

Health and Safety

# RESOURCE

Oregon OSHA • October – November 2019 • Volume 67 – online

Our first  
Spanish-language  
conference is  
coming up!  
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**Going the Distance**

Meet Ross Olson, health, safety, and  
environmental coordinator for Linde Gas North America LLC



# 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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## Reaching the most vulnerable workers

**By Michael Wood**

For all of us in the workplace health and safety community, one of the challenges we face on a recurring basis is how best to reach those workers who are most vulnerable to injury, who have the most difficult time accessing the protections available to them, and – sadly – whose employers are sometimes the least inclined to fulfill their own responsibilities.

In identifying and reaching such workers, one of the challenges we repeatedly encounter is language. Understanding how to protect yourself in a hazardous workplace can be challenging at the best of times. But doing so when English is not your first language presents an additional barrier. And if you must also navigate the process to file a complaint, protect yourself from retaliation – or even just to do something straightforward like to make sure you get paid what you deserve – it can be even more challenging.

In recent years, Oregon OSHA has stepped up its efforts to reach such workers, particularly those who speak Spanish. We have built upon our longstanding initiatives such as the PESO bilingual training program with new training materials, including Spanish-language computer-based training. We also have increased the number of bilingual staff available for enforcement and other activities.

A number of other organizations are tackling the same set of issues – SAIF, for example, actively reaches out to provide training for Spanish speakers, particularly in the agriculture industries. And various advocacy groups have long pushed for better outreach to Spanish-speaking and other workers facing language barriers in the workplace.

This year, Oregon OSHA has launched a new initiative. We are bringing our well-established conference capability to bear on the issue by launching the first Oregon OSHA conference that addresses issues from the worker perspective – and that will be addressed entirely in Spanish. This new conference, “Seguridad, salud y sus derechos en el trabajo,” will be held at the Oregon State Fairgrounds in



Oregon OSHA  
Administrator



Salem on Tuesday, Nov. 19. We are providing it (and the noon meal) free of charge to any Spanish-speaking employees who fall within Oregon OSHA jurisdiction.

The conference will address workers' rights in the workplace, but it also will provide guidance on how to recognize hazards in some of the most common industries, as well as how to protect yourself from those hazards. The conference will feature a variety of presenters and exhibitors.

More information, including guidance on how to register to attend, can be found on our website at <https://osha.oregon.gov/conferences/espanol/Pages/default.aspx>.

We are excited about this new initiative – even as we are a bit anxious about how the details will all come together. Whatever else, this conference will be a learning opportunity, not only for those who attend the event, but also for all of us who are involved in putting it on. And we will take those lessons, whatever they are, and use them to make future events more effective and more successful. ●

A handwritten signature in black ink, which appears to be "m. wood".



# Don't miss...



## Education:

October-December workshops

### Oct. 29, 2019 – Salem

8 a.m. Worker Protection Standard

1 p.m. Hazard Communication Aligned with GHS

### Nov. 19, 2019 – Klamath Falls

8 a.m. Worker Protection Standard

1 p.m. Hazard Communication Aligned with GHS

### Dec. 11, 2019 – Bend

8 a.m. Worker Protection Standard

1 p.m. Hazard Communication Aligned with GHS



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)

## Oregon OSHA to present first Spanish-language safety conference

**November 19, 2019**  
**8:30 a.m. to 4:30 p.m.**

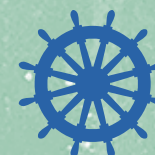
**Oregon State Fairgrounds**  
**Salem, Oregon**

Check-in begins at 7:30 a.m.  
in the Jackman-Long Building

### Topics include:

- Asserting your right to a safe workplace
- Protecting your health at work and at home
- Identifying and addressing common workplace hazards
- Safety and health in:
  - Agriculture
  - Construction
  - Food processing
  - Logging and forest harvesting
- Role of the supervisor in workplace safety
- Protecting yourself from wage theft

For more information or to register, go online  
<https://osha.oregon.gov/conferences/espanol/Pages/default.aspx>



## 29<sup>th</sup> Annual Western Pulp, Paper, & Forest Products Safety & Health Conference

*Partners in Safety – Steering Toward the Future*

**December 3–6, 2019**  
**Red Lion Hotel on the River**  
**Jantzen Beach • Portland, OR**

*The 29th annual safety and health conference is specially designed for the pulp, paper, and forest products industry. An excellent workplace safety and health training resource!*

**Exhibits • Awards**  
**Industry networking**

A joint effort of the Oregon/Idaho/Utah Pulp & Paper Workers Council of AWPPW, the Department of Consumer and Business Services Oregon Occupational Safety & Health Division (Oregon OSHA), the Washington/Alaska Council of AWPPW, the Washington Department of Labor & Industries (DOSH), USW, the pulp and paper manufacturing, and forest products industries.

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



## Did you know?

Carbon monoxide is a colorless, odorless, and tasteless poisonous gas. It is harmful because it displaces oxygen in the blood and deprives the heart, brain, and other vital organs of oxygen. A common workplace hazard, it is one of the leading causes of poisoning by inhalation.

Resources are available to help address the hazards of carbon monoxide. They include Oregon OSHA's [A-to-Z topic page](#) on the subject, which offers hazard alerts about [running gas-powered equipment in a box truck](#) and [preventing poisoning from an internal combustion engine](#).

Meanwhile, federal OSHA offers English and Spanish [videos](#) addressing how to prevent poisoning from using portable gas-powered equipment in construction.

## Quotable

**"When you are hurried, worried, or distracted, your perception is not accurate. That's when accidents, poor judgment, and reactive communication occur."**

– **Robin Rose**, of Robin Rose Training and Consulting Inc. in Salem, on the importance of managing stress and shifting your state of mind to one of awareness and accuracy.

# Datapoints

## Hazard communication tops most-violated rules for automotive repair shops

Violations of Oregon OSHA's hazard communication standard accounted for nearly two-thirds of all safety and health rule violations among automotive repair shops in 2018, with total penalties of \$5,000. Among the rules that establish the standard, the most frequently violated include:

- Written hazard communication program [1910.1200(e)]
- Safety data sheets [1910.1200(g)]
- Employee information and training [1910.1200(h)]
- Labels and other forms of warning [1910.1200(f)]

The heart of the hazard communication standard, which affects all workplaces where hazardous chemicals are used, is the written hazard communication program. The program, which must be specific to your workplace, requires that you identify and list the hazardous chemicals at your workplace, then describe how you will use safety data sheets, labels, and training to inform your employees about the chemicals and how they can protect themselves.

