OREGON HEALTH AND SAFETY

RESOURCE

September, October, November 2001



Georgia-Pacific Pulp and Paper Mill recognized for safety achievement



The Georgia-Pacific West, Inc. pulp and paper mill (G-P Toledo) is a "star" worksite under Oregon OSHA's Voluntary Protection Program (VPP). The company celebrated its recognition at a ceremony

on June 5 at its site at 1 Butler Bridge Road in Toledo. The mill is one of only three Star Sites in Oregon.

The Voluntary Protection Program recognizes and promotes effective workplace safety and health management, understanding that enforcement of safety and health rules and laws alone can never fully achieve the objectives of the Occupational Safety and Health Act.

See "Celebrate," page 16



Peter De Luca, Oregon OSHA administrator, LeRoy Tharp, president of Local 13 of the Association of Western Pulp and Paper Workers, and Edward Bortz, vice president/general manager of Toledo Paper Operations.

Vehicle accidents are the #1 cause of on-the-job deaths

The fact that the leading cause of on-the-job injuries and fatalities in Oregon are vehicle-related accidents may surprise some people.

In fact, according to statistics from the Information Management Division of DCBS, about 40 percent of Oregon workers who have died on the job since 1990 were killed by collisions, overturned vehicles, or accidents in which they were struck or pinned by a vehicle.

"Forty percent of the accidents being vehicle-related does not mean that they're all on-the-highway-type accidents," said Rod Comstock, regional manager for OR-OSHA. "We're having a lot of accidents in construction work zones and in agriculture."

See "Vehicle," page 15

What's inside . . .

Put safety first on the farm!

arming is one of the most dangerous occupations in the United States. According to the National Safety Council more than 800 farmers and ranchers die in work-related accidents yearly. Many of these incidents happen during the harvest season, as farmers work long hours getting their crops from field to market. Another 150,000 agricultural workers suffer disabling work-related injuries. Mechanical, chemical, and environmental hazards present high risks of accidents for agricultural workers. Most of these incidents are preventable.

Harvest equipment safety

Harvesting equipment is a necessity on farms. To prevent injuries while operating harvesting equipment, follow safe work practices all the time. Be physically and mentally fit before operating equipment. Fatigue, stress, and worry can cause you not to focus on safe equipment operation. Take breaks.

Read operator's manuals and warning decals and pay attention to safety information. Inspect the equipment and correct any hazards before operating. Identify hazardous areas on equipment and make sure you stay away from moving parts. Beware of pinch points, shear points, wrap points, pull-in areas, thrown objects, crush points, stored-energy hazards, and freewheeling parts. Make sure everyone who operates the equipment has received training and is physically able to operate it safely.

Shut down equipment, turn off engine, remove key, and wait for moving parts to stop before approaching equipment. Keep bystanders and others away from equipment operation area. Do not allow "extra riders," especially children.

Chemical safety

Crop-protection chemicals are necessary to ensure the production of food from Oregon's farms and ranches. They protect from unwanted weeds, insects, rodents, fungus, and diseases. These chemicals also must be handled with care to reduce potential worker exposure.

Always read the label. All crop-protection chemicals include information on the proper use of the chemical, safe handling, storage, and first-aid information. Obtain material safety data sheets (MSDSs) for the chemicals that you use. MSDSs contain additional health hazard data, spill or leak procedures and handling information. Be sure to keep a set separate from the storage area.

Wear personal protective equipment (PPE) required by the chemical's label. PPE that should be available on the farm and ranch include chemical-resistant gloves, coveralls, boots, hat and apron; approved respirator with cartridges for pesticides; and chemical protection goggles and face shield.

Keep chemicals in properly labeled storage areas that can be locked to keep bystanders and children out. Launder chemical-soiled clothing separately from other laundry.

Set a good example for others

Children and youths are at increased risk for injury and death for many reasons. Many young people get into trouble by copying what they see adults do on the farm. If they notice a parent step over an operating power takeoff, they will most likely do the same, even though it is not a safe practice. If they observe an older person not wearing a seat belt while operating a tractor with roll-over protection, they tend to do the same when they operate machinery. Younger children also like to climb and can get into serious trouble by climbing on silos and grain bins where the ladders are within reach.

The National Safety Council has designated September 16-22 National Farm Safety & Health Week. Information is available on the Web at www.nsc.org. Visit the OR-OSHA Resource Center in Salem in person or online at www.orosha.org. It's important for farmers and ranchers to put safety first. The NSC and OR-OSHA can help.

Administrator's Message



Peter De Luca

The changing of the guard

No doubt you've noticed that we have a new president. He has appointed a new secretary of labor. She, in turn, recently appointed a new assistant secretary to head OSHA. Who is he?

His name is John Henshaw. He has worked in a number of private sector locations — most of these involved chemicals. Some of them were Voluntary Protection Program (VPP) participants.

Henshaw has articulated some general priorities:

- He wants OSHA to be a leader in the national dialogue to set the agenda not simply to participate.
- He wants strong and effective enforcement.
- He wants to focus on outreach, education, and compliance assistance.
- Finally, he wants to encourage voluntary efforts such as SHARP, VPP, and partnerships.

Come September, I will have an opportunity to meet with Henshaw. There are a few things I think he should know — things which are often lost on federal people. He should know that about half of the U.S. states run their own OSHA plans. These plans cover about half of the nation's workforce and perform, in the aggregate, more inspections and consultations than Federal OSHA performs in those states that have left occupational health and safety to the feds.

In terms of Henshaw's goals, I would like him to know that they are a formula for success — already tried and tested in Oregon. They are largely the secret of our success.

Oregon's program is based on strong enforcement. We have more compliance officers per capita than any other state in the nation. Because of this high concentration, we are able to have the lowest fines. These two concepts work hand-in-hand.

OR-OSHA leads the dialogue on safety and health. Clearly, business and labor would have such a dialogue without us, but we remain the catalyst. We bring issues to the front. We assemble the various interests. We start and we lead the dialogue.

For many years, our focus has been on education and consultation. I have often said that each OR-OSHA encounter a business has — even in an enforcement mode — should be a learning experience. Most of our programs are geared toward outreach.

Finally, we have long encouraged voluntary efforts. We have VPP in Oregon. We not only have a very active SHARP program, we have the nation's only SHARP Alliance — a group of businesses that come together regularly

for the purpose of mentoring themselves and other businesses seeking to become SHARP.

