**Health and Safety** 

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**Read article** >

# 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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# Workers Memorial Day is about stories, not statistics

by Michael Wood

ast April, as I prepared for Workers Memorial Day, I wrote about "a special challenge" because of the upward spike in the number of workers who had died in Oregon workplaces in 2016. The good news is that the 2017 list contains fewer names than the 2016 list. But the bad news – the more important news – is that the 2017 list remains much too long.

Each year, we remind ourselves that Workers Memorial Day is less a day to discuss statistical trends and rates than a day to discuss the individual stories they represent – each name we will hear read later this month represents a life cut short. It tells a story of dreams lost, of family, friends, and co-workers grieving the untimely death of a friend or loved one.

Over the years, my comments about death in Oregon workplaces have sometimes gotten a bit of push back. I've called them a failure of our system, and I've had Oregon OSHA staff and other workplace health and safety professionals tell me that they don't think of themselves as failures. And they're right – we do succeed much of the time, and we at times do extraordinary work. But what else can a death in the workplace be than a failure?

> Oregon OSHA Administrator

Last year, I declared that the upward spike in numbers – and the flattening overall trend in fatality rates – represent a failure as well. On my part, and on the part of the system in which you and I work. That doesn't mean I plan to turn in my resignation, nor should the many others who work to eliminate risks that can cause serious injury, illness, or death in Oregon workplaces. But it does mean that we cannot rest on our laurels, because we have not yet earned that respite.



As I said last year, we must continue to face the real risks of death in our workplaces head on. We must continue to honestly confront them as they occur, and we must continue to truly strive to identify their causes, and to eliminate those causes and to mitigate the underlying hazards. And Workers Memorial Day, when we confront the real stories of loss – and look into the faces of those who mourn their friends and family – is a day to remind ourselves that those risks are real. And the fight matters. Whether it is one unnecessary death, or dozens, the fight matters.

And we are not done fighting.

Editor's note: The annual Workers Memorial Day ceremony is noon, Friday, April 27, at the Fallen Workers Memorial outside the Labor and Industries Building, 350 Winter St. NE, on the Capitol Mall in Salem.





# Don't miss...

**Education: April-May workshops** 

May 10, 2018 • Salem 8 a.m. Fall Protection **1 p.m.** Safety Meetings and Committees

For more information:

osha.oregon.gov/edu

education schedule updates:

osha.oregon.gov/edu/workshops

May 30, 2018 • Eugene 8 a.m. Fall Protection **1 p.m.** Safety and the Supervisor



#### May 1-3, 2018

Anchorage Marriott and Dena'ina Center Anchoraae, Alaska

#### **Registration now open!**

Visit safetyseries.cvent.com/vpp18 and regionxvpppa.org

Occupational

Health Cone

#### This summit is designed for all industries and worksites, even if they are not in the Voluntary Protection Program (VPP). Operations personnel, program/project managers, safety managers/coordinators, and safety committee members will benefit from this world-class workplace safety training and networking.

## 12th Annua alue Mount For the most recent public

#### Better to lose a minute in life than life in a minute May 21 & 22, 2018

Pendleton Convention Center • Pendleton, OR

Accidents are forever - Keynote by Matt Pomerinke

#### **Registration now open!**

Visit safetyseries.cvent.com/blue18

Safety leadership workshop (May 21) ..... No cost Conference (May 22, includes lunch) ......\$75 Forklift Round-Up competitor fee (May 21)....\$50

#### The 12<sup>th</sup> annual event focuses on helping organizations strengthen their safety culture. **Topics featured include:**

- Safety leadership and communication
- Safety committee series
- Total worker health
- Root cause analysis
- Forklift safety
- Mindfulness
- Safety for supervisors
- Walking-working surfaces ... and more!

To receive registration materials, exhibitor information, or sponsorship information for the 2018 events, contact the Conference Section: oregon.conferences@oregon.gov | 503-947-7411





f you have an employee who loses time from work because of a workplace injury or illness, you must determine why it happened and prevent it from happening again, if possible. Here are the seven steps to investigate any workplace injury or illness:

- Establish an investigation team. Include employees who have been trained to conduct an investigation. If you have a safety committee, the safety committee representatives must be trained in incident investigation principles and know how to apply them.
- Secure and preserve the scene. Secure the scene by making it inaccessible to others as soon as possible after the incident happened.
- Document what happened. Identifying the sequence of events that led up to the incident helps you determine possible causes. Photographs, measurements, and interviews with employees will help document what happened.
- Determine the root causes. A root cause is the underlying reason for an injury – poor supervision, inadequate training, and lax safety policies are examples.

## - Quotable

- Report the findings. Prepare a written report that describes who was involved, where the incident occurred, when it happened, and the root causes. Specifically, recommend how to prevent the incident from happening again.
- Act on the recommendations. Have management review the report and determine what will be done to prevent similar incidents from happening in the future.
- **Follow up.** Ensure that appropriate corrective action was taken to prevent similar incidents from happening again.