You'll find more information about the hazard communication standard in Oregon OSHA's, [GHS-Aligned Hazard Communication Standard](#) publication. ●

Rule	Rule number	Violations	Total penalties
Hazard communication	1910.1200	<b>122</b>	<b>\$5,000</b>
Safety committees and safety meetings	437-001-0765	<b>25</b>	<b>\$650</b>
Respiratory protection	1910.134	<b>11</b>	<b>\$1,080</b>
Abrasive wheel machinery	1910.215	<b>9</b>	<b>\$1,150</b>
Additional Oregon rules for handling materials	437-002-0221	<b>7</b>	<b>\$280</b>
Sanitation	1910.141	<b>4</b>	<b>\$420</b>
Medical services and first aid	437-002-0161	<b>4</b>	<b>\$320</b>
Portable fire extinguishers	437-002-0187	<b>4</b>	<b>\$100</b>
Spray finishing	437-002-0107	<b>2</b>	<b>\$460</b>
Personal protective equipment	437-002-0134	<b>2</b>	<b>\$295</b>

Source: DCBS, Oregon OSHA top 25 violations report; calendar year 2018, NAICS 811111 - General Automotive Repair.

## Addressing the dangers of carbon monoxide

By Aaron Corvin

On a Saturday evening in June, Oscar Segura entered a small residential garage in Portland to re-paint the walls.

To make way for the paint job, he would first use a gas-powered pressure washer to remove mold.

Inside the garage – its door sealed shut – Segura activated the equipment.

About 20 minutes later, a co-worker found Segura unconscious on the floor of the garage, the pressure washer still running. The co-worker pulled Segura out and began CPR. The fire department transported Segura to the hospital, where he died later that day.

What claimed Segura's life is one of the leading causes of poisoning by inhalation and a common workplace hazard: carbon monoxide.

The dangers of carbon monoxide are well known. Yet the toxic gas continues to find unsuspecting victims, as the accident that ended Segura's life makes all too clear. The accident prompted an investigation by [Oregon OSHA](#) of Guzman Pro Painting LLC, Segura's employer. The accident – and the results of the investigation – serve as a reminder to employers to take necessary precautions to protect workers from the potentially fatal effects of carbon monoxide exposure.

It's a reminder that federal OSHA signaled earlier this year. In a [news release](#), the agency noted that every year carbon monoxide poisoning claims the lives of employees nationwide, "usually when fuel-burning equipment and tools are used in buildings or semi-enclosed spaces without adequate ventilation."

Addressing the dangers of carbon monoxide takes on even more importance in light of the coming winter months, when fuel-burning equipment is used in indoor areas to keep out the cold and wind.

### Harmful when breathed

Carbon monoxide is a byproduct of the incomplete burning of material containing carbon, such as natural gas, gasoline, kerosene, oil, propane, coal, and wood.

It's a poisonous, colorless, odorless, and tasteless gas. Although it has no detectable odor, the toxic gas is often mixed with other gases that do have an odor. As a result, you can inhale carbon monoxide along with gases you can smell and not even know carbon monoxide is present.

Carbon monoxide is harmful when breathed because it displaces oxygen in the blood and deprives the heart, brain, and other vital organs of oxygen. One of the most common sources of exposure in the workplace is the internal combustion engine.

There are several actions employers can take to prevent carbon monoxide poisoning. One of them is to install an effective ventilation system that will remove carbon monoxide from work areas. Another is to prohibit the use of gasoline-powered engines or tools in poorly ventilated areas. Employers may also consider switching from gas-powered equipment to equipment powered by electricity, batteries, or compressed air – as long as the substitute equipment can be used safely. And employers must properly educate and train workers in the safe use of machinery, including the kind that burns fuel and gives off carbon monoxide.



*A house in Portland was the site of a fatal accident in which a worker, using a gas-powered pressure washer to prepare to paint the walls of a closed garage, succumbed to carbon monoxide poisoning.*

## Dangers of carbon monoxide, continued

### Violations cited

When Segura entered the garage with the pressure washer, the exterior of the house had already been painted. In shutting the garage door – and leaving no ventilation – he may have been worried that debris from the spray washing would stain the newly-painted house, according to Oregon OSHA's investigation.

Yet, the investigation, which resulted in a citation against Guzzman Pro Painting, found the company failed to follow certain rules designed to maintain a safe job site for workers. It identified three violations associated with the work itself:

- Segura was exposed to carbon monoxide at levels exceeding three times the Permissible Exposure Limit, on a time-weighted average, for more than a total of 30 minutes during the workday.
- The employer failed to determine and implement administrative or engineering controls – such as ventilation – to prevent an overexposure to carbon monoxide.
- The employer did not ensure Segura heeded carbon monoxide warning statements in the pressure washer's owner's manual, which included warnings in both English and Spanish. A placard on the equipment states, "Warning, the engine emits toxic carbon monoxide, do not run in an enclosed area."



*Oregon OSHA opened an investigation following the death of a worker who was overexposed to carbon monoxide while using a gas-powered pressure washer inside a closed residential garage. Pictured here is the garage after the accident.*

*The gas-powered pressure washer that was used by a worker inside a closed residential garage included carbon monoxide warning statements. A placard on the equipment states: "Warning, the engine emits toxic carbon monoxide, do not run in an enclosed area."*



Oregon OSHA also cited Guzzman Pro Painting for failing to report the fatality to the agency in a timely manner. Such [timely notification](#) provides Oregon OSHA with the best opportunity to examine the scene before physical changes occur, interview those associated with the event before recollections evolve, and ensure additional employees are no longer exposed to the original hazard.

### Help is available

No employer must face tackling the dangers of carbon monoxide in the dark.

Resources, information, and help are abundant. Oregon OSHA's [A-to-Z topic page](#) on the subject includes hazard alerts about [running gas-powered equipment in a box truck](#) and [preventing poisoning from an internal combustion engine](#).

Meanwhile, federal OSHA offers English and Spanish [videos](#) addressing how to prevent poisoning from using portable gas-powered equipment in construction. Moreover, federal OSHA provides a [fact sheet](#), which includes tips for employers and workers in preventing carbon monoxide poisoning.

In addition to its enforcement activities, Oregon OSHA offers employers resources to help improve workplace safety and health. Employers can contact the agency's no-cost [consultation services](#), which include hazard assessments, recommendations to control and eliminate hazards, and hands-on training.