Yes, when I meet John Henshaw, I'll tell him if he really wants a model for his vision of OSHA, he should look to Oregon. In my opinion, the business and labor organizations in Oregon that have come together for occupational safety and health have worked hard with government to create the most successful program in the nation — maybe in the world! Safety and health works in Oregon because everybody works together. Everybody pulls in the same direction. And when that happens, everybody wins!

That, if I have my way, will be my conversation with the new assistant secretary of labor for OSHA.



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Winners of Workers' Memorial Scholarships announced

by Kathy Mossbrucker, Administrative Assistant, Oregon OSHA

Three Oregon college students received Workers' Memorial Scholarships for the 2001-2002 school year. The Department of Consumer and Business Services Oregon Occupational Safety and Health Division (OR-OSHA) administers annual scholarships for the education of spouses or children of permanently disabled or fatally injured workers.

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

Patrick Oropallo was awarded \$5,000 to attend Southern Oregon University. He will be a freshman majoring in business administration. Orapallo attended Ashland High School, where he earned a varsity letter all four years as a member of the golf team. He also is a member of the Oak Knoll Golf Club. Working part-time at the club enables him to pay for his golf equipment and fees. Orapallo's most meaningful accomplishment was winning the Oak Knoll club championship. "It showed me that if you want something bad enough and put in the effort and hard work it takes, you can obtain it," Oropallo said on his application. After getting a degree in business administration and a teaching certificate, Oropallo wants to teach on the professional golf circuit and, eventually, be the head professional for a golf course.

Calvin Brown, of Sweet Home, was awarded \$5,000 and will be attending the University of Oregon to pursue a double major, business administration and Japanese. Brown lived in Tokyo, Japan, in 1999 as an exchange student. During that time, despite not having any prior Japanese language instruction, he became proficient in the language and culture. In November 1999 he placed fourth in a Japanese speech contest. His volunteer service includes delivering Thanksgiving baskets to the needy, operating the mixer board and sound equipment at the Homeless Benefit Concert, and working at the local Boys and Girls Club. Brown's main objective in life is to pass on to his children the values and morals that his parents instilled in him.



L to R: John Kirkpatrick, business representative, International Brotherhood of Painters and Allied Trades; Patrick Orapallo; Peter De Luca, administrator, OR-OSHA; Sarah Baldwin; Rep. Diane Rosenbaum, House District 14; Danny Santos, Education Policy Advisor, Office of the Governor; Lisa Trussell, Legislative Representative, Associated Oregon Industries; Calvin Brown.

Sarah Baldwin will be a fifth-year senior at Portland State University, where she is working to obtain a bachelor of science degree in psychology. She is hoping to be accepted to Willamette University School of Law in 2002. She was awarded \$6,150. Baldwin took a correspondence course from Brigham Young University and graduated at 16 with a GPA of 3.7. She then attended Umpqua Community College while working as a librarian there. After graduating with an advanced associates degree, she entered Portland State University. Baldwin and her boyfriend have purchased and are remodeling a house in Portland. They plan to sell it to help finance law school tuition. After graduating from Willamette University, Sarah would like to practice law in Portland.

For more information on this scholarship program, contact Michelle Cattanach, (503) 947-7440, or the Oregon Student Assistance Commission, (800) 452-8807.



Steve Beech, Manager, Consultation and Services Section

by Cheryl Mushaney, Administrative Assistant, Oregon OSHA

In 1972 a young boy was walking down a

street in Portland when he noticed a man hunched over in the back seat of a car, diligently typing on an aging typewriter mounted on a board attached to the back of the seat. As he walked by, he questioned the two-

fingered typist, "Hey, mister, are you from the FBI?" Grumpily, the man responded as he ripped six pieces of paper with carbons and several typos from the typewriter, "No, I'm an Accident Prevention Division inspector."

Today, younger staff may ask, "What's carbon paper?," while complaining that their printer is too darned slow in printing out the four copies they need. Beech, the grumpy Accident Prevention Division (APD) inspector, has pretty much seen it all. And, he remembers it well.

Beech started his APD career conducting safety inspections in northeast Portland. Over the past 29 years, his experience with the agency has been varied and challenging. Following passage of the Oregon Safe Employment Act (OSEAct) in 1973, Beech was recruited as one of the five original sanction officers for the newly formed Oregon OSHA. He developed and wrote many of the administrative rules that implemented the OSEAct, putting him in position to steer the division in directions in which it had not gone before.

During 1976-'78 Beech was the executive assistant to the assistant administrator for Field Activities. From 1978-85, as assistant manager of Enforcement (Safety), he assumed statewide responsibility for the safety enforcement program and accident and fatality investigations. Always a dexterous two-fingered typist, he was instrumental in implementing a standard alleged violation element system (SAVEs) that allowed field inspectors to compose reports that did not require writing by hand or typing.

Beech managed the Technical Services Section between 1985 and 1991. This section adopted and amended safety-and-health administrative rules, issued variances, provided customers with occupational safety and health information, maintaind an occupational safety and health resource and audiovisual library, acted as a liaison with Federal OSHA, and provided employers with public sector consultations. During his tenure with Technical Services, the largest number of new rules in the history of OSHA were published by the federal government.



Steve Beech, 2001

Steve Beech, 1972

This required a huge effort by section staff to review, adopt, and publish comparable rules for the Oregon OSHA plan.

Notable during his tenure with Technical Services was the part he played in helping Oregon attract Japanese firms to the state. Beech traveled to Japan five times to assist with economic-development efforts and to help Japanese firms understand the differences in safety-and-health regulation between our two cultures. Companies he worked with include Fujitsu America, Fujitsu Micro Electronics, Japan Aviation Electronics (JAL), Ushio Denki, and Toshiba Ceramics.

In 1991, Beech became the manager of the Consultation and Services Section. The section began with 11 consultants and evolved into a staff of 45. Beech helped build Oregon's consultation program into one of the most respected in the nation. Since 1991, services to employers grew from approximately 500 completed consultations each year to nearly 3,000.

Beech oversees a statewide program that provides internal training to OR-OSHA staff and external training to all Oregon employers and employees, technical assistance to anyone with a question, and no-cost consultations at the request of any Oregon employer. He believes in innovation and in challenging and using people's abilities. In 1995, he introduced the review of safety-and-health programs and SHARP (Safety and Health Achievement Recognition Program) to Oregon

See "Beech," page 16

Your hearing: Use it, don't lose it

by Clint McBride and Ellis Brasch, Technical Analysts, Oregon OSHA

Most of us take hearing for granted — when we go home at the end of a workday and when we get up in the morning, we expect to hear well. Human hearing is amazingly sensitive. Our ears can distinguish 400,000 different sounds and can detect sounds so quiet that they cause the eardrum to vibrate less than 1/80,000,000 of an inch. But that remarkable sensitivity doesn't have a lifetime guarantee. To maintain that sensitivity, you have to protect it.