For more help, check out Oregon OSHA's accident investigation online course.

"Fear of not achieving a zero incident or accident rate compels people, by our very nature, to practice aversion rather than achievement ... it's time we embrace and practice a productive safety mindset based upon doing something – safety in action – rather than avoiding something – safety through inaction."

- Joe Estey, principal performance improvement specialist for Lucas Engineering and Management Solutions.

## – Datapoints —

- The Oregon Workers' Compensation Division received notification of 20,461 accepted disabling claims in 2016. Employment increased by 59,000 workers, resulting in a 2016 claims rate of 1.0 claims per 100 workers.
- » Transportation and material movers are the most commonly injured worker occupation, comprising nearly 18 percent of all accepted disabling claims in 2016.
- » Sprains or strains of the back were the most common injury in 2016, accounting for 3,602 claims (17.6 percent).
- Private industry accounted for 17,922 of the accepted disabling claims (87.6 percent).
- In 2016, there were 75 years separating the oldest and youngest workers. The youngest was a 14-year-old farm worker who fractured his wrist after falling from a horse. The oldest were two 89-year-olds, a car rental worker who suffered as head injury from a fall, and a clergy person who fell and injured his shoulder.
- Workers in their first year with an employer filed 6,378 claims, 31.2 percent of the total accepted disabling claims in 2016, compared to 2,101 (10.3 percent) for those in their second year.



#### **Continuous improvement:** Suterra grows its commitment to safety

#### By Aaron Corvin

You don't make advances in the safety and health of your employees by settling for good enough.

To say Suterra LLC understands this would be an understatement.

The Bend, Ore.-based company – a leading provider of bio-rational products for crop protection and pest control – wanted to make sure its already robust health and safety programs were covering all the bases.

So it teamed up with Oregon OSHA consultants by entering the Safety and Health Achievement Recognition Program (SHARP) in August 2012. Five years later, Suterra proudly flies the flag of a SHARP graduate. It's an accomplishment that not only translates to a safer and healthier workplace, but also positions the company to attract new talent as it grows.

Cory Stengel, a health consultant for Oregon OSHA, and Randy Nice, a safety consultant for the agency, helped the company make improvements on several fronts, including fall protection, chemical exposure monitoring, safe pesticide application practices, and all-terrain vehicle (ATV) safety.

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When Suterra began its SHARP journey, its Days Away Restricted or Transferred (DART) rate was 1.5. Its current DART rate is 0.87. By way of context, the average DART rate for Suterra's industry in Oregon is 2.1. It's 1.4 on the federal level.

Stengel said Suterra's effort to continuously improve was multi-faceted, with increased involvement of the company's safety committee and continued commitment to the safety and health process by top managers.

"Quality control and safety are hand in hand there," Stengel said. "Having one excel means the other one is going to excel. They hire people who understand that from day one."

With 70 employees at the Bend facility, the company sells its environmentally friendly pest control products internationally, helping growers reduce their use of traditional insecticides.

Suterra's headquarters

and plant in Bend.

Suterra

Suterra's plant includes a production line for its aerosol-based products.

Oregon OSHA's SHARP program helped Suterra take a fresh look at its policies and processes, and reinforced the company's ongoing efforts to improve safety, according to Aman Khapoya, vice president of global operations for Suterra.

And the recognition that comes with being a SHARP company also serves as a valuable tool to recruit new employees, Khapoya said.

"As our business grows and we compete for new talent, we hope candidates see our achievements under the SHARP program and realize that we are truly committed to the health and safety of our team," he said. "The candidates for whom that safety commitment is important are precisely the ones we want – and the ones we will need to make Suterra even better."

#### **Identifying hazards**

Suterra's facility includes multiple buildings for manufacturing, laboratories, administration, and material storage. The company's operation produces pheromone products that cause mating disruption in adult pests.

While Suterra was already exceeding minimum safety rules in many cases when it began the SHARP process, Oregon OSHA helped the company identify and correct hazards, and bolster its health and safety programs.

For example, Oregon OSHA found exposures to fall hazards on certain areas of roofs that workers needed to access to perform maintenance duties.



Quickly, Suterra mopped up the hazards by installing additional guardrails.

Then there was the company's considerable amount of work repairing stainless steel equipment. Such repair work involves welding, which gives off toxic fumes. And while Suterra already had protective measures in place, including local exhaust ventilation, the company needed data to know whether those measures were working. Likewise, the company was eager to test whether exposure controls were working in its laboratory process, which uses different types of solvents.

Oregon OSHA went to work. "We helped identify the potential hazards and monitored," Stengel said. "You needed to have the data."

The results showed Suterra's controls were working – there was no cause for concern.

#### **Above and beyond**

Oregon OSHA also helped Suterra fortify its safety program for the use of ATVs.

