Volume 4 — online





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## RESOURCE

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#### **Department of Consumer**

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If you want to continue to receive the Resource newsletter, sign up for future issues at www.orosha.org

## Administrator's message: A Good Investment During Tough Times

By Michael Wood

It's sometimes difficult for me to turn on the radio in the morning. The news, at least about our economy, is not generally very good (and what passes for good news is often that a particular negative event was not as bad as expected). But I have some genuinely good news to offer – workplace safety pays!

Through good times and bad, employers in Oregon have seen no increase in overall pure premium rates for 19 years running, and 15 of those years actually saw an average rate decrease. Much of that success is simply because prevention works.

With that reality in mind, I want to encourage you to keep your eye on the ball when it comes to safety, even while you may be struggling through some tough economic times. The reality is that cutting back in key health and safety efforts and resources may be tempting, but experienced employers will tell you it's a short-sighted move that will probably cost you more money in the long run (and even over the relatively near term).

Fortunately, there are also some very good deals when it comes to health and safety resources. Oregon OSHA's Web site includes access to publications and Web resources. And it includes information about free educational workshops and online courses. In addition, you can always ask an Oregon OSHA consultant to come to your workplace to give you advice about safety and health issues – these visits are free and completely risk free. In Oregon, we never share consultation information with our enforcement programs.

In addition, the workers' compensation carriers provide risk management assistance – and many private, for-profit consultants offer a pretty good service for the money. In other words, there are lots of ways to get the information and resources you need to keep employees safe – and without busting your budget.

One often-overlooked opportunity is the Governor's Occupational Safety and Health (GOSH) Conference. With an investment of a few days and a modest registration fee, the GOSH Conference is a great value, providing workshops on a range of relevant topics and providing an exhibition that is probably worth the price of admission all by itself. In addition to this partnership with the Columbia-Willamette

Chapter of the American Society of Safety Engineers (ASSE), Oregon OSHA works with other ASSE chapters and safety associations to put on conferences throughout the state www.orosha.org/conferences/.

During a time of economic uncertainty, maintaining and even increasing your focus on safety can provide other benefits as well – it reminds employees of the value you put on them and on their work, and it creates an opportunity for a constructive partnership at a time when economic realities may be putting strains on your overall relationship. But the best reason to stay committed to prevention is that it works. And, when these tough times pass and fresh new opportunities come your way, you and your employees will be in a much better position to take advantage of them.



Michael Wood, Administrator

# Saving your back The value of ergonomic solutions

By Melanie Mesaros

If you lift heavy boxes, equipment, or other objects as part of your job, you may be at risk for a soft-tissue injury. According to the data provided by the Department of Business and Consumer Services' Information Management Division, 47 percent of all disabling claims were strains and sprains, also known as soft-tissue injuries, between 2003 and 2007.

"Soft-tissue injuries have been the leading source of workers' comp claims for decades," said Annette Blake-Swindler, an Oregon OSHA ergonomist, who believes the reason the numbers may be so significant is the combination of changes in production processes, better medical diagnosis, voluntary overtime, increased awareness, and an aging workforce. She said there is a tendency for some industries to continue doing certain things "because that's how it's always been done or it is seen as the best way to do it."

Research on work-related strains dates back to the early 1700s, when occupational safety pioneer Dr. Bernadino Ramazzini detailed similar injuries in bakers, glass makers, and scribes. In the 19th century, Gray's Anatomy wrote about "washer woman's sprain."

"If someone is exposed to the same physically demanding or awkward task over a period of time, breakdown eventually occurs," said Blake-Swindler. "Awkward work postures such as bending, twisting, and reaching overhead and physical exertions such as pushing, pulling, and lifting are some of the risk factors to evaluate."

Ergonomics is one approach to identifying and reducing or eliminating these demanding

**Back and Neck Muscles** 



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activities and their injury potential. It is fitting the job to the worker rather than fitting the person to the job. Oregon OSHA receives requests from employers often when they have a problem but don't know how to solve it.





#### Confidential, no-cost consultations are available to employers who want to improve their work environment and/or prevent injuries.

Blake-Swindler said the first thing an employer should do to identify and solve problems is review injury records, safety committee meeting minutes, and employee symptom reports. "You need to talk with workers about what their perceptions are," she said. "Workers come up with great solutions. They can be an untapped resource. They really need to be incorporated into the problem solving process from the start."