Noise-induced hearing loss is the term for hearing damaged by excessive noise. People differ in their sensitivity to noise, however, and there's no way to determine who is most at risk. Factors such as sound pressure (decibel level), frequency (hertz), and exposure time all play a role in determining whether noise is harmful or just annoying. However, you should consider your hearing at risk if noise affects you in one of the following ways:

- You have to shout above noise to make yourself heard
- You have ringing in your ears for several hours after exposure to noise
- You have difficulty hearing normal sounds for several hours after exposure to noise

Is your workplace dangerously loud?

If you're not sure whether the noise in your workplace is dangerously loud, ask yourself: Is normal conversation difficult because of the noise? Have co-workers also complained about the noise? These are symptoms of a noise problem.

Identifying noise problems

There's really only one way to tell if workplace noise is dangerous. Have the noise evaluated by someone trained to do a sound survey. Anyone trained to use a sound-level meter and a dosimeter should be able to conduct a survey. A sound survey will give you enough information to understand a noise problem — to identify it and to help you decide how to control it. It's important to narrow the survey's focus so that you aren't overwhelmed with more information than you need to make a good decision. There are three types of sound surveys:

Basic survey — The surveyor uses a sound level meter to identify areas in the workplace that may put workers' hearing at risk.

Detailed survey — The surveyor uses a sound level meter and a dosimeter to monitor and estimate an individual worker's daily exposure to noise.

Engineering survey — The surveyor monitors noise levels produced by machinery in different operating modes to identify strategies for eliminating or controlling excessive noise.

It's not always necessary to do detailed noise surveys to decide how to protect employees. Often, you can make an appropriate decision using survey information obtained from a sound level meter and a dosimeter.

Controlling workplace noise

If you have a workplace noise problem, there are three points at which you can bring it under control and seven tools you can use to accomplish the task.

Noise control points

- At the source: What's causing the noise?
- Along the sound path: How does the sound move from the source to the listener?
- At the listener: Who's affected by the noise?

Noise control tools

Exposure monitoring

Exposure monitoring helps you determine if your workplace has a noise problem, where it occurs, when it occurs, and whose hearing may be at risk. Anyone trained to use a sound level meter and a dosimeter should be able to survey noise from work tasks and machines, and monitor exposure levels for individual employees. If employees at your workplace are exposed to noise levels that exceed 85 decibels averaged over an eight-hour period, you must reduce their exposure.

Audiometric testing

Audiometric testing determines whether an employee's hearing is stable or getting worse over time. The testing instrument is called an audiometer and the result of the test, the audiogram, is a graph showing an employee's hearing ability at different sound-frequency levels. If employees at your workplace are exposed to noise levels that exceed 85 decibels averaged over an eight-hour period, they must receive annual audiometric tests.

Education and training

Informed employees know about workplace hazards, how to recognize the hazards, and how to control their exposure. The best way to inform them — and to keep them informed — is through education and training.

Employees who are exposed to noise levels that exceed 85 decibels averaged over an eight-hour period must understand the following concepts:

- Why noise that exceeds 85 decibels can damage their hearing
- The purpose of audiometric testing
- The purpose of hearing protectors and how to use them

Engineering controls

When you replace a noisy machine with a quiet one, or modify it to make it quieter, or change the sound path so that dangerous noise never reaches the listener, you're using an engineering control.

Engineering controls are the best way to control noise if the control is effective, practical, and affordable for your workplace. Unfortunately, there are no ready-to-order engineering controls. You have to tailor them to your workplace — but you're more likely to succeed when you've done the following:

- You understand what's causing the noise.
- You've determined how the noise is reaching the listener.
- You've identified the most appropriate point, or points, at which to control the noise.

Administrative controls

Administrative controls manage workers' activities to reduce exposure to noise hazards. Administrative controls are usually less expensive to carry out than engineering controls, because there are no significant capital costs involved in changing or modifying equipment. In some cases, administrative controls have reduced employee exposure to noise and increased their productivity by rotating them through demanding, noisy tasks. On the other hand, administrative controls usually aren't as effective as engineering controls, because they don't control the noise source. Noisy machines are still noisy and the exposure hazard is still present.

Hearing protectors

There are two types of hearing protectors: ear plugs and ear muffs. Both decrease the pressure of sound that reaches the eardrum and are the next line of defense against noise when you can't reduce exposures to safe levels with engineering or administrative controls. Earplugs fit in the outer ear canal. To be effective, they must totally block the ear canal with an airtight seal. An improperly fitted, dirty, or worn-out plug will not seal and can irritate the ear canal. Earmuffs fit over the entire outer ear to form an air seal — they won't seal around eyeglasses or long hair — and are held in place by an adjustable head band. The head band must hold earmuffs firmly around the ear.

Properly fitted earplugs and muffs reduce noise levels 15 to 30 decibels. Better earplugs and muffs are approximately equal in sound reduction, though earplugs are more effective for reducing low-frequency noise and earmuffs for reducing high-frequency noise. Remember that hearing protectors control noise, they don't eliminate it; they're effective only if you wear them the entire time you're exposed to hazardous noise.

Record keeping

You might think of record keeping as a separate activity, but it ties together critical information about all the other tools you use to eliminate or control workplace noise. The table below summarizes critical record-keeping information for each noise-control tool.