When visiting farms and orchards, the company's field representatives drive ATVs to different locations to help growers set up and use Suterra's products.

While Suterra maintains programs on the safe handling of ATVs, Stengel said, Oregon OSHA noted that the company also needed to require drivers to wear helmets. "We pointed out that the manufacturer requires a helmet, and that OSHA enforces that requirement," Stengel said.

Suterra wasted no time in adding safeguards and incorporating Oregon OSHA's guidance, Stengel said. "Even with the items they were missing," he said, "it didn't take them long to not only comply but to go above and beyond what we were asking." Suterra took other steps to improve its safety and health systems, including implementing a comprehensive ergonomics program, revamping a training system for new employees, and installing additional fire safety measures in its facilities.

"The safety committee," Stengel said, "was involved the whole way."

For Khapoya, the SHARP process highlighted the benefits of an effective partnership between a public agency and a private company.

"Some companies try to minimize interaction with regulatory agencies, because they fear exposing gaps in compliance," he said. "Unfortunately, that compliance-oriented view also denies them the knowledge and support these agencies can offer." The best approach is to develop relationships with regulatory agency professionals, Khapoya said, which enables companies to fully understand rules and to achieve their intent.

"Based on our work together in the SHARP program," he said, "we know our partners at Oregon OSHA are eager to offer advice and support if we have questions while tackling a new situation."

> Suterra's commitment to employee safety extends beyond the plant into the field, where sales and technical personnel work with customers to provide solutions and support.

Employers may contact Oregon OSHA's no-cost consultation services for help with safety and health programs:

Toll-free in Oregon: 800-922-2689 Contact field offices Email: consult.web@oregon.gov

Consultation services also offers two programs designed to achieve positive, lasting results for workplace health and safety: The Safety and Health Achievement Recognition Program (SHARP) and the Voluntary Protection Program (VPP).

#### Is it an accident or an incident? You'll need to investigate.

our business hasn't had a workplace injury or illness for years and then suddenly one of your best employees is in the hospital with a broken arm. It happened while he was doing a task that he had done many times and he had never been injured. Was it unavoidable or could it have been prevented? Although most work-related injuries and illness are preventable – even when they're called accidents – the only way to know for sure is to investigate.

If you have an employee who loses time from work because of a workplace injury or illness, you must determine why it happened and prevent it from happening again, if possible. If your workplace has a safety committee, the safety committee must recommend how to prevent similar events from occurring.

Later in this story, we highlight the differences between two work-related injuries: one that could probably not have been prevented and one that could. In both cases, investigations were key to determining how, and why, the injuries happened. That's why incident investigations are so important. How do you do one? Let's review the seven steps necessary to investigate any workplace injury or illness.



- 1. **Establish an investigation team.** Include employees who have been trained to conduct an investigation. If you have a safety committee, the safety committee representatives must be trained in incident investigation principles and know how to apply them.
- 2. Secure and preserve the scene. Secure the scene by making it inaccessible to others as soon as possible after the incident happened; securing the scene preserves any remaining evidence and keeps others away from existing hazards.
- 3. **Document what happened.** Identifying the sequence of events that led up to the incident helps you determine possible causes. Photographs, measurements, and interviews with employees will help document what happened.
- Determine the root causes. A root cause is the underlying reason for an injury – poor supervision, inadequate training, and lax safety policies are examples. After you determine the root cause – or causes – of an injury or illness, you can prevent it from happening again.
- 5. **Report the findings.** Prepare a written report that describes who was involved, where the incident occurred, when it happened, and the root causes. Specifically, recommend how to prevent the incident from happening again. When a worker is injured at a multiemployer worksite, the investigation findings should be shared with each employer at the site.
- 6. Act on the recommendations. Have management review the report and determine what will be done to prevent similar incidents from happening in the future.
- 7. **Follow up.** Ensure that appropriate corrective action was taken to prevent similar incidents from happening again.

**Feature:** Is it an accident or an incident? You'll need to investigate.

#### What about temporary workers?

Temporary workers are entitled to the same workplace protections as other workers. If a temporary worker is injured, both the host employer and the staffing agency should know about the injury promptly. The staffing agency and the host employer should investigate the incident.

#### Are they accidents or incidents? Look for the root cause.

#### Consider two scenarios:

- 1. A journeyman lineman working on a de-energized high-voltage powerline is shocked when a grounding lanyard picks up stray voltage from a nearby energized line.
- 2. A worker standing on a 44-inch-high scaffold applying drywall finish steps backward off the scaffold and fractures his skull.

Could the injuries in the above scenarios have been prevented, or were they the result of unpredictable events? It's impossible to know until you determine the underlying factors that caused them. Oregon OSHA compliance officers investigated both incidents and determined that one was unforeseeable, but the other could have been prevented. How did they make the determination? They looked for root causes.