They may also turn to Oregon OSHA's [technical staff](#) for help understanding on-the-job health and safety rules and how to apply them. ●



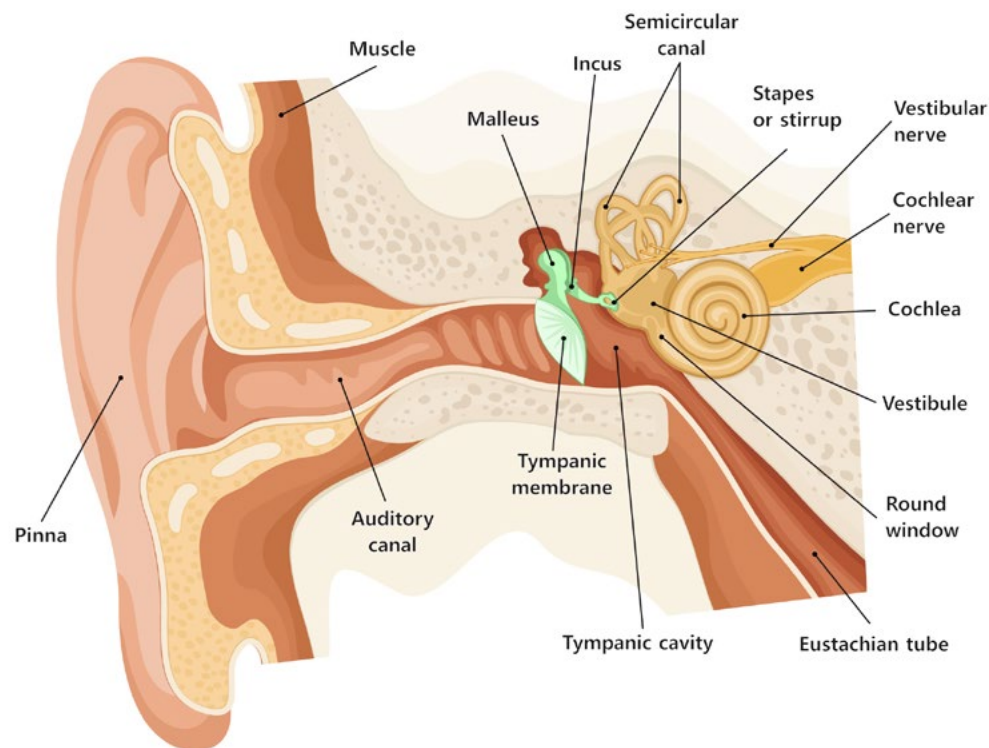
## Hear this: October is National Protect Your Hearing Month

Most of us take our hearing for granted. When we go home after work and when we get up in the morning, we expect to hear. But hearing does not come with a lifetime guarantee and when it's damaged, it may be difficult, if not impossible, to restore. This October is [National Protect Your Hearing Month](#), and a timely reminder to keep your exposure to noise at safe levels – at work and at play.

When it [mapped noise levels across the country](#) in 2017, the U.S. Department of Transportation found that 97 percent of the population is subjected to human-caused noise. And a recent study of 290 national parks found that 67 percent of the sites had significant levels of human-caused noise, most of it from aircraft, traffic, and industrial sources such as oil and natural gas drilling. We are exposed to much of this environmental noise at levels that don't damage our hearing. But noise can be harmful when it is painfully loud for a brief time – or when it is loud enough to make hearing other sounds difficult over an extended time, such as an eight-hour workday.

Such sounds can damage sensitive structures in the inner ear and cause noise-induced hearing loss. Noise-induced hearing loss can be temporary or permanent; it can affect one ear or both ears. In the United States, noise-induced hearing loss is the [third-most common chronic physical condition among adults](#) after hypertension and arthritis. Up to 24 percent of American adults younger than age 70 may have hearing loss due to noise exposure in one or both ears, and the Centers for Disease Control and Prevention says that as many as 12.5 percent of kids and teens ages 6 to 19 [have some damage to their hearing](#).

Among U.S. workers, hearing loss is also a serious health concern because it can be caused not only by excessive noise but also by exposure to some types



of chemicals. About 22 million U.S. workers are exposed to noise levels that can damage hearing – considered to be 85 decibels or more, averaged over an eight-hour day. And more than 10 million workers are exposed to [chemicals known as ototoxicants](#) that can damage their hearing or make them more susceptible to the damaging effects of noise.

Ototoxicant chemicals damage nerve fibers that are responsible for hearing and balance and reach the inner ear through the blood stream. Many substances contain ototoxicants, including certain pesticides, solvents, and pharmaceuticals.

There is also evidence that excessive noise can damage our health in ways that go beyond hearing. A study published in the Journal of the American College of Cardiology (February 2018) suggests that noise induces a stress response in humans and animals that increases levels of hormones called catecholamines, which are associated with coronary artery disease, stroke, and heart failure.



## National Protect Your Hearing Month, continued

And a study conducted by the Centers for Disease Control and Prevention published in the American Journal of Industrial Medicine (March 2018) found that hypertension and elevated cholesterol were more prevalent among noise-exposed workers. Nine percent of high cholesterol and 14 percent of high blood pressure cases among workers were linked to loud noise on the job.

### Protecting your hearing

Of course, the best way to protect your hearing is to limit your exposure to loud noise. Exposure to noise levels of 85 decibels (dBA) for more than eight hours a day can damage hearing, and it takes less time to cause harm as noise levels rise above 85 dBA. For example, a typical motorcycle can generate a noise level of 100 dBA, which can become harmful after about a two-hour ride; a noise level of 115 dBA – not uncommon at concerts – can damage unprotected ears in 15 minutes.



When it's possible, one of the simplest ways to protect your hearing is to increase the distance between you and the sound source. How does increasing the distance affect sound levels? Sound pressure – the intensity of a sound – is measured at a given distance from a sound source. Thanks to a simple law of physics, we know that each time you double the distance from a sound source, you decrease the sound level by about six decibels. For example, if you are standing 10 feet from a source and the sound level where you are standing is 90 decibels, the sound level would be about 84 decibels at a distance of 20 feet. Nearby surfaces that might reflect the sound (or block it) can change the numbers, but this is still good for estimating sound levels at a distance.