_	conservation What it covers	on: critical record-keeping info	ormation Retention period
Exposure monitoring	Sound survey	The date of survey, instruments used, areas surveyed, noise hazards identified, employees affected, employees with exposure levels exceeding 85 decibels over an eight-hour period	2 years
Audiometric testing	Baseline and annual audiograms	Name and job classification of each affected employee, employee test results, tester's name, test date, audiometer calibration date, test room background sound pressure level	Until the employee's termination date
Education and training	Hearing conservation concepts	Names of employees who received training, training dates, who presented the training	No minimum period
Engineering controls	Feasibility survey	Results of feasibility surveys, controls used, start date, noise reduction achieved	No minimum period
Administrative controls	Feasibility survey	Results of feasibility surveys, controls used, start date, noise reduction achieved, employees affected	No minimum period
Hearing protectors	Selection and fitting	Date of initial hearing protector fitting for each employee, size and brand of hearing protector selected, name of person who assisted with fitting	No minimum period

PED Manufacturing earns SHARP recognition

by Sherry Marks, Safety Consultant, Oregon OSHA and Cindy Overstreet, Safety and Environmental Engineer, PED

Early in 2000, Paul Houtz of PED Manufacturing's shipping and receiving department brought information about the Safety and Health Achievement Recognition Program (SHARP) to PED's safety committee. Houtz had learned about SHARP while attending one of Oregon OSHA's public education workshops. His presentation started the proverbial ball rolling.

Cindy Overstreet, Safety and Environmental Engineer for PED, conducted further research on SHARP. She called Clyde Stryker of Spirit Communications, the first SHARP recipient, for information and guidance. Stryker was very informative and expressed great enthusiasm toward the SHARP process. PED's safety committee, with the support of company management, called and

asked for a consultation with the intent of becoming a SHARP employer. The safety committee and company management agreed that the SHARP process would be the next step in their continuing effort to improve the company's safety and health program.

PED Manufacturing has produced high-specification investment castings since 1969. The company was purchased three years ago by Doncasters, an English conglomerate. PED operates on seven acres in Oregon City and has about 175 employees. PED pours air and vacuum melt ferrous, nickel, and cobalt-based alloys. The investment casting process utilized at PED has been in use for centuries. The "lost wax" process dates backward in time beyond the Egyptian pyramids.

A versatile company, PED manufactures orthopedic prosthetics such as hips, knees and shoulders. They also fabricate pumps, compressors, and aerospace castings.

Its safety-and-health program is fully supported and implemented by employees and management. Management demon-

strates its belief in the program through the allocation of money, resources, training and education; coaching and positive reinforcement; and accountability for safety through performance evaluations. General manager Dick Brozek takes a proactive approach to safety and health at PED. He provides visible support by participating in monthly safety committee meetings and supporting the committee's recommendations.

During the consultative process, Oregon OSHA consultants Nancy Graf, Cindy Weitz, and Sherry Marks conducted a walkthrough and interviewed employees. They identified very few safety and health hazards; the hazards identified were quickly remedied through the efforts of Cindy Overstreet, PED's safety committee, and Kris KuyKendall and his maintenance staff. In addition, the company worked with the former Oregon-OSHA Worksite Redesign Program to develop an automated bandsaw system that will reduce labor by 30 percent and eliminate the risk of the operator being severely injured. The enclosed system will also reduce noise and fume levels, and substantially reduce the potential for ergonomic-related injuries.



PED's SHARP team – Top row, L to R: Doug Rhodes, Chris Villarreal, Dave Howell, Chuck Burroughs, Cindy Overstreet, Chryl Adnson, Eric King, and Jerry Wilfong. Bottom row, L to R: Karla Smith, Jerry Schaetzel, and Verne Stack.

During the ergonomics portion of the consultation, Cindy Weitz helped the company implement an effective ergonomics program. Employees were also able to try a variety of products to find a "best fit" for individual workstations. PED is following up the process by purchasing necessary equipment. The consultation was completed during a well-attended lunch-time training session. Many positive comments were heard after the class.

See "PED," page 13

SAFETY NOTES

Department of Consumer & Business Services Oregon Occupational Safety & Health Division Salem, OR 97301-3882

Fatality Report

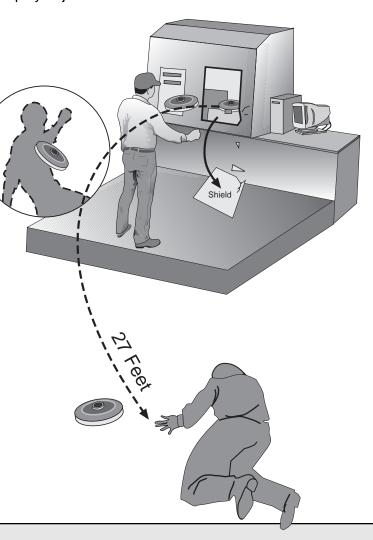
Accident type	Struck by
Industry	Manufacturing
Employee job title	Machinist trainee

Description of accident

The victim was a machinist for a company engaged in the manufacture and distribution of industrial pumps and pumping equipment. The company was in the process of machining bronze pump impellers (rotors) to specifications.

At the time of the accident, the victim had been in training on the vertical lathe for about two weeks. The impeller he was machining was approximately 15 inches in diameter and weighed about 40 pounds. He was standing in front of the viewing window (a Lexan shield) when the impeller dislodged from the chuck jaws and struck the corner of the shield. The impact damaged the shield, allowing the impeller to exit the lathe and strike the victim in the chest. The force of the blow knocked the victim approximately 27 feet, off the work platform and onto a concrete floor.

The leadworker, who had been instructing the victim just minutes before the accident, was in the office on a telephone call when he heard a loud noise. He ran to the work area and found the victim lying on the floor. Fire department personnel responded within a few minutes to the 911 call, but were unable to revive the victim.



Investigation findings

The impeller involved in the accident was smaller in diameter and had a higher hub than other impellers being machined. The employer did not have a quality-control system in place to ensure the impellers were cast within allowable tolerances. Measurements taken indicated the chuck jaws on the lathe were not at optimum extension to secure the odd-sized impeller properly while it was being machined. Two prior incidents, where parts were ejected from the chuck jaws but contained inside the metal lathe, were not investigated to determine the cause of the problem or address possible operator error, or to prevent recurrence of the same type of incident.

When interviewed, employees stated that they had not reviewed the machine's operating manual. The employer did not provide adequate instruction and supervision of the victim.

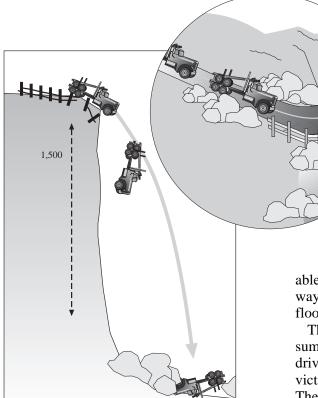
Applicable standards

ORS 654.010 OAR 437-001-0760(1)(a)



Department of Consumer & Business Services Oregon Occupational Safety & Health Division Salem. OR 97301-3882

Fatality Report



Accident description

The employer is in the business of loading and hauling raw logs to mills throughout Washington, Idaho, and Oregon. The day of the accident the victim had driven from Washington to a mill in Oregon and delivered a load of logs. He was returning to Washington, followed by another company truck, to pick up another load.