## Elements of an incident investigation plan

An incident investigation plan will help you ensure that any workplace injury or illness is properly investigated. You plan should state:

- How and when management will be notified about the incident.
- When Oregon OSHA will be notified about the incident. Oregon OSHA requires employers to report work-related injuries or illnesses that cause the loss of an eye, an amputation or avulsion that includes bone or cartilage loss, in-patient hospitalization, fatality, or catastrophe. Report fatalities or catastrophes within eight hours. Report in-patient hospitalization, loss of an eye, and amputations or avulsions that result in bone loss within 24 hours.
- Who is authorized to notify fire, police, and other responders about the incident.
- Who will conduct incident investigations and the training they have received.
- Who will get the investigation report.
- Who will be responsible for acting on recommendations.
- The deadlines for reporting investigation findings and acting on recommendations.

Source: OSHA: Incident Investigations: A Guide for Employers (2015)

Scenario 1: A journeyman lineman working on a de-energized high-voltage powerline is shocked when a grounding lanyard picks up stray voltage from a nearby energized line.

Six employees – a three-person ground crew and a three-person aerial lift crew – volunteered to do insulator change outs on a remote 500,000-volt power transmission line that would take two weeks to complete. The line just happened to be between two other energized 500,000-volt Bonneville Power Administration lines that ran parallel along a northsouth corridor.

The crews began the day inspecting their vehicles at their motel, which was five miles from the site. After the inspections, they held a safety meeting to discuss the work, potential hazards, grounding requirements, and what to do in an emergency. The line foreman also verified and documented that the line had been de-energized.

When the crews got to the site, they grounded the aerial lift truck to the tower, then set up and tested the step-and-touch monitoring system, which would warn them if the ground near the transmission tower was energized. The system would sound an alarm if there was a difference in voltage between the tower and the ground. The ground crew began the day preparing 24 glass insulating bells that would replace the existing ones on the tower while the lift crew got the tools they needed, did safety checks, and went over the lift plan.

Because a journeyman lineman and a co-worker would be more than 150 feet above the ground, they needed to be sure they could communicate by radio with the boom operator in the truck. Also on the ground was a journeyman electrician designated as the safety watch person.

The aerial crew had grounded the tower with a 40-foot-long "ground lanyard" that was attached to the de-energized powerline near the work area to ensure that the two linemen were safe from any electrical hazards.



As the boom operator moved the lift bucket down three feet and three feet closer to the line, it apparently hit the ground lanyard and pulled it away from the tower – though none of the aerial crew saw it happening. The designated safety person on the ground saw the ground lanyard coming off of the tower, but was unable to warn the crew in time.

When the ground lanyard came loose, it picked up voltage from the nearby energized Bonneville Power Administration transmission lines and the difference in electrical potential – a phenomenon called capacitive coupling – immediately shocked the lineman, who received second-degree burns on his hands and forearms.

Although the incident had the potential to be life threatening, the ground crew and the lift crew were well-trained, held a pre-job safety meeting, and followed all procedures necessary to control the risk of electrical shock. Because the crews followed all safety protocols in controlling risks associated with the job, the compliance officer determined that the incident was unforeseeable. Feature: Is it an accident or an incident? You'll need to investigate.

Scenario 2: A worker standing on a 44-inch-high scaffold while applying drywall finish steps backward off the scaffold and fractures his skull.

A worker, who was doing drywall work in a building, had to erect a scaffold over a wheelchair ramp to reach the top of a wall. To compensate for the slope, he placed a 46-inch-high aluminum step ladder on the ramp, then positioned a Baker scaffold (six-foot high, six-foot long, and two-foot wide) opposite the stepladder along the wall and locked the wheels.

Next, he placed one end of a 10-foot-long scaffold plank on an end of the Baker scaffold and secured it with wire. Then, he set the other end of the plank on top of the stepladder, got up on the scaffold, and began applying the drywall finish along the top portion of the wall.

The worker did not have any ladder or scaffold training, and the company had developed the practice of using the top of the 46-inch stepladder to support a scaffold plank. Although the ladder manufacturer allowed a scaffold plank to be used on its 46-inch stepladders, the worker was not following the ladder manufacturer's instructions, which required that the scaffold be securely fastened to two ladders placed an appropriate distance apart – and not above the second step from the top.

The worker was so focused on his work that he did not realize he had walked the entire length of the scaffold plank. He took another step backward and fell off the end of the plank, striking his head on the concrete floor. He was unconscious for about seven minutes until emergency medical responders arrived and took him to a local hospital.

The compliance officer determined that the incident could have been prevented. The root cause was the employer's failure to provide appropriate ladder and scaffold training to the worker.

## Ask Technical

#### **Question:**

Can an Oregon OSHA compliance officer, who is not on the clock, fine an employer for presumed safety violations? What process does the employee have to follow? How can I be sure the compliance officer is an Oregon OSHA employee?