Wearing hearing protection, such as earmuffs or earplugs, is a good idea when you know you might be exposed to loud sounds for a relatively short time – for example, when you're doing yard work and using a leaf blower, or attending a loud concert, a sporting event, or a movie.

If you're exposed to loud or prolonged noise at work, however, such hearing protection should be considered only when it is not possible to reduce the noise by more effective methods. Workplace safety and health specialists will tell you the most effective way to control excessive noise is to eliminate the source; if that's not possible, then the next best solution is to use a quieter source or change the sound path so that the sound is not as intense. Other, less effective, options include isolating workers from the source and reducing the time that workers are exposed to the source. For more information about how to protect your hearing at work, check out Oregon OSHA's ["Quick guide to protecting your hearing."](#) ●

## *Oregon OSHA to present first Spanish-language safety conference*

Come November, Oregon OSHA will present its first Spanish-language conference addressing workers and their needs. Topics include asserting their rights to a safe workplace, protecting their health and safety at work and at home, and protecting against wage theft.

Presenters at the free conference – to be held from 8:30 a.m. to 4:30 p.m. on Tuesday, Nov. 19, 2019, at the Oregon State Fairgrounds in Salem – will include workplace safety and health professionals, medical providers, and other experts. The event will feature lunch and exhibits.

Supporters of the event include the Central Oregon Safety & Health Association, Oregon Columbia Chapter of the Associated General Contractors, the Oregon Bureau of Labor and Industries, the Oregon Institute of Occupational Health Sciences at OHSU, SAIF Corporation, and Oregon Business & Industry.

Other conference topics include:

- Identifying and addressing common workplace hazards
- Safety and health in agriculture, construction, food processing, and logging and forest harvesting
- The role of the supervisor in workplace safety

Those interested in attending must pre-register by Wednesday, Nov. 13. For more information or to register, go online – <https://osha.oregon.gov/conferences/espanol/Pages/default.aspx> – or call 541-618-7920. Questions may also be submitted by email: [oregon.conferences@oregon.gov](mailto:oregon.conferences@oregon.gov) ●







# Ask Oregon OSHA

Our business owns property near the Columbia River and has a diver come in twice a year to inspect one of the ponds on the property and clean fish screens. We called for bids this year and received one that states they are "OSHA approved." We have been subcontracting with another company that does not mention they are OSHA approved. Is a company required to be OSHA approved to do dive work and clean fish screens?

**No.** There is no such thing as "OSHA approved." Neither Oregon OSHA nor federal OSHA approve or certify any product, service, or company. Oregon OSHA's expectation for all employers is that they meet the minimum requirements of our rules to adequately identify the hazards to which their employees are exposed and to ensure that their employees are protected from those hazards. ●



## Short take

### Workers' compensation costs to drop for seventh-straight year

Oregon's long-running success in managing the workers' compensation system continues as businesses will see yet another drop in costs in 2020 as the key factor behind annual cost changes dips yet again. The numbers are indicative of a long-term trend:

- Employers, next year, on average, will pay \$1.02 per \$100 of payroll for workers' compensation insurance, down from \$1.11 in 2019, according to the Oregon Department of Consumer and Business Services (DCBS). That figure covers workers' compensation claims costs, assessments, and insurer profit and expenses.
- The pure premium rate – the base rate insurers use to determine how much employers must pay for medical claims and lost wages – will drop by an average 8.4 percent. In fact, the pure premium – filed by a national rate-setting organization and approved by DCBS – has declined by 45 percent during the 2013 to 2020 period.

This will mark the seventh year in a row that businesses will experience an average decrease in their [workers' compensation costs](#). Those costs have steadily declined over the years, even as workers continue to receive good benefits. The ongoing decline in costs reflects Oregon's comprehensive approach to managing the system, including efforts by the Workers' Compensation Division (WCD) and Oregon OSHA. For example, WCD enforces requirements that employers carry insurance for their workers, keeps medical costs under control, and helps injured workers return to work sooner and earn their pre-injury wages. At the same time, Oregon OSHA enforces on-the-job safety and health rules, identifies hazards so they can be corrected, and advises employers about how to boost worker safety and health.

Employers' cost for workers' compensation insurance covers the pure premium and insurer profit and expenses, plus the premium assessment. Employers also pay the Workers' Benefit Fund assessment, which is a cents-per-hour-worked rate.

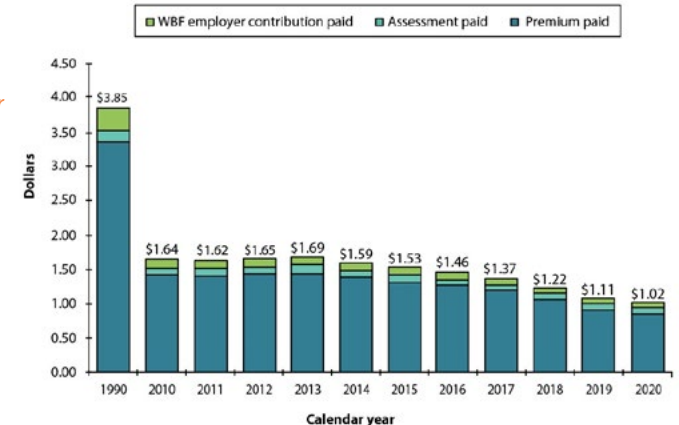
The premium assessment is a percentage of the workers' compensation insurance premium employers pay. It is added to the premium. It will increase from 7.8 percent this year to 8.4 percent in 2020. The increase is needed to partially offset the decline in pure premium and to keep pace with a growing economy. This modest increase maintains stable funding for state workers' compensation regulation and worker protection programs that preserve historically low costs.

The Workers' Benefit Fund assessment provides benefit increases to permanently disabled workers and to families of workers who died from a workplace injury or disease. It also supports Oregon's efforts to help injured workers return to work sooner – through incentive programs to employers – and earn their pre-injury wages.

The fund's revenue comes from a cents-per-hour-worked assessment. It will decrease from 2.4 cents per hour worked in 2019 to 2.2 cents per hour worked in 2020. The fund is healthy, made so by a growing economy, which allows the rate to be reduced.

The decrease in the pure premium is effective Jan. 1, 2020, but employers will see the changes when they renew their policies in 2020. The assessment changes are effective Jan. 1, 2020. ●

Total workers' compensation employer costs per \$100 payroll



This graph shows the total employer costs per \$100 of payroll for loaded pure premium, premium assessment, and Workers' Benefit Fund cents-per-hour assessment. Loaded pure premium includes insurer costs, known as expense loading factors. Historic figures are adjusted to reflect the 2018 mix of employment and payroll.