As the two trucks started down a grade, they came upon a 90-degree left-hand curve. The lead truck was unable to negotiate the curve and hit the guardrail. The guardrail gave way and the truck and victim plunged 1,500 feet to the canyon floor.

The second driver could not reach the victim from the road. He summoned help and called for emergency services. The second driver and medical personnel were able to reach the truck and victim by climbing through thick brush at the bottom of the grade. The victim was pronounced dead at the scene.

Investigation findings

The brakes on the log truck involved in the accident were significantly out of adjustment and the brake lining was inadequate for safe stopping. Interviews revealed that on several occasions other drivers had reported mechanical problems for this vehicle, including heavy blue smoke coming from the brakes, the retarder (Jake) brake not functioning properly, and the brakes overheating. Approximately two weeks prior to the accident a driver told a mechanic that the brakes almost failed and smoked badly. The driver said the brakes were "spongy and hot" and the Jake brake had little or no compression. The mechanic told the driver he was waiting for parts.

The employer failed to keep vehicle and post-trip inspection reports. A post-trip inspection report is required to cover at minimum: service brakes, steering mechanism, parking (hand) brake, lighting devices and reflectors, tires and horn, windshield wipers, rearview mirrors, coupling devices, wheels and rims, and emergency equipment.

The employer was cited for failure to ensure that the defective vehicle brakes were repaired or replaced before the vehicle was operated and for failing to conduct a brake test before moving a load.

Applicable standards

OAR 437-006-0485(2) OAR 437-006-0485(1)



Department of Consumer & Business Services Oregon Occupational Safety & Health Division Salem, OR 97301-3882

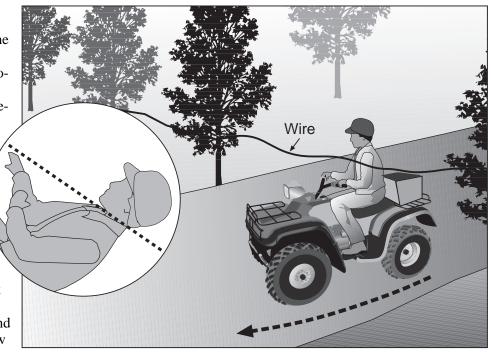
Fatality Report

Accident type	Laceration to throa
Industry	Farminç
Employee job title	Labore

Accident description

The victim was employed by a tree fruit business. At the time of the accident he was using an all terrain vehicle (ATV) to travel from one location to another on the farm.

The victim entered the orchard between the third and fourth rows of trees to the north of the agricultural labor housing (ALH). He was observed moving east at a moderate speed. Just east of the ALH, he cut across two rows of trees and approached his supervisor, who was mowing between the first and second rows of trees. After a brief discussion about work issues, he mounted the ATV and proceeded west between the first and second rows of trees. A witness saw the victim pass by the ALH. As the



victim passed out of sight, the witness and others heard a loud bang. As they approached the location of the sound they found the victim lying on the ground and the ATV farther down the dirt drive.

As the victim left the orchard he had struck a 3/8 inch wire cable that was strung between the first tree in the first row and the first tree in the third row at the north end of the orchard. The impact lacerated the victim's throat, broke his neck, and knocked him off the ATV.

Upon being notified, the supervisor drove to the accident site and began administering first aid immediately. He then ran to his house nearby and instructed his wife to call 911. He returned to the victim and attempted to stop the flow of blood from his neck with a towel. EMTs arrived and began advanced life-support procedures. He was transported to the hospital and pronounced dead shortly thereafter. The victim died from brain anoxia due to the laceration and disruption of blood flow to the brain.

Investigation findings

The employer had strung the wire cable to prevent vehicles from entering the north end of the orchard. At the time of the accident the cable had two strips of colored ribbon tied to it on the section between the second and third rows of trees, but the section between the first and second rows was not marked. The wire cable was occasionally removed in order to allow farm equipment in for harvesting, spraying, and other orchard maintenance. The size of the cable and the direction in which the victim was traveling (with the sun in his eyes) made the cable almost impossible to see.

The employer was cited for erecting a cable across a travel route without adequate marking or signage or maintaining the cable in a clearly visible manner.

Applicable standards

ORS 6541.010



Department of Consumer & Business Services Oregon Occupational Safety & Health Division Salem. OR 97301-3882

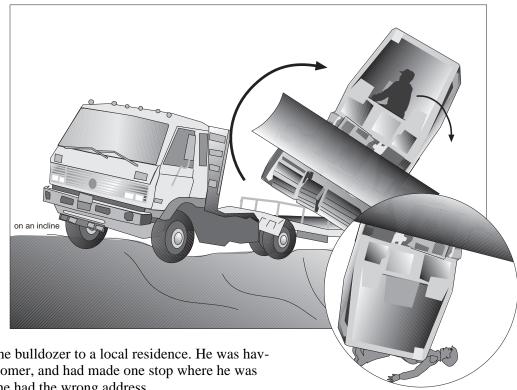
Fatality Report

Accident type Pinned/crushed Industry Towing Employee job title Truck driver/equipment hauler

Accident description

A passing motorist stopped to investigate when he observed a truck with its motor running and a John Deere 550 crawler bulldozer on its side with the motor running and the reverse beeper sounding. He called 911 when he discovered the victim pinned beneath the rollover-protection cover (canopy) of the bulldozer.

The victim had been hired by the towing company to drive an equipment transport truck and deliver construction equipment locally and out of state. He also operated tow trucks. On the day of the accident



he was dispatched to deliver the bulldozer to a local residence. He was having difficulty locating the customer, and had made one stop where he was informed by the resident that he had the wrong address.

Although the accident was unwitnessed, evidence indicates that the victim backed into a driveway, placing the equipment trailer's driver-side axle tires over an embankment. The driver's side was at a downward angle. He was not able to pull forward. The victim released all of the chains and binders and attempted to drive the bulldozer off the trailer. When the victim started the bulldozer engine and put the transmission in reverse, the steel grousers (tracks) of the bulldozer slid sideways on the steel plates of the trailer toward the driver's side, causing the bulldozer to roll off the side of the trailer. The victim was not wearing a seat belt and was ejected from the driver's seat. He sustained fatal injuries when he was pinned at the chest under the canopy.