The most commonly used tools or devices to make things easier in a manufacturing environment are scissor lifts, forklifts, conveyors, vacuum lifts, and patient lifts. These are devices that take the load off the body and transfer it to a piece of equipment. However, solutions are not found simply by supplying a piece of equipment, Blake-Swindler explained.

"You can't just throw money and equipment at a problem," she said. "That may only be part of the answer. Work practices such as eliminating unnecessary movements, using adjustments on equipment, and work organization should be considered. Managers should also look at work schedules and the distribution of difficult tasks."

The most efficient way to eliminate problems is in the design phase. The more experienced companies make ergonomics a part of planning and purchasing, she said. Consider storing



materials between knuckle and shoulder level so workers don't have to bend with a load or lift above shoulder level. Also, try to place what you're working on within arms' reach so you don't have to bend.

Many factors can influence a lift. For example, is it a box you're lifting with a weight evenly distributed with hand holds in the side or is it a plastic bag fully filled with no room to grip the ends? Do you have to pick an object up from

the floor and put it on a shelf above shoulder level? How many times do you have to lift during the work shift?

Research and experience also shows that stretching, by itself, is of limited benefit for preventing injury when exposed to a high-risk task, said Blake-Swindler. It does, however, provide time for workers to get mentally focused in preparation for their work shift and to discuss safety and health issues. She said Oregon OSHA does not offer safe lifting courses.

"The reason is that 50 years of experience has taught us that safe lifting training is not effective in reducing back injuries," said Blake-Swindler. "Rather, the focus should be on identifying problems and resolving them at the source."

#### Here are some ways to start solving issues in your workplace:

- Ask for a no-cost, confidential consultation from Oregon OSHA ergonomists
- Ask for help from your workers' compensation insurance carrier
- Contact others in the industry
- Train your safety committee in ergonomics

#### If you find you're running into stumbling blocks during your problem-solving, consider these common mistakes:

- Not properly identifying the hazard before drawing up solutions
- Wrong assumptions and inadequate information
- Inadequate buy-in from top management and/or workers
- Thinking re-engineering or mechanizing is always the only answer
- Not including employees in the problemsolving process. They often have the best ideas and are critical in the implementation process **OregonOSHA**

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#### "Saving your back" continued

Oregon OSHA ergonomists have written a positional paper on the subject of back belts, also referred to as abdominal supports, weight lifting belts, lumbar belts or lift belts. Studies on the value of back belts, in preventing injuries to the back have been inconclusive, but it is generally accepted that they are not protective equipment and should not be used in place of ergonomic interventions.

"Reducing injuries not only benefits workers but it is cost effective for business," said Blake-Swindler. "I've worked with many companies who have used ergonomics to cut their workers' compensation premiums in half. They ended up retaining high quality employees, who improved the quality of their product and changed the culture of the workplace."

More information about back safety and workplace ergonomics can be found at the links below.

#### Washington ergonomics Web site:

#### www.lni.wa.gov/Safety/Topics/ ReduceHazards/ErgoBank/default.asp

Tips for working at computers, back injury prevention guide and other Oregon OSHA ergonomics publications:

www.orosha.org/publications/ergopubs.html



In 2007, these industries saw the highest number of total accepted disabling claims for overexertion, repetitive motion, or bodily reaction.

- Manufacturing
- Retail trade
- Health care
- Construction
- Transportation











## **Ask Technical**

Oregon OSHA's Technical section answers more than 500 questions a month about safety and health issues. In this feature, we'll share frequently asked questions with readers.

• Can you tell me what the appropriate temperature should be in office buildings? We are struggling with what the appropriate temperature should be. A general census agrees that it is better to be colder because you can put more clothes on, however when you're hot there is only so many you can take off.



Oregon OSHA's rules regarding temperatures only apply to humidity and temperature extremes, such as cold temperatures that can cause frostbite or hot temperatures that can cause heat stroke. The agency doesn't have any requirements for general office temperatures.

However, there is a trade organization called the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) that recommends temperatures in the winter should range from 68 to 74 degrees Fahrenheit and 73 to 79 degrees Fahrenheit in the summer.



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#### **Accident Report**

Accident type | Fatality Industry | Construction – Excavator Employee job title | Laborer



#### **Accident description:**

A hydraulic excavator with a jackhammer attached was being used to break up the street in Portland. Two laborers were assigned to hold plywood panels along the sidewalk in front of the street to prevent flying debris from striking pedestrians or passing vehicles.

