move them to a cool, shaded area. Do not leave them alone.
- Loosen and remove heavy clothing.
- Provide cool water to drink (a small cup every 15 minutes) if they are not feeling sick to their stomach.
- Try to cool them by fanning them. Cool the skin with a spray mist of cold water or a wet cloth.
- If they do not feel better in a few minutes, call 911 for emergency help.

To help those suffering from **heat stroke**:

- Call for 911 for emergency help
- Move the person to a cool, shaded area. Don't leave the person alone. Lay the person on her or his back, and, if the person is having seizures, remove nearby objects so the person won't hit them. If the person is sick to his or her stomach, lay the person on their side.
- Remove heavy and outer clothing.
- Have the person drink some cool water (a small cup every 15 minutes) if the person is alert enough to drink anything and not feeling sick to their stomach.
- Try to cool the person by fanning her or him. Cool the skin with a cool spray mist of water, wet cloth, or wet sheet.

## Tools and resources

The federal government offers a [Heat Safety Tool](#) mobile phone app that allows workers and supervisors to calculate the heat index for their worksite.

Based on the heat index, the app displays a risk level to outdoor workers. The app also enables you to receive reminders about the steps you should take at a certain risk level to protect workers from heat-related illness.

Reminders include water and rest breaks, emergency planning, adjusting work operations, gradually building up the workload for new employees, training on identifying the signs and symptoms of heat illness, and watching out for each other for those signs and symptoms.

Oregon OSHA offers many resources and publications – including in Spanish and English – on the web through its [heat stress topic page](#). They include a [sample heat illness prevention plan](#) for employers; brochures in [Spanish](#) and [English](#); and heat stress prevention videos in [Spanish](#) and [English](#). ●





**We need to work in a trench that consists of solid rock and Type B soil; the bottom three feet is stable rock and the top three feet is Type B soil. Should we consider the three feet of Type B soil on top as part of a six-feet-deep excavation that must have a protective system?**

.....



Regardless of the soil and rock characteristics, the trench is six feet deep and requires a protective system such as sloping, benching, shoring, or shielding that will protect workers from potential instability in the Type B soil. The designated competent person at the site has the responsibility for evaluating the soil and rock characteristics and determining the appropriate protective system.

Oregon OSHA requires protective systems for trenches and other excavations that are five or more feet deep; keep in mind, however, that a protective system could be required if the trench is less than five feet deep if a competent person determines that it is necessary to protect workers who could be exposed to a cave-in. ●



## Short take

### Workers' Memorial Scholarship recipient wins national award

Salma Anguiano, one of nine Oregon high school graduates who won an [Oregon OSHA Workers' Memorial Scholarship](#) last year, continues to shine as a college student and citizen.

Within six months of enrolling in Whitman College last fall, she tied for first place in the campus-based Letters to an Elected Official Competition.

The competition is sponsored by Project Pericles, a higher education consortium that promotes civil engagement and social responsibility.

[Learn more about Anguiano's achievement in this story](#) by Whitman College's campus newspaper. Anguiano is a 2018 graduate of Hermiston High School. A vehicle accident left her stepfather, who worked at a dairy farm, a quadriplegic. Anguiano received a \$1,500 Workers' Memorial Scholarship award. ●



Click to learn more about Oregon OSHA  
Workers' Memorial Scholarships



## Short take

### Parkrose High School team wins safety video contest

Students at Parkrose High School in Portland won \$500 for their first-place video titled “The Safety Bros” in an annual safety video contest that promotes young worker safety and the importance of speaking up.

Bouncing with music, energy, and humor, the video features a duo of workplace safety and health bros who rally a group of workers to the cause of speaking up and working safe by spurring them to join “a most excellent song and dance number.”

Parkrose High School also won a matching amount of prize money.

The members of the Parkrose team are:

- |                   |                   |                   |
|-------------------|-------------------|-------------------|
| • Chad McAdams    | • Austin Audette  | • Sam Adjibogoun  |
| • Shanahan Sweet  | • Zack Tudor      | • Ryan Vacano     |
| • Jason Taylor    | • Julia Bardocz   | • Kim Townsend    |
| • Nayely Interian | • Mary Dinh       | • Kaley Easton    |
| • Mason Swinehart | • Clayton Espenel | • Kayla Sanders   |
| • Hunter Fields   | • Adrian Phan     | • Aida Najafabadi |
| • Waymond Crowder | • Phong Ta        |                   |
|                   | • Jonathan Hawes  |                   |