Investigation findings

The employer did not have a training program designed for employees authorized to deliver and operate construction equipment. The employer relied on "experienced" drivers, but did not confirm that experience. Employees were provided safety equipment, but did not receive instruction on how to use it. Employees were not monitored, when working away from the facility, to ensure that safe work practices were followed. The fatal accident was not reported to OR-OSHA in a timely manner. Employers must report fatalities and catastrophes to OR-OSHA within eight hours. A catastrophe is an accident in which two or more employees are fatally injured or three or more employees are admitted to a hospital or an equivalent medical facility.

Applicable standards

OAR 437-01-760(1)(a); OAR 437-01-052

"PED," from page 8

PED's philosophy on safety is "The right way, the only way, is the safe way." The company is sincerely dedicated to the safe production of its castings. By empowering all of its employees, PED encourages involvement in its overall safety-and-health effort.

All employees are encouraged to recognize their fellow employees with safety-incentive gifts. Safety celebrations for specific accomplishments occur regularly. PED is proud of its safety performance and attributes its business success in large part to its success in preventing injuries and illnesses.



A part of the casting process is the foundry pour where molten metal is poured into molds.



Of the 85,000 employers in Oregon, 68 of them can say they are SHARP employers. SHARP is the Safety and Health Achievement Recognition Program of the Oregon Occupational Safety and Health Division Consultative Services Program. SHARP is a cooperative program between business and government that recognizes Oregon employers and employees committed to managing occupational safety and health.

Oregon's newest SHARP employers:

- Astoria Golf and Country Club
- CDI Technical Services
- Douglas County Forest Products
- Duro-Last Roofing, Inc.
- Full Sail Brewery
- Milgard Manufacturing
- PED Manufacturing, Ltd.
- Portland General Electric (PGE), Boardman Coal Plant
- PG&E National Energy Group, Gas Transmission Northwest

- Roseburg Forest Products
- Timber Products (TP) Trucking
- Trus Joist, Junction City Plant
- Two Rivers Correctional Institution
- Wayne's Garage
- Weyerhaeuser Company, Springfield Timberlands
- Weyerhaeuser Company, Western Timberlands TOPS Operations
- Weyerhaeuser Company, Wilbur Pole Facility

All Oregon employers are eligible to participate in the SHARP program. **Questions?**Call Mark Hurliman or Cheryl Mushaney, **(503)** 378-3272, or toll-free in Oregon, **(800)** 922-2689. Information is also available on the Web, **www.orosha.org**.

The OSHA 300 Log (formerly OSHA 200) will debut January 1, 2002

OSHA's 200 Log for recording workplace injuries and illnesses will become the 300 Log on Jan. 1, 2002, following changes to OR-OSHA's Division 1 based on the revised federal standard for record keeping that was published in the July 3 Federal Register.

The final rule is the result of an effort started in the 1980s, involving businesses, labor organizations, health professionals, and others to improve the quality of the injury and illness records maintained under the Occupational Safety and Health Act.

The new rule simplifies the record-keeping process by making the record requirements more logical and coherent, by explaining requirements in plain language, by consolidating the interpretations and guidance previously found in a host of secondary sources, and by providing new record-keeping forms that are easier to understand and complete.

Two provisions delayed for further study

Adoption of two provisions of the final rule will be delayed: recording occupational hearing loss based on the occurrence of a standard threshold shift (STS) in hearing acuity and defining "musculoskeletal disorder" (MSD) and checking the column on the log identifying a recordable MSD.

Both of those provisions will receive further study and input by business, labor, and the public health community. The effect of the delay on 2002 record-keeping is that employers will continue to record (in the OSHA 300 Log) work-related shifts of an average of 25dB or more at 2000, 3000, and 4000 hertz in either ear. When a recordable hearing loss occurs, the audiogram indicating the hearing loss will become the new baseline for determining whether future additional hearing loss by the individual must be recorded. Employers will continue to record disorders affecting the muscles, nerves, tendons, ligaments, and other soft-tissue areas of the body as other injuries. Symptoms of soft-tissue disorders will be treated the same as symptoms of any other injury or illness, and soft-tissue cases will be recordable only if work-related.

Questions? Call Sarah Loudon, (503) 947-7301

Need some help?

If you are responsible for filling out the current OSHA Form 200, if you supervise the person that completes the form, or if you are a safety committee member, you'll need to know how to use the new form. OR-OSHA has developed a no-cost workshop to help you.

Class content:

- Brief review of the Supplementary Record (DCBS Form 801), presented by the Workers' Compensation Division
- Who is exempt
- · Location and retention of record
- Mechanics of the OSHA 300 Log and how to fill it out
- · Determining the recordability of an injury or illness
- Calculating lost-workday-case-incidence rates
- Evaluating the form to recognize injury trends, root problems, etc.

Locations, dates, and times are listed below. You can contact the Education Section by phone, (503) 947-7443.

OR-OSHA believes that an improved record-keeping system will raise employer awareness of workplace hazards and help employers and employees use and analyze these records more effectively. Injury and illness records are an essential tool to help employers effectively manage their safety and health programs.

108 Recordkeeping

Ashland	6/19/02	8 a.m.
Beaverton	5/15/02	1 p.m.
Bend	3/6/02	1 p.m.
Eugene	3/20/02	1 p.m.
Eugene	8/29/02	1 p.m.
Hermiston	4/23/02	1 p.m.
Ontario	6/11/02	1 p.m.
Portland	4/10/02	1 p.m.
Portland	7/2/02	1 p.m.
Salem	4/18/02	8 a.m.
Salem	7/11/02	1 p.m.
The Dalles	7/24/02	8 a.m.

"Vehicle," from page 1

Comstock said that OR-OSHA is researching vehiclerelated fatalities of the past 10 years to pinpoint causes and come up with recommendations to help employers prevent them.

In the past five years, 70 fatalities related to vehicle accidents were accepted by Oregon workers' compensation system as claims. Accepted vehicle-related injury claims were 5,772. The total vehicle-related claims accepted for the five years came to 5,842.

The costs (in money, time, physical problems, and mental distress) associated with vehicle-related accidents and injuries can be extremely high. The National Highway Traffic Safety Administration reports that each year on-the-job traffic accidents cost \$43 billion, averaging \$22,000 per crash and \$110,000 per injury.