#### Answer:

An Oregon OSHA compliance officer can investigate a potential workplace hazard anytime he or she sees it from a public place or if the inspection has been assigned at an Oregon OSHA field office. This could include an imminent danger situation or a special emphasis program such as fall protection. Compliance officers are never "off the clock" – the job is 24/7 when required.

A compliance officer follows a process of identifying himself or herself by providing an Oregon OSHA business card and government-issued credentials. The compliance officer will then contact the site manager or business owner and conduct an opening conference, explaining the purpose, nature, and scope of the investigation, and the employer's rights. After the investigation is finished, the compliance officer will conduct a closing conference to explain findings, penalties that might be issued, and appeal rights.

If you think the compliance officer is not legitimate, call the Oregon OSHA field office in your area and speak to a supervisor.



#### Behind the scene: Oregon OSHA consultants share their experiences working with Suterra

S uterra began SHARP in 2012 with Oregon OSHA consultants Cory Stengel and Randy Nice assisting the company throughout its five years in the program. In this interview, Stengel and Nice describe how they benefited from their experiences working with the company.



#### What did you learn from working with Suterra?

**Nice:** First, we had to learn about the technology behind Suterra's pheromone-based products. The pheromones target specific pests and disrupt their mating behavior so they produce fewer eggs and fewer larvae. It's an alternative to insecticides and offers growers a safer method of long-term pest control.

Also, because we worked with Suterra throughout their full five years in SHARP, I saw firsthand how a company can move forward by taking a systematic approach to solving problems.

**Stengel:** I learned how a company can take a really proactive approach to controlling hazards. Suterra's managers knew they would be expanding production in the future, which would likely introduce new hazards into the work environment. So, they worked to determine what those future hazards might be. For example, Oregon OSHA's process safety management requirements (which are a set of rules for controlling unexpected releases of toxic, reactive, and flammable liquids and gases) were not an issue for the company early in their SHARP tenure; that's because employees were under the process safety management thresholds for these types of chemicals. But management suspected that it could become an issue after the company built a larger facility and expanded production. So, the company made an upfront investment in hazard controls to address those potential PSM issues.

And when they were expanding their production facilities, they held the contract employees to the same safety standard as they did their own employees.

We were also impressed with the company's innovative approach to problem solving. Basically, management asked the safety committee to propose solutions for hazards that didn't have obvious fixes. For example, employees who cleaned puffer canisters (which house spray cans that release automated doses of pheromones on crops) had a difficult time opening and closing the canisters. It took a lot of effort and caused a number of sprains and strains. The safety committee studied the task and figured out a way for employees to open the canisters with just a single action.

## What was the best part of your experience working with Suterra?

**Nice:** For me, it was watching the company's safety culture grow. Safety was already part of Suterra's work culture when the company began SHARP, but to see it become even stronger over those five years was quite inspiring. That growth came through management commitment and employee involvement – there was always a sense that something exciting was happening.

**Stengel:** It was easy to work with everyone. The company took a very organized approach to finding and fixing hazards – and we never felt rushed when we were doing our consultation visits. They would say, "We think we might have a safety issue here," and ask us for advice about how to fix it. They would do some research and make a decision to correct the hazard with a fix that went beyond Oregon OSHA's rules. Then, they would follow up with a PowerPoint show that described how they went about controlling the hazards.

## Were there any work processes that you found particularly challenging to make safer?

**Nice:** It was challenging identifying potential hazards for employees who did agricultural field work, mainly because we weren't able to observe their work directly. We did ask them safety-related questions about their jobs and, with that information, we were able to recommend training, policies, and procedures to improve safety in the field – for example, with all-terrain vehicles and other agricultural equipment.

**Stengel:** Understanding how the Worker Protection Standard applied to the company's pheromone products took some effort. The EPA wrote the standard to reduce the risk of pesticide poisoning among agricultural workers and pesticide handlers, but Oregon OSHA enforces most of the requirements. Parsing out those requirements and how they applied to Suterra's field workers was challenging. However, thanks to management's strategic approach to problem solving and planning, the company was able to implement all the parts of the standard that applied to field workers.



Oregon OSHA's Safety and Health Achievement Recognition Program (SHARP) coaches companies on how to effectively manage workplace safety and health. In turn, companies are recognized for their success in reaching specific benchmarks during the five-year program.

The program empowers companies to continuously improve and to become self-sufficient in managing workplace safety and health. It's primarily set up to help small and mid-size businesses.

Learn more about SHARP, including the application and approval process, and benefits, by going online. Or contact Mark Hurliman, Oregon OSHA VPP/SHARP program manager, 541-776-6016, mark.e.hurliman@oregon.gov.

## OregonSaves invites more employers to sign up

he Oregon State Treasury has opened the OregonSaves retirement program to any employer of any size that doesn't offer a retirement plan of its own.

The move follows the launch of the program as a pilot in July.