*Continued on next page*







*Parkrose team members (continued):*

- |                       |                            |                         |
|-----------------------|----------------------------|-------------------------|
| • Anthony Xiong       | • Denis Ramic              | • Ashley Jackson        |
| • Veshawn Saechao     | • Fue Chee Vang            | • Oscar Sieber          |
| • Ryan Matthews       | • Calvin Haynes            | • Sam Madden            |
| • Ashley Moua         | • Alexis Budar             | • Tayquaan Jackson      |
| • Shade Courtney      | • Griffin Clover           | • Carson Schafer        |
| • Alex Viegas Dias    | • Daniel Rodriguez Sanchez | • Matthew Silver        |
| • James Jasso-Commack | • Jet Vang                 | • Ryan Nguyen           |
| • Julius Hardman      | • Timothy Vu               | • Giezi Tenorio-Robledo |
| • Hunter Osborn       | • Aallan McKenzie          |                         |

Second- and third-place prizes also were awarded to Crescent Valley High School in Corvallis and Summit High School in Bend, respectively

The second- and third-place winners are as follows:



### Second place (\$400)

"Safety Joe"

Crescent Valley High School, Corvallis

Created by:

Danny Mason and Alex Vartanov



### Third place (\$300)

"Anytime, Anyplace"

Summit High School, Bend

Created by:

Marvin Walder, Ryan Walker,  
Olivia McGean, and  
Amberly Schreinerwood

Sponsored by the [Oregon Young Employee Safety Coalition \(O\[yes\]\)](https://www.oregonyoungemployeesafetycoalition.org/), the video contest calls on students to create a 90-second or less video with a central theme: "Speak up. Work safe."

All of the winning videos, as well as the other finalists, are available for viewing on YouTube:

[https://www.youtube.com/watch?v=Z5\\_HsiPb\\_rc&list=PLM75uPd4sBhx05Jw-ZDmjYieJiG49qjsDx](https://www.youtube.com/watch?v=Z5_HsiPb_rc&list=PLM75uPd4sBhx05Jw-ZDmjYieJiG49qjsDx) ●



## Short take

### Employers across Oregon take a Safety Break

Sixty-seven companies, nonprofits, and local governments helped underscore the importance of safety and health on the job by participating in [Safety Break for Oregon](#) on May 8.

Their activities included discussions of construction safety; games and quizzes designed to identify hazards; training on fire extinguishers; emergency response presentations; vehicle safety demonstrations; and stretching and flexing to improve ergonomics.

The 16th year of the event encouraged employers and workers to collaborate to bolster workplace safety and health with training, award recognition gatherings, or other creative activities. As part of the event, Lippert Components Inc., Valvoline Instant Oil Change, and Oregon Department of Transportation Maintenance and Operations Branch each won a \$100 prize for a luncheon of their choice. The prizes were awarded to event participants in a random drawing. [The Oregon SHARP Alliance](#) sponsored the contest. ●



Starbucks employees and managers in Oregon focused on a variety of Safety Break topics, including stretches to prevent injuries.



LMC Construction held Safety Break activities at an estimated 10 to 15 job sites. Its activities included giving safety awards to two subcontractor workers.



Comcast Cable Eugene's Safety Break activities included recertifying all of its facility and vehicle fire extinguishers.



## Short take

### Owens Corning plant in Gresham earns VPP Merit status

The Owens Corning Foam Insulation plant in Gresham has won approval to participate as a Merit site in Oregon OSHA's [Voluntary Protection Program](#) (VPP).

The approval to [participate in VPP](#) – which encourages companies to effectively protect workers by going well beyond minimum safety requirements – follows the plant's successful completion of a VPP evaluation.

"The site had a clear idea of systems and practices that manage health and safety at a high level and were implementing those practices," according to the evaluation team. The Oregon OSHA evaluation team members were: Nathan Sweet, health consultant, Gary Robertson, safety consultant, and Terra Gaines, health compliance officer. Matthew Erickson, regional safety coordinator for Cintas Corporation, served as the team's [Special Government Employee](#).

The site, which employs 45 people and two contract workers, produces rigid foam insulation through extrusion, cooling, edge trimming and cutting, printing, packaging, and warehousing. Hazards at the site include chemical, electrical, pinch points and noise related to machines, and heat. The facility also uses highly hazardous chemicals in sufficient quantities, warranting its placement under the [Process Safety Management Standard](#).

As a Merit site, the Owens Corning plant in Gresham is expected to achieve certain goals. Those goals include identifying ways to measure the condition of certain safety and health program elements, such as management leadership and employee involvement; conducting a comprehensive ergonomic assessment of the entire site; and developing a system for capturing anonymous submissions about health and safety concerns.