## Short take

### Oregon OSHA offers free online training for ladder safety

Ladders are essential tools on a variety of job sites, easy to obtain and simple to use. As fatal injury and rule violation data show, however, their safe use is hardly guaranteed.

Help is now available: Oregon OSHA has launched a free online ladder safety training course featuring videos that walk employers and workers through everything from the types and dangers of ladders to safe practices and proper storage.

The course includes interviews with Oregon OSHA and industry experts who discuss a comprehensive set of ladder safety issues. Those issues include choosing the right type of ladder for the job; heeding the ladder manufacturer's instructions; addressing the common hazards associated with using ladders; and following ladder safety rules.

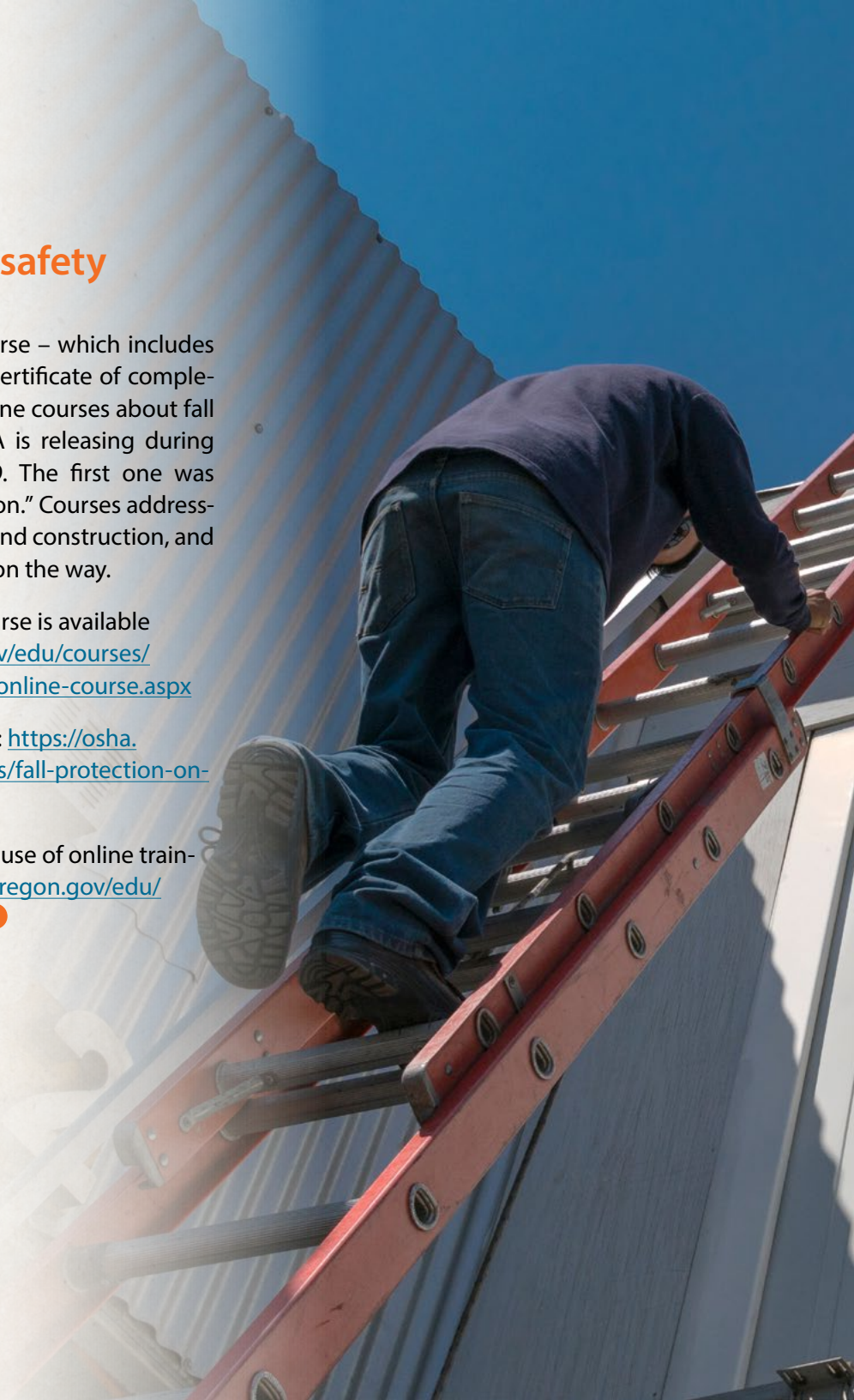
From 2011 to 2016, the most common sources of fatal injuries from falls to a lower level were ladders (836 fatal injuries) and roofs (763), according to the U.S. Bureau of Labor Statistics. Moreover, ladder use was the No. 6 most cited Oregon OSHA standard in 2018, with 148 total violations and initial penalties totaling \$109,920. The standard covers multiple requirements, including that side rails must extend at least three feet above an upper landing surface; that ladders must be maintained free of slipping hazards; and that they must be periodically inspected for visible defects.

The ladder safety training course – which includes the opportunity to receive a certificate of completion – is the second of five online courses about fall protection that Oregon OSHA is releasing during the summer and fall of 2019. The first one was “Fundamentals of Fall Protection.” Courses addressing fall protection for roofing and construction, and walking-working surfaces are on the way.

The Ladder Safety training course is available online: <https://osha.oregon.gov/edu/courses/Pages/portable-ladder-safety-online-course.aspx>

Take the Fundamentals course: <https://osha.oregon.gov/edu/courses/Pages/fall-protection-online-course.aspx>

Oregon OSHA encourages the use of online training. Learn more: <https://osha.oregon.gov/edu/courses/Pages/default.aspx> ●





## Short take

### Marvin Wood Products moves forward with Star status

Marvin Wood Products in Baker City has been approved for continued participation as a Star site in Oregon OSHA's [Voluntary Protection Program](#).

The approval to participate in VPP – which encourages companies to protect workers by going well beyond minimum safety requirements – follows the facility's successful completion of a recent VPP evaluation.

The facility, which employs 175 people, produces basic wood components for windows and doors. Hazards at the site include entanglement and amputations in machinery, which include rotating blades, pinch points, and rotating parts.