Now, more than 300 businesses across Oregon have begun facilitating the program for their employees. These employers range in size from a few employees to hundreds, and come from a wide range of industries, including agriculture, construction, health care, hospitality, food service, manufacturing, nonprofit, and retail.

Workers at these companies now have an easy, automatic way to save for retirement with every paycheck, helping them take control of their own financial futures. And the savings are starting to add up. Employees in the program have already saved more than \$900,000 combined for retirement in just a few months.

"OregonSaves allows me to offer a retirement plan to my employees, which I would have a difficult time providing on my own," said Josh Allison, owner of Reach Break Brewing in Astoria. "As a small, family-owned business, it gives me the tools to recruit and retain good employees. It also gives my employees the ability to work for our company as a career. It's a win-win for all parties involved."

Employers interested in joining OregonSaves can call 844-661-1256 (toll-free) or email clientservices@oregonsaves.com. For more information, please visit www.oregonsaves.com.

# <image>

## Work hard. Save easy.

OregonSaves gives Oregonians an easier way to save for retirement.

You're working hard for your money. Let's make sure it works hard for you.



The Fallen Workers Memorial is outside the Labor and Industries Building in Salem and was dedicated in 2009.

#### **April 28: Why it's important**

orty-eight 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 on 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, the Canadian Union of Public Employees and the Canadian Labor Congress, in 1985, 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.

Today, the number of U.S. workers who have died on the job has dropped by 40 percent from the 14,000 in 1970 – a number that is still too high because most workplace injuries and illnesses are preventable. Yet, worldwide, more than 2.3 million workers continue to die every year because of work-related injuries and diseases. April 28 serves as a reminder that this number is not acceptable and much more work needs to be done to make workplaces safer.

Editor's note: Because April 28 falls on a Saturday this year, the AFL-CIO will hold its observance of Workers Memorial Day on Friday, April 27.

## SAFETY BREAK FOR OREGON

#### Sign up online

Join worksites across Oregon and honor safety leaders, hold a training, or get a conversation started about safety and health.

#### Short take

#### Oregon employers invited to take a 'Safety Break' May 9

mployers across the state are invited to participate in Safety Break for Oregon on Wednesday, May 9, an event aimed at raising awareness and promoting the value of keeping people safe and healthy while on the job.

Now in its 15th year, Safety Break encourages employers to bolster workplace safety and health with training, award recognition gatherings, or other creative activities. Oregon OSHA coordinates Safety Break, which is voluntary for employers. Businesses and other employers can decide what activities are most beneficial to their workforce.

Companies that participate will be entered to win one of three \$100 checks, to be used for a luncheon of their choice, when they sign up online by Friday, May 4. The Oregon SHARP Alliance is sponsoring the contest.

During the event, companies are encouraged to share their Safety Break activities on social media by tagging @OregonOSHA on Facebook and using #SafetyBreak2018 on Twitter and Instagram.

For more information, ideas on how to host an event, or to download graphics, visit the Safety Break for Oregon website.

#### **Event focuses on preventing falls in** construction

embers of the construction industry in Oregon are invited to attend a one-day event focused on how to identify and prevent fall hazards. The Pacific Northwest OSHA Education Center Stand-Down Event is 8 a.m. to 2 p.m. on Friday, May 11, at the Sheet Metal Institute in Portland, 2379 N.E. 178th Ave.

Registration is complimentary. Training is limited to 80 participants, so reserving a seat early is encouraged. In addition to training in fall hazard awareness, the event will feature an industry expert panel discussion. If you are unable to make this event, other stand-down resources are available.

The event is part of the May 7-11 National Safety Stand-Down to prevent falls in construction. Falls from elevation remain a leading cause of death for construction employees, accounting for 370 of the 991 construction fatalities in 2016, according to federal data. Those deaths were preventable. The National Safety Stand-Down aims to raise fall hazard awareness across the country in an ongoing effort to prevent fatalities and injuries.

Use #StandDown4Safety to share your stand-down participation.



#### **Stop Falls Stand-Down**

- Plan a toolbox talk or other safety activity
- Take a break to talk about how to prevent falls
- Provide training for all workers

#### For more information:

www.osha.gov/StopFallsStandDown #StandDown4Safety • (800) 321-OSHA (6742)













#### Is your workplace affected by the new beryllium rules?

#### What are the rules?

437-002-2024 through 437-002-2026, 437-002-2028 through 437-002-2030, 437-002-2032 through 437-002-2038, 437-002-2040, and 437-002-2045.

## When did the rules become effective?

March 12, 2018.

#### Who is affected?

The rules apply to general industry and construction employers with employees who could be exposed to beryllium. In general industry, workers can be exposed to beryllium in a variety of settings, including nonferrous foundries, welding, making beryllium alloy products, and dental offices. In construction, exposure to beryllium primarily occurs when metal slags that contain trace amounts of beryllium are used for abrasive blasting.