The plant will act as a Merit participant for 18 months, with the next evaluation on or near May 9, 2020.

The benefits of becoming a VPP company include up to 80 percent fewer work-day injuries than expected of an average site of the same size and industry; reduced workers' compensation costs; improved employee motivation to work safely; and recognition in the community.

For more information about VPP, contact Mark E. Hurliman, Oregon OSHA VPP/SHARP program manager, 541-776-6016 or [mark.e.hurliman@oregon.gov](mailto:mark.e.hurliman@oregon.gov). ●







# Safety Notes .....

## Incident Report

**Incident:** Amputation

**Company:** Perishable prepared food manufacturer

**Worker:** Farm laborer

### What happened?

An employee's hand was amputated when she tried to remove debris from a rotating shaft in an onion peeling machine.

### How did it happen?

A 26-year-old farm laborer started her day working on the onion-peeling processing line where employees "rough-clean" onions and place them on a conveyor that sends them through a machine that trims and peels them.

Because she needed to finish early to go to an appointment, she asked her supervisor if she could clean the machine after the day's production run instead of preparing onions for shipping with the other employees.

After getting her supervisor's permission, she started the cleaning task by blowing down the machine from top to bottom with a three-foot-long air nozzle attached to an air line. Then, she washed the machine with a pressure washer.

When she finished, she noticed some grass wrapped around the drive shaft to the machine's positioning chain. She walked around to the right side of the machine and opened a safety door to remove the grass. The safety door had a switch that turned off the machine if the door was opened while the machine was running – but the machine continued to run.

There was a gap of four to five inches between the two sides of the chain that connected the top sprocket on the drive motor to a slave sprocket on the drive shaft, so she thought she could "just reach in and grab the small amount of grass" if she was careful.

*View through the safety door.  
The grass was wrapped around the  
shaft connected to the lower sprocket.*



As she reached for the grass, her sleeve caught the rotating slave sprocket, which pulled in her arm and severed her hand at the wrist. She pulled her arm away from the machine, covered it with clothing, and ran to her supervisor, who was working with the other employees.

Her supervisor immediately called 911 and then wrapped the arm and applied a tourniquet. He ran back into the facility, retrieved her gloved hand, and put it in an ice-filled bag.

Emergency responders arrived in 15 to 20 minutes and took her to a local hospital. After she was treated and stabilized, she was transferred to a regional medical center where doctors tried, unsuccessfully, to reattach her hand.

### Findings

- The woman had worked for the company for about three years. She was shown how to clean the onion peeler machine by her foreman when she first started working in the processing line about two years ago and had cleaned the machine more than 100 times.
- Employees were instructed to call the foreman when the machine malfunctioned and when the safety door needed to be opened. The foreman would then shut down the machine before opening the safety access door.
- When they were first interviewed, employees said they were not authorized to open the safety door – but later admitted, “We have all done it, but the machine shuts off.”
- The interlock switch on the machine’s safety door would occasionally stick and not turn the machine off when the door was opened.
- The onion peeling machine has two hazardous energy sources – pneumatic and electrical – but the company had no procedures for locking it out.
- The woman said she was in a hurry to finish her work and, when the machine did not stop after she opened the safety door, she thought it would take too long to find the foreman; she thought she could easily reach the grass and remove it.



*Close-up of the safety door switch and the gap between the chains. The sprocket rotates counter-clockwise.*



*The open safety door on the onion peeling machine. Note the warning sign to the left of the opening.*

### Violation

1910.147(c)(1) – *Control of Hazardous Energy (Lockout/Tagout), Energy control program*, The employer did not establish an energy control program consisting of energy control procedures, employee training and periodic inspections. ●



# Going the Distance .....

<b>Company</b>	Taylor Northwest
<b>Type of business</b>	Heavy construction
<b>Established</b>	2008
<b>Employees</b>	140

*Bend construction firm **Taylor Northwest** capped an enviable workplace safety record in 2018, winning the Associated General Contractors' (Oregon-Columbia Chapter) Outstanding Safety Program Award, which represents the "best of the best" in AGC's workplace safety awards program.*

*Left to right: Travis Stone (AGC), Lori Taylor, Todd Taylor, and Lindsey Wenick.*



Taylor Northwest also won AGC's ROSE (Recognition of Safety Excellence) in 2018 and PRIDE (Program Recognition Indicating Dedication & Excellence) safety awards in 2017 and 2018.