The VPP evaluation found the facility's areas of safety and health excellence to include robust safety committee meetings; a thorough hazard-analysis program that includes monitoring of work practices; strong employee participation in reviewing safety and health programs; an ongoing commitment by management to reduce incidence rates, which remain well below industry averages; and an ergonomics team that examines work stations and raises awareness of related issues.

Marvin Wood Products' Baker City site – a graduate of Oregon OSHA's [Safety and Health Achievement Recognition Program \(SHARP\)](#) – became a VPP site in October 2003. The Oregon OSHA members of the VPP evaluation team that recently evaluated the Baker City facility were: Gary Robertson, safety consultant and team leader; Paulo Pinto, safety compliance officer and backup team leader; Jarrodd Bohn, safety compliance officer; and Averie Foster, health consultant. Rick Gammon of Georgia-Pacific Philomath served as the team's [Special Government Employee](#).

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). ●





## Short take

### Scholarship awards boost student achievement

Eight Oregon high school graduates are recipients of the 2019 Workers' Memorial Scholarship awards. The awards program helps finance higher education for family members of Oregon workers who have been fatally injured or permanently disabled on the job.

The Workers' Memorial Scholarship is open to any high school graduate, graduating high school senior, GED recipient, or current college undergraduate or graduate student who is a dependent or spouse of an Oregon worker who has been fatally injured or permanently disabled while on the job. Learn more about the program: <http://osha.oregon.gov/workers/Pages/workers-memorial-scholarship.aspx>.

This year's recipients are:

#### Salma Anguiano, Hermiston



Anguiano is a 2018 graduate of Hermiston High School. She is studying American government and politics, and ethnic studies at Whitman College. Anguiano hopes to attend law school.

A vehicle accident left her stepfather, who worked at a dairy farm, a quadriplegic. Anguiano is receiving a \$5,500 award.

#### Abbey Dieu, Coquille

A graduate of Coquille High School, Dieu will begin coursework in physical therapy at Linn-Benton Community College in the fall. She plans to pursue a bachelor's degree in general science, with the larger goal of securing a career in physical therapy.

Dieu's father, a logger, was struck by a fallen tree in an accident that nearly claimed his life. She is receiving a \$2,500 award.

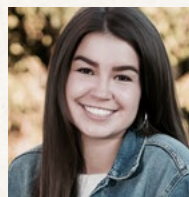
#### Ginger Ewing, Bandon



Ewing graduated from Bandon High School this year. She plans to study nursing at Linfield College, with a goal of securing a master's degree in that field.

Ewing's father, a cattle ranch worker, was fatally kicked in the head by a horse. She is receiving a \$4,000 award.

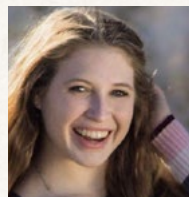
#### Samantha Hull, Portland



Hull is a 2018 graduate of Portland Christian High School. She is pursuing a bachelor's degree in elementary education and teaching at Corban University.

Hull's father died in a forklift accident before she was born. She is receiving a \$500 award.

#### Ora Kuhse, Springfield



A graduate of Springfield High School, Kuhse will attend Lane Community College in the fall. She will immerse herself in the study and application of beauty treatment, with an eye toward eventually fashioning a career as a licensed cosmetologist.

Kuhse's father, a press operator, died in an industrial accident at a plywood plant. She is receiving a \$2,500 award.

#### Grace Milner, Silverton

A graduate of Silverton High School, Milner is pursuing a bachelor's degree in pediatric nursing – with a minor in Spanish – at Linfield College.

Her stepfather died in a car accident while traveling for work. Milner is receiving a \$5,500 award.



## Short take

### Scholarships, continued

#### Alannah Rudduck, Warrenton



After graduating Warrenton High School, Rudduck earned three associate's degrees at Mt. Hood Community College. She is now working toward a bachelor's degree in dental hygiene at Augusta University in Georgia. She also plans to pursue a minor in business.

Rudduck's father, a police officer, died in the line of duty. She is receiving a \$4,000 award.

#### Sydney Sampson, Springfield



A graduate of Henry D. Sheldon High School who completed coursework at Lane Community College, Sampson will be a sophomore at University of Oregon in the fall. At the university, she is double-majoring in political science and international studies.

After she obtains her bachelor's degree, Sampson plans to volunteer with the Peace Corps. Ultimately, she aspires to become the first black female Secretary-General of the United Nations.

Sampson's stepfather, a police officer, was shot to death in the line of duty. She is receiving a \$500 award.

Award recommendations are made by Oregon OSHA's Safe Employment Education and Training Advisory Committee, an advisory group with members from business, organized labor, and government. Oregon OSHA presents the awards annually to help in the postsecondary education of spouses or children of permanently and totally disabled or fatally injured workers.

The 1991 Legislature established the Workers' Memorial Scholarship at the request of the Oregon AFL-CIO, with support from Associated Oregon Industries.





## Short take

### Portland area contractor cited for 13 job safety violations

Oregon OSHA has cited a Portland-area custom floor coatings company for 13 serious violations – four of them repeat offenses – of workplace health and safety rules. The agency's inspection found Specialty Coatings Inc. exposed workers to multiple hazards, including the potential for fire and severe burns, suffocation, and lung disease.

The inspection – launched in response to two separate confidential complaints – examined work operations at the company's main office and warehouse in Tigard, and job sites in Hillsboro and Portland. Those work operations included handling flammable liquids, grinding concrete floors, and applying chemicals.



The inspection's findings included that the company did not properly handle and store flammable liquids, raising fire and severe burn dangers; failed to provide a medical evaluation before requiring the use of a respirator, increasing the risk of suffocation or heart attack; and lacked a plan to control workers' exposure to dust containing crystalline silica, a byproduct of concrete grinding that can cause lung disease and cancer.

Four of the 13 violations – including the breach of the medical evaluation requirement – are repeat offenses stemming from previous Oregon OSHA inspections of Specialty Coatings.

The citation against Specialty Coatings carries a total proposed penalty of \$2,855. The fine amount includes a standard penalty reduction based on the small size of the company, which employed seven people at the time of Oregon OSHA's inspection. Altogether, the inspection found:

- The company did not electrically bond and ground metal drums of flammable liquid with secondary containers to prevent sparks from causing a fire.
- More than 120 gallons of flammable liquid were stored outside adequate safety storage cabinets.
- The company failed to provide adequate notification and training about the health hazards of breathing in crystalline silica.
- The company did not ensure that specific tasks that could expose workers to crystalline silica were understood.
- The company failed to establish and carry out a silica exposure control plan, including descriptions of engineering controls, work practices, and respiratory protection.
- The company did not provide an adequate fit-test for at least two employees who were required to wear tight-fitting respirators.