The hydraulic jackhammer attachment was connected to the excavator with a quick coupler device that was installed on the end of the excavator's boom. The quick coupler is a mechanism that allows for rapidly changing boom attachments (i.e., changing from a jackhammer attachment to a bucket for digging, etc.)

A short time prior to the accident, the workers holding the plywood noticed excessive noise coming from the jackhammer. They stopped working to inspect the equipment and determined the noise was due to wear and tear on the older jackhammer.

Not long after the workers had stopped to look the equipment, the 3,000-pound jackhammer attachment ejected from excavator and crashed into one of the plywood panels and crushed the worker. Emergency responders were not able to save him.

## **Oregon**OSHA



The photo to the right was taken on the scene, immediately after the quick coupler failure.

#### Applicable standards:

#### 29 CFR 1926.602(b)(3):

The quick coupler device had not been properly inspected, utilized, or maintained in accordance with standards of the Power Crane and Shovel Association (PCSA) as adopted by occupational safety and health regulations.

- a. Severely worn attachment pins and bushings on quick coupler.
- b. Missing inspection cover, safety warning label, and safety bolt.

#### 29 CFR 1926.21(b)(2):

Employees had not been instructed in the recognition and avoidance of unsafe conditions and the regulations applicable to the work environment to control or eliminate any hazards or other exposure to injury.

- a. Employees were assigned to hold "debris" panels in the danger area surrounding the point of operation of the jackhammer.
- b. Employees were not aware of the manufacturer's requirements for proper inspection, operation, and maintenance of the quick coupler.
- c. Employees were unaware of the quick coupler specifications requiring installation of a safety bolt to secure attachments to the quick coupler.

**Note:** Due to the number of fatal accidents occurring in the nation from the unintended release of attachments from quick couplers, the U.S. Department of Labor, Occupational Safety and Health Administration issued a Safety and Health Information Bulletin (SHIB) (SHIB 07-22-05) to alert employers and employees of the need to follow manufacturers' instructions regarding the installation, use, testing, inspection, and maintenance of quick coupler devices. The publication also explains how buckets and other attachments can be unintentionally released from quick couplers and details actions necessary to prevent such unintended release. A copy of the publication is available in the Oregon OSHA Resource Center or online at www.orosha.org.

## **OregonOSHA**

# News Briefs

## Oregon VPP participation grows in 2008

Oregon OSHA added eight Voluntary Protection Program (VPP) sites in 2008, making it a banner year for the program. VPP is the premier safety and health performance recognition program in the country. Initiated in 1982 by federal OSHA, there are more than 2,140 VPP sites in the United States.

Oregon companies have kept the VPP program growing since its adoption in 1996. Oregon OSHA approved eight new VPP applications in 2008, bringing the total number of VPP worksites to 23. To achieve VPP status, a worksite must have an average injury and illness rate at or below the rates of other employers in the same industry. The worksite must also undergo an extensive Oregon OSHA review of workplace conditions, safety records, employee safety and health programs, and regulatory compliance. The review includes Oregon OSHA interviews with employees.

The eight newest Oregon VPP sites include Invitrogen (Molecular Probes Labeling and Detection Technology) in Eugene, ConocoPhillips Co., Portland Lubricants Plant in Portland, Boise Packaging & Newsprint LLC in Salem, The Sherwin Williams Company – Purdy Brush in Portland, three Georgia-Pacific Consumer Products LLC sites, and Covanta Marion, Inc. in Brooks.

For more information about the VPP process, contact program manager Mark Hurliman at 541-776-6030.



VPP Manager Mark Hurliman (left) presents an award at the Georgia-Pacific Front Avenue facility.



Georgia-Pacific's group in Kelly Point.



Employees at Georgia-Pacific's Kelly Point facility show off their star flag



## New English-Spanish tip sheets and glossary available for restaurant industry



Restaurant owners can now download safety tip sheets and an English-Spanish glossary specifically designed for their industry. The modules are available on the Oregon OSHA Web site at www.orosha.org/pdf/peso/peso\_restaurant\_tips.pdf.

The most common injuries for restaurant workers include slips, trips, falls, burns, and cuts. These tip sheets address all of these issues.