Work Zone Safety Tips Do's and Don'ts while driving through a job site

DO:

- Pay attention to the orange diamond-shaped warning signs or electronic message boards posted in advance of a road construction project.
- Heed directions on work zone warning signs.
- Obey posted speed limits.
- Watch for slowing or stopped traffic.
- Anticipate potential dangers.
- Watch how traffic well ahead of you is flowing.
- Keep an eye out for construction vehicles and workers.
- Use extra caution at night.
- · Watch for detours and lane diversions.
- Be patient.

DON'T:

- Slow down significantly or speed up.
- Slow down to look at the construction work being done.
- Resume normal speed until you emerge from the work zone.
- Tailgate. (Most accidents in work zones are rear-end collisions.)
- Change lanes.
- Change the radio/tape/CD, use a cellular phone, or do paperwork.
- Speed.

Note: Penalties for speeding in work zones are double those of normal penalties.

"Celebrate," from page 1

G-P Toledo's 523 employees are very active in the company's safety and health program. Site management is proactive on safety and health issues, placing a strong emphasis on safe-work practices. Managers also give employees a variety of opportunities to be meaningfully and substantially involved in the company's safety-and-health program. Together, management and



G-P's VPP team displays the Star Site flag.

labor at this facility have created a workplace culture where safety is not only a priority, it is a core value for all employees.

The mill has been working towards VPP designation since 1996, attaining "merit" status in August 1999. Merit participants have demonstrated the potential and willingness to achieve Star Site status, and are implementing planned steps to meet fully all Star Site requirements. Star Site status is the highest level attainable under the VPP program and indicates that participants meet all VPP requirements. To achieve VPP Star Site status, a worksite must have a three-year average injury-and-illness rate at or below that of its industry as a whole. In addition, the worksite must undergo extensive OR-OSHA interviews of its personnel as well as reviews of workplace conditions, safety records, employee safety and health programs, and regulatory compliance.

An OR-OSHA VPP evaluation team visited the G-P Toledo site in September 2000 and found that the safety and health program management system there exceeded OR-OSHA requirements. The team observed that the

various safety-and-health-related programs as well as safety and health conditions at the site were well above average for the industry.

OR-OSHA's VPP companies are removed from routine scheduled inspection lists for the duration of their participation in the program. Employees lose none of their rights under the program, and OR-OSHA still investigates accidents, valid formal complaints, and chemical spills.

For more information about G-P Toledo, contact Tom Picciano at Georgia-Pacific Corporation, (541) 336-8202. For information regarding the VPP, contact Mark E. Hurliman, OR-OSHA VPP coordinator, (503) 947-7437, or toll-free in Oregon, (800) 922-2689. Information about the Oregon VPP is also available online at www.orosha.org.

"Beech," from page 5

OSHA and its stakeholders – Oregon employers. His strong belief in SHARP was forged when, as a young inspector in Portland, he saw that employers needed a road map to move beyond OSHA compliance toward self-sufficiency. SHARP has been embraced by Oregon employers and has helped establish OR-OSHA nationally as a premier program.

Steve never completed his college degree in marine biology, but joined the Navy during the Vietnam War and served aboard the *U.S.S. Eversole*.

Steve and Jannet, his wife of 31 years, live in St. Paul with their son Dean, who is attending college. They have

two married daughters, Hillarie, a Red Cross lab biologist; and Lindsey, a Eurorail travel agent.

Steve quietly retired in August, insisting on no fanfare. He is proud of his work at Oregon OSHA and since his departure has set some new goals for himself.

Each February, you will find him at the Daytona 500. In November, look for him at the Seafood Festival in Apalachacola, Florida. And, in between, there'll be lots of sidetrips to warm locations for snorkeling, hiking, fishing, and his never-ending search for the perfect shrimp shack.

The OR-OSHA Resource Center and Audiovisual Library ARESOURCE FOR PROMOTING KELLER



I know a shortcut!

by Don Harris, AV Librarian, Oregon OSHA

How many times have you heard someone say, "I know a shortcut"? Well, if your life has been anything like mine, you've heard it plenty. Maybe you've said it yourself a time or two. The problem is, these words are often an invitation to trouble. In fact, I was once lost in a blizzard — with a howling baby and grouchy toddlers — all because someone said, "I know a shortcut."

As you probably know, a big part of our job here at Oregon OSHA is to encourage you not to take shortcuts. When it comes to safety and health on the job, it's much better to spend a little extra time and effort to do things safely than to spend time wishing you had after a workplace injury or fatality. Even in the less hazardous world of our video library, I frequently advise borrowers against trying shortcuts when it comes to obtaining or returning safety videos. There's a good reason. What seems to be a harmless shortcut can result in an expense of several hundred dollars. The "easy" way is not always the best way.

Now that you're duly cautioned, I'd like to recommend some shortcuts that I hope you will try! Be warned! These shortcuts have to do with technology, and, yes, you'll need to use a computer. Even if the very thought of a computer fills you with dread, I hope you'll bear with me, because . . . Using computer technology to access OR-OSHA resources is easy, and can save you significant amounts of time and money. Here are some great shortcuts.

1) OR-OSHA publications direct from the Web

Select "Publications" from the main menu at www.orosha.org. Then, select "Manuals, pamphlets, guidelines, and more." You'll find a truly dazzling array of publications which can be read on-line or printed for future reference. (Naturally, I hope you'll pay special attention to the current AV catalog and the "New Arrivals" list.)

2) OR-OSHA CD-ROM

In hard-copy, OR-OSHA's rules and publications fill several large boxes, making shipping expensive and cumbersome. The OR-OSHA CD-ROM is a great alternative. One compact disk contains the complete text of all OR-OSHA rules (OAR Chapter 437), as well as program directives, letters of interpretation, and most OR-OSHA publications. The CD-ROM is updated regularly and you can sign up for a free subscription service. The first 10 copies of the CD-ROM are free. All OR-OSHA rules and publications are uncopyrighted and may be duplicated.

3) E-mail notification system

As Oregon workplaces change, so do safety and health regulations. If you're interested in knowing about proposed and final administrative rule changes, you can add yourself to the e-mail notification list by selecting "Publications" at www.orosha.org. Then select "E-Mail Notification Service." This service allows you to control what you receive from Oregon OSHA and to contact us easily if you have questions.

And that's not all! Plans include integration of the AV library and resource center onto the Web. This will allow borrowers to access their account information, check availability of titles, and schedule videos on-line.