#### Why are the rules necessary?

Workplace exposure to beryllium and beryllium compounds can result in chronic beryllium disease (a serious pulmonary illness), and lung cancer. Beryllium – an extremely strong, lightweight metal – is used in the aerospace, electronics, energy, telecommunications, medical, and defense industries.

## What are the key changes in the rules?

- Lowers the permissible exposure limit for beryllium from 2 micrograms per cubic meter to 0.2 micrograms per cubic meter, and changes the action level to 0.1 micrograms per cubic meter.
- Requires an exposure assessment, with periodic monitoring under certain circumstances; engineering and work practice controls; a written exposure control plan; provisions for regulating employee access to certain areas; respiratory protection; medical surveillance; and employee training.
- Other changes include requirements for housekeeping and waste disposal that were unintentionally omitted in earlier rulemaking, and recordkeeping requirements.

#### Spring into spring: focus on safety

Spring, which began March 20, means Oregonians can look forward to more daylight, warmer temperatures, and less precipitation in the months to come. For folks who find Oregon winters less than enjoyable, those are all reasons to celebrate. However, there's also a dark cloud associated with spring: a seasonal increase in workplace injuries and illnesses. Historically, accepted disabling workers' compensation claims in Oregon begin to increase in March and April after a winter respite and continue to increase through August. Construction, agriculture, forestry, and manufacturing all contribute to the seasonal pattern as workers spend more time on outdoor jobs. Why not celebrate this spring with an emphasis on preventing seasonal workplace injuries and illnesses?

#### Private sector accepted disabling claims by month of occurrence



(Oregon 2014, 2015, 2016)

Source: Central Services Division, Information Technology and Research Section.

For accepted workers' compensation claims between 2014-2016

## 51%

of all claims are made in the five months between March and August.

1,451

claims are made each month, on average.

February

is the safest month, with an average of 1,317 accepted claims.

# August

sees an average of 1,633 accepted claims, 13% higher than the average of all claims accepted between 2014-2016.



#### What happened?

A silently spinning paddle inside a dust collector hopper stripped pieces of bone from a worker's right middle and index fingers as he tried to remove debris that was clogging the unit.

#### How did it happen?

The company's alfalfa dust collector hopper sounded like it might be clogged, so the general manager asked the maintenance mechanic to check the unit and remove the clog, if necessary. He also told the maintenance mechanic to be sure to look up into the unit's housing first and make sure the paddle was not spinning.

The company had a written lockout/tagout program with the names of authorized and affected employees and procedures for locking out the hopper, but the maintenance mechanic was not one of them. Another employee, a general laborer, said that the company had formally trained him in lockout/tagout and that he was authorized to lock out the hopper, but he had never locked or tagged it out in the past 20 years. The maintenance mechanic, on the other hand, had never been shown how to lock out the hopper.

The hopper's control panel was located inside a nearby building, so the maintenance mechanic entered the building and pushed the stop button on the panel to turn off the unit. However, there were also two hopper disconnects outside that were mounted side-by-side next to the unit. The disconnect on the left controlled the bottom section of the hopper and the disconnect on the right controlled the top section.



#### **Accident Report**

Incident: Struck by Industry: Agriculture: forage exporter Worker: Maintenance mechanic

The hopper and dust collector.







The exposed paddle blades.

But the maintenance mechanic didn't know that the dust collector hopper completely shut down and all its moving parts stopped only when both disconnects were switched to the off position. The maintenance mechanic thought that if one disconnect was switched to the off position, the dust collector would go through a 15-minute self-cleaning cycle and then shut down. He had some tools from another project that he had been working on, so he decided to put them away and then return in about 15 minutes. When he got back, he thought the hopper was completely off because he could not hear anything moving inside. He forgot that the general manager told him to look into the housing to make sure the paddle was not spinning.

The maintenance mechanic put his right hand into the housing to determine if there were any signs of it being plugged. But the hopper's paddle was still spinning and the blades struck his right index and middle fingers, causing avulsion fractures in both fingers. (An avulsion fracture occurs when a small chunk of bone attached to a tendon or ligament is pulled away from the main part of the bone.)

The guard that the company put over the housing after the incident.

22

#### **Violations**

1910.147(c)(7)(i)(A): Each authorized employee did not receive training in the recognition of hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.

Going the distance

# **Going the Distance**



#### **Company:**

Cascade Health

#### Workforce/operations:

Based in Eugene, Cascade Health is a nonprofit organization whose mission is to provide quality, charitable, and compassionate health care. More than 200 staff members provide a wide range of services, including healthy living, counseling, home health and hospice care, occupational health, injury response and treatment, wellness, and prevention. Oregon Business magazine has named Cascade Health one of the 100 best nonprofits to work for in the state for eight years.