"We wanted to give restaurant managers a quick tool that's easy to use," said Jason Jantzi, Oregon OSHA's public education manager.

The tip sheets were originally created at the University of California, Berkeley and the Labor Occupational Safety and Health Program at the University of California, Los Angeles.

## Oregon GOSH executive summit to feature four top business leaders



The 2009 Oregon Governor's Occupational Safety & Health (GOSH) Conference, to be held March 9·12 at the Oregon Convention Center, will feature a one-hour moderated panel discussion from four Northwest business leaders on how they have successfully incorporated safety, health, and the environment into their business models.

Senior management from GE Security, Skanska USA, Boeing Portland, and Intel will share their perspective on the importance of safety and health within their organizations and their expectations of the safety and health function in leadership, management, and the bottom line.

"This is a rare opportunity to hear from top business leaders on how they are managing safety and health in these uncertain economic times," said Sharell Lien, Oregon OSHA conference coordinator. "I expect the conversation to be candid and insightful."

For more information about the conference or to register, go to www.oregonGOSH.com.

Continued on Page 12 **DregonOSHA** 

### News Briefs, continued

# New report shows Oregon OSHA consultations top 15,000

The Consultative Services Annual Report shows from 2001 to 2007, Oregon OSHA conducted 15,944 consultations, essentially reaching 1,562,404 Oregon employees. Safety consultations, which address physical worksite hazards, are the most commonly requested service, accounting for 62.6 percent of opened consultations.

However, health consultations, which address health-related hazards, ergonomic consultations to prevent cumulative trauma injuries, and process safety management consultations, which evaluate an employer's development of prevention plans, were also up.

Consultative services also include the time-intensive process of assisting interested employers as they work toward being part of the Safety and Health Achievement Recognition Program.

The overall goal of the consultation program is to assist employers in implementing and maintaining an effective safety and health program and to ultimately become self-sufficient in managing their program.

Further details can be found in the Consultative Services Annual Report, available at www.oregon.gov/DCBS, just click on statistical reports, or on Oregon OSHA's Web site, www.orosha.org.



Congratulations to these new SHARP employers:

- Boise Cascade LCC, Rogue Valley Plywood Mill in White City
- States Industries Components Division in Eugene

## **Oregon OSHA's latest innovation:** user-centered publications

By Ellis Brasch, Oregon OSHA program development specialist

Don't get me wrong; I like to read. But I have a real problem reading rules, regulations, disclaimers, warranties, terms-of-service agreements, policies and procedures...almost any document that tells me what I have to do to stay out of trouble. It's not because I'm a scofflaw – it's because I don't want to spend half a day trying to understand what these documents tell me I'm supposed to do.

Sometimes we pay people to do the reading for us – lawyers and tax accountants, for example. But usually, when we're on our own, we just forget the reading and hope that we won't get in trouble later.

#### Reading shouldn't be so difficult

That's what Oregon legislators thought in 2007 when they passed House Bill 2702-A, which required state agencies to start writing their

public documents in "plain language, simple sentences, and be of readable layout and lettering size."

Plain language and all its trappings *can* make documents easy to read. But the real problem with documents (that tell us what we have to do) is the writer's inability to see situations from the perspective of the reader – and for us government types, that reader is a member of the public.



OSILA

#### Quick guides to the rescue

At Oregon OSHA, we've been writing workplace safety guides in plain language for more than a decade and we've received many comments from folks who told us our guides were useful – primarily educators or safety directors at large organizations. But what about the small business owners who have to get by without a safety director or a staff of safety professionals? It occurred to us that us that we were neglecting their "situation."

So we decided to create a series of publications for employers who aren't safety professionals and who don't have much time to think about safety, and for employers who may not even know what they should do to keep themselves or their employees safe.

We call these publications "quick guides" because you can read them in about 15 minutes. Quick guides are for employers and employees who need to know about a specific workplace safety requirement and get back to business – quickly.

We've published two quick guides so far: Hazard communication for general industry and Safety committees and safety meetings. More are on the way, and every one comes with a plain language guarantee!



# **OregonOSHA** Health and Safety Going the distance

# 

#### Tell me about your background and safety philosophy?

While I was attending Oregon State University, I worked summers as a construction laborer for Marion Construction. I graduated from Oregon State University in 1997 with a bachelor's degree in environmental health and safety.

I have been working full time for Slayden Construction Group since graduation.