In closing, I have a couple of confessions to make. First, I'm not overly fond of computers. I don't miss carbon paper or threading the projector, but I do like a book or manual that I can actually hold in my hands. Oregon OSHA recognizes that many others feel the same way. Also, there are a number of situations in which it's just not possible to use a computer. For these reasons, we'll continue to make hard-copy texts available to you for as long as responsible use of tax dollars allows us to do so.

Second (and more embarrassing), I was the someone who said "I know a shortcut" and ended up lost in a blizzard. This experience taught me that I don't really know a shortcut from Medford to Klamath Falls; using my little finger as a pacifier will only trick the baby for so long, and some "shortcuts" aren't worth taking.

The shortcuts I've offered today *are* worth taking and are already working well for thousands of employers and workers in Oregon. They can work for you, too!

Further information about the OR-OSHA Web site, CD-ROM, and E-Mail Notification Service may be obtained from Brenda Price (503) 947-7447 or toll free in Oregon, (800) 922-2689.

A telephone call changed everything

Not long ago Hal Westbrook, co-owner of Douglas County Forest Products (DCFP), saw Oregon OSHA as the enemy at the gate. On September 7 DCFP joined the elite ranks of Oregon OSHA's Safety and Health Achievement Recognition Program (SHARP). How did this change take place? It began with talking, listening, and a comprehensive consultation.

DCFP operates a sawmill and planing mill in Winchester and employees about 100 people. The company has a log yard where logs

are brought in by truck. The logs are scaled and decked for storage before being fed into a ring barker to de-bark the logs. The logs then go to the bucksaw where they are bucked into eight, nine and 10-foot lengths. From there the logs enter the

mill and are cut into 2-by-4 and 2-by-6 studs and are planed and kiln-dried. End products including wood chips are shipped by rail and truck. This



is a high hazard industry.

The company has a long history and formerly tumultuous relationship with Oregon OSHA. Regular inspections and inspections precipitated by a 1997 accident resulted in several citations and penalties totaling \$67,000. DCFP appealed.

Let's talk

One day, in the midst of hearing dates, depositions, and mounting legal fees, Hal Westbrook called Oregon OSHA's administrator Peter De Luca. Westbrook wanted to talk. DeLuca listened. Westbrook said, "Is there some way out of this mess?" An October 1999 meeting and further discussions produced a settlement agreement in which DCFP agreed to a comprehensive health and safety consultation. And, although not a condition of the settlement, DCFP wanted to apply for SHARP.

Oregon OSHA consultants Mark Hurliman, Mark Noll, and Carl Lukens began the consultation process in November 1999. In December 2000, Oregon OSHA notified DCFP that it had satisfied all the terms and conditions of the settlement agreement.

Safer — more productive

DCFP controller Rick Matthews indicated that when he first spoke with OSHA about working together to have a safer workplace and that a by-product could be greater productivity, he thought the two concepts were mutually exclusive. He was not anxious to have an ergonomist on site because "he didn't want to raise all the conveyors ½ inch." But to the surprise of DCFP management, the safety and ergonomic changes

recommended and implemented actually improved both morale and productivity.

"Mark Noll's approach has been very commonsense. He has helped make the mill more efficient," said Hal Westbrook. "He opened our eyes to involving the hourly people. You can make it happen quicker with their input. The planer is a prime example — just changing a few things made the process easier."

SHARP recognition

In 1996, DCFP's lost workday case incidence rate (LWDCIR) was 16.3 and the company had 43 recorded workplace injuries. In 2000, the company's LWDCIR fell to 5.7 with seven injuries reported.

"The lost workday case incidence rate for 2000 is the lowest this workplace has ever seen," Hurliman wrote in his assessment. "It's below the statewide average for the first time since they started measuring it."

"The company's culture," Hurliman wrote, "is geared toward safe, healthy and ergonomically sound practices. In conversations with management and employees of this company, a high level of commitment to safety is obvious. Employees have significant pride in their safety program."

Congratulations DCFP! Welcome to SHARP.



Hal Westbrook and Mark Hurliman

Deadline extended for grant applications

You have until November 1 to submit grant applications for funds to develop programs addressing workplace safety and health.

The Safety and Health Education Grant Program offers grants of up to \$40,000 to employer and employee groups and other nonprofits that want to develop safety and health training programs that would be useful for entire industries or for specific work processes. Matching funds are not required.

Tomás Schwabe, an Oregon OSHA training specialist, said that the division particularly wants to see proposals for programs, in English and Spanish, that focus on health-care workplaces, ergonomics, silica, logging, fall protection, and noise.

The grants are intended to help nonprofits use their industry-specific safety and health expertise to develop unique training programs that can be shared with those who have similar workplaces or work processes. OR-OSHA makes the training programs available at no cost to all Oregonians through its OR-OSHA Resource Center.

Since 1989, OR-OSHA has granted more than \$1.6 million from penalties levied on non-compliant employers. Previously funded training programs have covered such topics as hearing protection, tractor safety, noise reduction, preventing animal attacks, and training mentally challenged individuals about hazards in workplaces.

Applications for grant proposals must be received by OR-OSHA by 5 p.m. Nov. 1. For more information about grants, call Tomás Schwabe, (503) 947-7436. For a grant application packet, call Kathy Mossbrucker, (503) 947-7437 or (800) 922-2689, toll-free. Application packets are also available under "Grants/Programs" on the OR-OSHA Web site, www.orosha.org.

RESOURCE

SUBSCRIPTION FORM

Resource is a newsletter concerning occupational safety and health in Oregon. To subscribe to this free publication or to change your mailing address on your current subscription, fill out and return this form or call (503) 947-7447.

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Visit us on the Internet: www.orosha.org

The Oregon construction industry and OR-OSHA are working together to reduce construction injuries and fatalities.

The **Joint Emphasis Program** (JEP) is a

cooperative effort among management, labor, and government to design and implement focused joint training sessions.

The topic selected for the Fall/Winter session is "Health Issues in Construction." The course covers a variety of health issues common to construction including: silica, noise, lead, asbestos, and dermatoses. Register now to learn about the things you can't see and how they could be affecting you.

Call the Oregon OSHA Public Education Section, (503) 947-7443, or (888) 292-5247, option 2.

Class Schedule:

Coos Bay	10/16/01
Beaverton	11/1/01
Roseburg	11/14/01
Salem	11/20/01
Bend	11/27/01
Portland	12/18/01
Eugene	1/10/02

440-2850 (9/01)



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