The ROSE award recognizes AGC chapter leaders that demonstrate safety excellence; Taylor Northwest took first place in the heavy equipment division. The Outstanding Safety Program Award winner is selected from the first place ROSE award winners in each division.

The PRIDE award recognizes AGC members who are innovative industry leaders in workplace safety and continuously improve their safety programs. Oregon OSHA also recognizes PRIDE award winners; Oregon OSHA enforcement visits at PRIDE sites are typically focused safety inspections – limited to fall protection, electrical, struck-by, and caught-in hazards – rather than comprehensive inspections.

This month, Going the Distance highlights Taylor Northwest's commitment to workplace safety. Taylor Northwest safety director Lindsey Wenick explains why that commitment remains one of the company's core values.

**We identify the five biggest hazards that are associated with what they're doing, and then we ask, 'How are we going to abate those hazards.'**

– Lindsey Wenick, safety director, Taylor Northwest

### How has Taylor Northwest's culture contributed to the company's outstanding safety record?

We're a small company with long-term employees. We started with 20 people and now we're up to 140. We're a tight-knit group and we care about each other. (Taylor Northwest CEO) Todd Taylor knows everyone by their first name, their families, and how many kids they have. And so do I. Because we care about each other, we don't want to see anyone hurt on the job.

We train every employee to recognize hazards; in fact, every person goes through competent person training. And all of our employees have the right to stop work if they see a hazard. We make that clear in our IIPP (Injury and Illness Prevention Plan). Our employees also help us to improve our SOPs (Standard Operating Procedures), which we use to protect our employees and anyone else who might be affected by our onsite work.

We also have regular meetings involving Todd, our top managers/supervisors, and me. The first thing we discuss is safety – how can we make a job safer and more efficient? Then we get buy-in from our employees.

### How do you build safety into all of your jobs?

We never deviate from our IIPP, which goes above and beyond a site-specific plan. On any job we go to, regardless of the project, our IIPP identifies all the hazards that we will encounter.

We also have pre-task plans that we review every Monday with our crews. We identify the five biggest hazards that are associated with what they're doing, and then we ask, 'How are we going to abate those hazards.' That ensures everybody is on the same page, every day. Everybody knows the hazards associated with that day's work.

We investigate every incident; we track the cost, the down time, what happened, and how it happened. Then we ask, 'What could have been done differently, and how are we going to prevent that incident from happening in the future?'



My job is to provide our employees with the necessary training and tools to do their jobs safely. I tell them, 'I give you the cake, you put the frosting on it.' That's where the buy-in is. We're only as good as our employees.

### Cost doesn't affect that?

No, our budget is whatever is necessary to protect our employees. We don't put a dollar amount on safety. We get whatever we need to keep our employees safe.

When we interview a potential new employee, we ask them what their definition of safety is. If they say, 'Safety is just something that slows me down,' that's not what we want to hear. They have to believe in safety right up front during the interview. We don't want surprises when the issue is safety; we want everybody to know what our company stands for.

After we hire someone, it doesn't matter how much experience they have, we pair them with a mentor for a day or two to make sure they do work safely. Every new hire also goes through an in-depth orientation. I review the IIPP with them and they have to acknowledge that they understand it. Then we review their work after 30 days, after 60 days, and after 90 days to ensure they're following all the parts of the plan.

Finally, we reward our employees for doing a good job and doing it safely. The other day, Todd told me and the other managers: "Pick a day that we could give the entire crew the day off, with pay." I said, "Let's do July 5, that would give everyone a four-day weekend." Todd said, "Consider it done."

### Are there any projects you're doing now that have unique safety challenges?

The large data center project in Prineville. There are about 1,400 employees on the site and many of them aren't familiar with the hazards that are unique to Taylor Northwest because they haven't worked around heavy equipment before. So, we have to identify the hazards that our employees are exposed to and we have to identify hazards other employees are exposed to. We have to think outside the box and ask 'What can we do here to protect everybody.' We can't say, 'This our little sandbox, stay out.'

### What advice do you have for other companies that want to improve their safety programs?

I can think of four things:

1. Get all employees involved in the safety effort and give them a voice. They know the hazards and, more often than not, they'll have a good solution for controlling them.
2. Hold all employees responsible for working safely – not only your best operator, but your youngest person, too. And treat everyone the same.
3. Train the employees on the hazards they'll be exposed to.
4. And before you do any job task, make a safety plan and work that plan. Don't deviate from it unless it's absolutely necessary; you should know the hazards you'll encounter before you ever go to the site. ●

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– Lindsey Wenick, safety director, Taylor Northwest

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