Our company safety philosophy involves working with different owners, regulatory agencies, and other contractors to maintain a program that works well for our company. We feel that Oregon OSHA standards are a minimum requirement for our program. We look at the standards as a place to start and enhance our efforts from

Company: Slayden Construction Group, Inc.

Meet a leading Oregon health and safety professional

Health and Safety Professional: Jeremy Lawson, vice president of safety and equipment

Workforce: 180 employees Common Hazards: Fall protection, excavations, Silica exposure, confined space, lockout/tagout, fire prevention, and crane and forklift safety

> there, with the ultimate goal of zero injuries company wide. Our Injury and Illness Prevention Program is a document that continues to evolve over time.

With the support of our company owners, we have also invested a lot of time in our training program. All employees receive orientation at hire, and at the beginning of each project they are assigned. In addition, our safety managers conduct monthly training sessions at each

project with all employees. Part of our incentive program includes a raffle for a different tool at each of these training sessions. It takes every employee in the company to make the program work, so it makes sense that all employees receive the same training each month.

Our relationship with Oregon OSHA is also an important part of our program. I've worked with contractors that are very adversarial toward the agency. We take the opposite approach and try to learn everything we can from Oregon OSHA to continue to improve our program and the safety and health of our employees. Our acceptance into the SHARP program in May 2008 was very rewarding to our employees. They deserve it for all the hard work they put into our program.

# What are some of the biggest challenges you face as a safety manager?

I think the biggest challenge our safety department and our employees face is the fact that our jobsites are constantly changing. Once a structure is complete, all it takes is for the dirt crew to come in and backfill, and all of a Slayden recently moved a bridge near Drain, Ore., which was a complex undertaking. Can you explain how the safety of your employees was incorporated into the planning process and how you were able to accomplish the move?

Slayden Construction Group was selected as the Design Build Contractor on the OR 38 project near Drain, Ore. in February 2007. This project required the replacement of five bridges on OR 38, two of which were on each end of the tunnel west of Drain. In order to keep traffic flowing, with minimal lane closures, these two bridges were designed as "rapid replacements." Basically, the two new bridges were built on steel piling adjacent to the existing bridges. When the new bridges were complete, ODOT allowed a highway closure starting at 9 p.m. on Friday night. We had until 6 a.m. Monday morning to demolish the old bridge, and with the help of a specialty sub-contractor, jack up the new bridge, slide it into place, backfill, pave,

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sudden there could be a fall hazard. Our challenge is to make sure that all employees are trained to constantly monitor and correct these hazards on our jobsites. This is why employee training is so important to the success of our program.



Jeremy Lawson works with Jody Olson on a jobsite in Oregon City.



## **Oregon**OSHA

and have the highway reopened. We completed this task for each bridge well within our allowed time frame. The first slide was completed in May 2008, and the second slide in September 2008.

## This process created these unique challenges:

• We completed both bridge slides without any injuries.

The key element of our program that helped us achieve this goal was conducting a thorough "Job Hazard Analysis" for each work activity throughout the weekend. We made sure all employees were trained in the requirements of each JHA.

- Due to the schedule of the project, multiple shifts were required. This required a huge amount of planning and coordination between ODOT, our crews, and our subcontractors.
- There was a high volume of highway industry officials who wanted to be on site to witness this process since it is new to the bridge industry in Oregon. This required designating a person at each end of the

bridge to be in charge of "crowd" control. Everyone wanted to take photos and be right in the action so keeping bystanders safe was also important.





Lawson said Slayden management encourages employee participation.

#### Do you have any other examples of projects with unique safety challenges?

We take pride in tackling many complicated projects. We tend to specialize in projects that are in remote locations, with tight schedules, or involve innovative construction methods. I think construction projects as a whole create new challenges each day. The worksite is constantly changing and requires constant monitoring by all employees to make sure everyone goes home safe at the end of the day.

# What advice do you have for other safety managers hoping to make a difference?

After working in the industry for more than 10 years, I've seen many different approaches to building a successful safety program. The key elements are total support of the program by ownership/senior management and involvement of all employees to implement the program. Our employees are involved with safety on a daily basis, conducting JHAs for each work activity. In addition, our employees are represented on our corporate safety committee. If an employee has a suggestion regarding safety, they contact one of the safety committee members to get their item on the agenda. Without the commitment of ownership and involvement at every level, it is hard for a program to succeed.