The nonprofit's interdisciplinary Workplace Wellness and Injury Prevention Team works with nearly 2,000 employers in Lane County to match trainings and testing with individual needs. This may include pre-employment essential function testing, drug-free workplace initiatives, injury response and treatment, as well as proactive injury prevention programs such as risk assessments, ergonomic trainings, and workplace stretching programs.

#### **Physical therapist:**

Lena Houston-Davisson, MPT

#### **Responsibilities/hazards addressed:**

My responsibilities are to promote and facilitate workplace safety and wellness. My first career was working as a laborer in the wood products industry. During my nine years of performing production work, I experienced carpal tunnel syndrome and shoulder tendonitis. This fueled my passion to find ways to help employees and employers reduce risks for musculoskeletal disorders. As a physical therapist, I have worked with injured workers, and always come back to prevention and early intervention. Most of my work now is focused on job analysis, ergonomic assessments, injury prevention, and on-site work with employers to facilitate identification of ergonomic concerns and promote early intervention. I enjoy helping workplaces tailor their programs to meet their specific industry needs.

Lena Houston-Davisson, MPT Physical therapist, Cascade Health

**Going the distance** 

#### During the recent Cascade Occupational Safety and Health Conference, you gave a presentation about effective office ergonomics. What is your sense of how much progress we've made in this area and how far we still have to go?

While we have seen progress in ergonomic education and the availability of ergonomically designed equipment, there is still a long way to go. Progress is primarily determined by the degree employers embrace ergonomics as an important component of safety, wellness, and productivity. If ergonomic efforts provide assessments and education, but stop short of investing in meaning-ful intervention and improved equipment, the impact of these programs are severely limited.

Perception also plays a significant role in workplace investments. I have seen companies invest significant resources in ergonomic solutions for production lines, but not be willing to budget for a chair for an office worker who sits seven to eight hours daily. We need to shift our perception away from "office furniture" to essential equipment designed to promote efficiency and mitigate root causes of injury.

Technology is a double-edged sword for ergonomics. Online formats are beginning to improve educational accessibility, which I expect to continue as these avenues develop. Some newer tech options, such as tablets and small screens, make working in neutral postures more difficult, not to mention the long hours we engage in screen time outside of work time.

A comprehensive and invested approach to office ergonomics across all positions remains a critical need for long-term success.

As a physical therapist for Cascade Health in Eugene, Houston-Davisson focuses on job analysis, ergonomic assessments, injury prevention, and on-site work with employers.



## When it comes to your line of work, how do you measure success?

The obvious measures of success are a reduction of injuries and claims; however, I consider these long-term goals. A quality, comprehensive program may result in a spike in claims the first year or two, due to the treatment of previously unidentified problems. A proactive program and early intervention have been shown to reduce injuries and claims over time. What I look for is a shift in the safety and health culture as evidenced by employee engagement, early reporting, and employee-driven ideas for improvement. This is best achieved by employer commitment to a comprehensive program and consistent follow through. A comprehensive program includes education, workstation assessments, effective interventions, micro-breaks, and workplace stretching that includes management participation. Early intervention and appropriate medical management when needed are also important. Some of the best outcomes I've witnessed have resulted from programs where I have performed job analyses and ergonomic assessments, and maintained monthly or bi-monthly visits to facilitate early identification of ergonomic issues, early intervention of potential injury, and support for successful return to work. This builds a relationship of trust with employees and fosters participation. Employers who are interested in long-term results should look to implement a similar long-term plan.



#### What is some advice you'd give to those looking to improve ergonomics at their workplace or for others seeking a career in this field?

An effective ergonomic program requires ongoing management support. I strongly urge employers to think about ergonomics from a productivity, as well as health and safety model. This means planning ergonomic improvement into your budget as an ongoing investment.

When workstations are set up to support ergonomic principles, employees are able to work with optimal comfort and productivity. Additionally, providing new employees with an ergonomic assessment and education helps to demonstrate value, which can impact employee satisfaction, attendance, and retention. Not all interventions need to be expensive. Sometimes even small ergonomic changes can yield great benefits. Simply adjusting a chair to fit, and getting the keyboard and monitors properly positioned, can relieve pain and muscle tension.

I'd suggest building a relationship with an ergonomic professional who can assist with your needs and be available for follow-up. Many workers' compensation insurers have helpful consultants and materials. OSHA has publications and on-line resources, as well. Cascade Health offers customized programs to support health and safety needs, ranging from post-offer pre-placement testing, medical assessment and treatment of work injuries, injury prevention programs, ergonomic assessments, and more.

I find this field of work to be very rewarding and there are many opportunities to participate: from learning to be an ergonomic assessor at your workplace to becoming a professional. I'd encourage any interested person to get involved. It is personally fulfilling when you see the smile of relief as someone finally feels comfortable after struggling to work with pain. Ergonomic practice is a worthwhile endeavor.

"When workstations are set up to support ergonomic principles," according to Houston-Davisson, "employees are able to work with optimal comfort and productivity."