## Short take

### Contractor cited for 13 job safety violations, continued

- The company allowed at least one employee, who was required to wear a tight-fitting respirator, to put it on with facial hair that came between the sealing surfaces of the mask.
- The company did not provide training to employees so they could understand the labels on hazardous chemicals they worked with.
- A safety data sheet for at least one hazardous chemical used by employees was missing.
- The company failed to provide an adequate medical evaluation to at least one employee who used a tight-fitting, half-face respirator. This was the company's second repeat violation of this requirement over the past two years.
- The company did not ensure that at least two employees stored their respirators in a clean location – a repeat violation.
- The company failed to set up and carry out a respiratory protection program, including procedures for cleaning and disinfecting respirators, and changing out expired filter cartridges. This was a repeat violation.
- The company failed to hold effective monthly safety meetings – a repeat violation. ●

#### **In addition to its enforcement activities, Oregon OSHA offers employers resources to help improve workplace safety and health.**

The agency's technical staff members can answer questions about rules and how to apply them:

Phone: 503-378-3272

Toll-free in Oregon: 800-922-2689

Email: [tech.web@oregon.gov](mailto:tech.web@oregon.gov)

Online contact form: <https://osha.oregon.gov/Pages/Contact-Technical.aspx>

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

Phone: 503-378-3272

Toll-free in Oregon: 800-922-2689

Field office locations and phone numbers: <https://osha.oregon.gov/Pages/maps.aspx>

Email: [consult.web@oregon.gov](mailto:consult.web@oregon.gov)



## Short take

### Suicides can be prevented

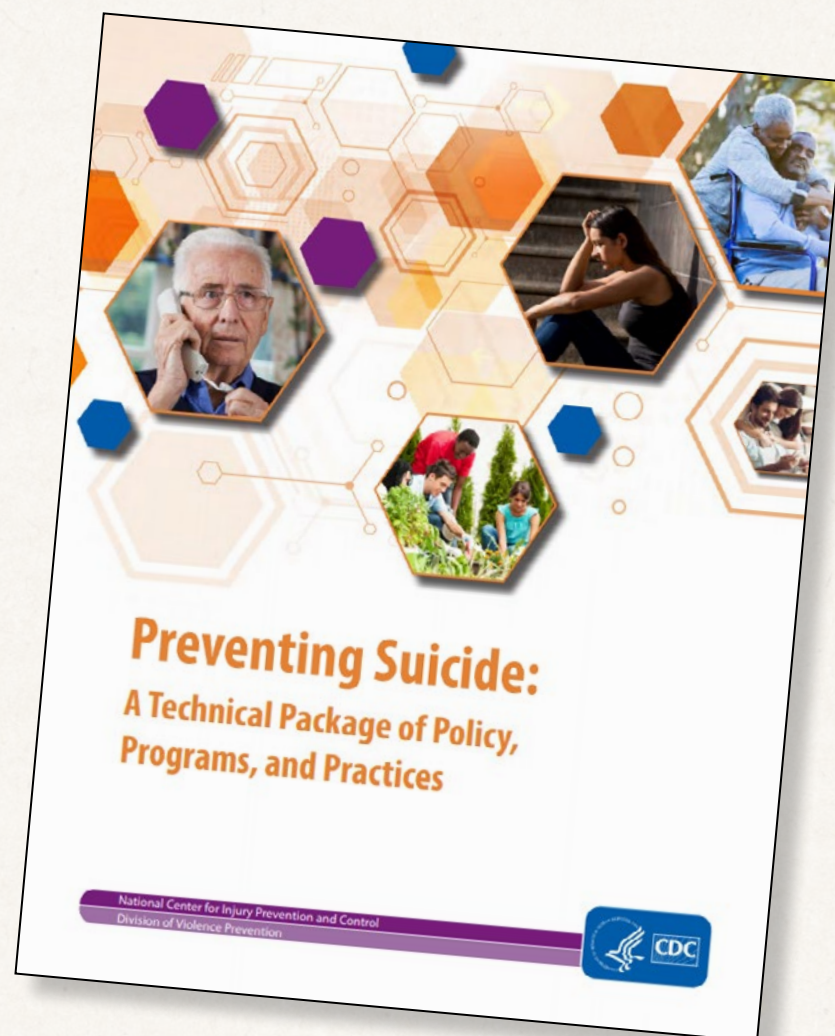
Although National Suicide Prevention Week happened last month (Sept. 8-14), suicide prevention remains a full-time job. The Centers for Disease Control and Prevention [reports that](#) the suicide rate has increased in every state, except Nevada, since 1999. Suicide was the 10th leading cause of death overall in the United States in 2017, claiming the lives of 47,173 people. In fact, there were more than [twice as many suicides](#) than homicides (19,510) that year.

Among the U.S. working age population, the suicide rate increased 34 percent from 12.9 per 100,000 population to 17.3 between 2000 and 2016, [according to the CDC](#). In 2016, 291 workers committed suicide – a 27 percent increase from the previous year – and 275 people committed suicide at work in 2017.

While feelings of hopelessness and despair are often associated with suicidal behavior, suicide has no single determining cause. Workplace suicide prevention efforts tend to emphasize early detection and training to identify those at risk and refer them to support services. The [CDC notes](#) that more research on the role of the workplace in primary suicide prevention is needed, including improving working conditions and reducing stress. However, there is evidence from many existing successful programs that suicide can be prevented when the focus is on:

- Strengthening economic supports
- Strengthening access and delivery of suicide care
- Creating protective environments
- Promoting connectedness
- Teaching coping and problem-solving skills
- Identifying and supporting people at risk
- Lessening harms and preventing future risk

For more information on suicide prevention strategies, see the CDC's [Preventing Suicide: A Technical Package of Policy, Programs, and Practices](#). ●







# Safety Notes .....

## Incident Report

**Incident:** Caught in machine

**Company:** Rubber compound manufacturer

**Worker:** Rubber cutter

### What happened?

A 23-year-old worker died after he became trapped in an unguarded machine designed to cool strips of hot rubber.

### About the company

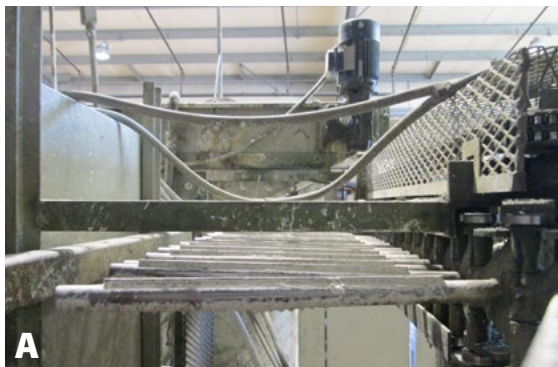
The company produces rubber compounds for a variety of different commercial applications and makes custom batches of rubber compounds ranging from three to 150 pounds.

### How did it happen?

The 23-year-old employee started his shift at 7 a.m. operating a cutter machine – the first of four machines in a production line that included a mixer, a drop-and-strip mill, and a festoon machine. The rubber compound is heated to a high temperature as it is processed and cut on the production line, then cooled in the festoon machine to prepare it for shipment.

A festoon machine is essentially a large (17 feet by 12 feet) cooling rack that moves long strips of hot rubber along 90, 1.5-inch diameter, metal rods where the strips are cooled by a series of fans. The festoon machine can be operated by one person who places the rubber strips on the rods, walks around to the other side of the machine before the rubber strips arrive, and then places the strips onto an off-loading conveyor.

The 23-year-old employee had been operating the cutter machine throughout the day, but in between batches, he would ask if anyone else working on the line needed help. About 2:45 p.m., another employee, who operated the festoon machine, asked for



**A**

help removing the rubber strips from the machine. The 23-year-old employee agreed and walked around to the back of the machine while his co-worker went to the front and waited for the strips to arrive. When he didn't see any, he called out asking where they were.

When he got no response, he walked to the back of the festoon and saw the 23-year-old employee caught in the machine with his head trapped between two of the metal rods. He hit the emergency stop on the electrical panel and ran for help. Other employees in the area who heard him yelling went to investigate and called 911.

Emergency personnel arrived along with the medical examiner, who determined that the employee had died from a broken neck.

### Findings

- The company's festoon machines operated continuously during a normal shift and had no guards to prevent operators or other employees from contacting the machine's rotating parts.
- Employees were allowed to reach into the festoon machines to make adjustments while the machines were running. The employees were also able to access other unguarded parts of the machines, which exposed them to additional hazards.
- The rubber strips moving through the unguarded festoon machines increased the risk that employees could get caught in the machine's moving parts. ●



**B**

**A** View of iron brace where the employee was trapped.

**B** The company put up a barrier that prevented exposure to the festoon machine after the incident.



# Going the Distance .....

## Company:

Linde Electronics, a division of Linde Gas North America LLC

## Health, Safety, and Environmental Coordinator:

Ross Olson

## Operations/facilities/workforce:

Linde Electronics is a global leader in electronic specialty gases. The White City plant packages, purifies, and manufactures electronic gases used primarily in the semiconductor industry. The plant employs 72 people.

## Responsibilities/hazards addressed:

Hazards include chemical (gaseous and liquid), electrical, dust, noise, and musculoskeletal hazards. The majority of these hazards are addressed through work instructions that have been developed for specific tasks and processes. Employees also go through extensive hands-on training to ensure that tasks are performed safely. Additionally, a robust hazardous work permit (HWP) program, contractor management, and preventive maintenance work are important day-to-day controls. Including employees employees in risk assessments for management-of-change work, as well as HazOps assessing chemical system risks, is key.

## Safety milestone:

In September, the plant was on track to achieve 1,000 days without an employee recordable or lost-time injury.



*The responsibilities of Ross Olson, health, safety, and environmental coordinator for Linde Gas North America, LLC, include process safety management, Voluntary Protection Program compliance, and employee training.*

**The White City facility was recently approved for continued participation as a Star site in Oregon OSHA's Voluntary Protection Program, which encourages companies to protect workers by going well beyond minimum safety requirements. That's no small feat. Why did your company seek to join VPP?**

VPP was a tool to help the plant achieve and maintain safety excellence. The plant was not content with meeting the minimum requirements, and there was a strong desire to go above and beyond. While going through the certification process, several gaps were identified and, as a result, a more comprehensive safety management system was implemented. Promoting a culture of safety within the company and to our customers is very important. The plant has been a VPP Star site since 2005 and continues to reinforce the message that safety is a core value of everything we do.

**What was the most important thing you learned during your company's VPP journey?**

One of the most important lessons I learned is having an excellent safety management system that promotes employee ownership in the safety process. The successful adoption of our online system in 2016 relied a great deal on the level of commitment from both management and employees, as well as an adequate commitment of resources to design and administer the system.

As a result, the plant has improved documentation and tracking of process hazard analysis (PHAs), audits/inspections, incident investigations, safety committee actions, management of change, and employee training. VPP helps promote employee ownership of these safety processes, helping reduce risks.

**In your line of work, how do you measure success?**

Personally, the most important measure is the elimination of unsafe behaviors and conditions. Having an effective safety management system allows us to identify, track, and mitigate risks before an injury happens. Valuable information is captured through observations, drills, training, audits, reviews, and

reports by line managers and workers. The information is then acted upon through various administrative and engineering controls.

We also celebrate individual and group successes often, thus reinforcing positive safety behaviors. Creating trusting relationships with workers increases the plant's ability to improve and maintain outstanding safety performance. The end result is being injury free.

**What advice would you give to those looking to improve safety and health where they work or others seeking a career in on-the-job safety and health?**

Ensure that both line managers and workers are involved in your safety management program. Know the difference between managing (telling workers how to make things happen) and leading (being a resource for workers to facilitate safety improvements). Provide on-site and off-site training, provide workers with the right tools, enforce accountability, listen, know and acknowledge your limitations, look for ways to improve safety, and, finally, celebrate individual and group successes that demonstrate your organization's commitment to safety.

There are many outside resources that can be utilized. They include Oregon OSHA, American Society of Safety Professionals, National Safety Council, and safety conferences. Work towards obtaining some type of nationally recognized safety certification. For example, attaining Certified Safety Professional (CSP) status would be beneficial. ●

*Members of the safety committee for Linde (Olson is holding an award) gathered recently to celebrate the White City facility's approval for continued participation as a VPP Star site.*

