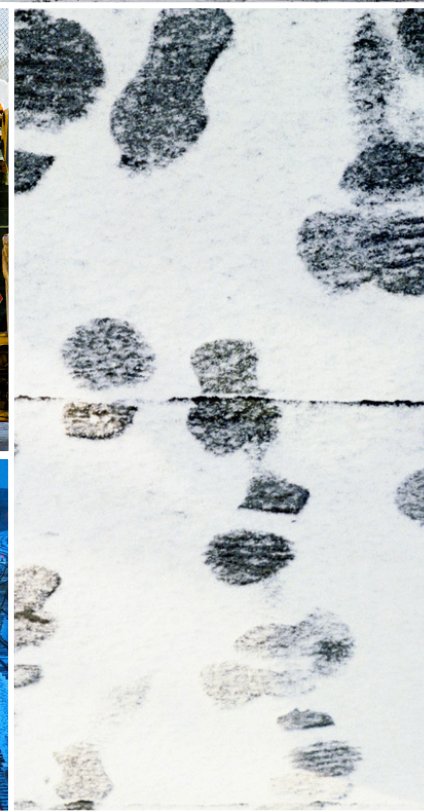




Cover story – page 4



**Inside:**

Video contest for high school students announced | 2

Safety Notes | 8

Going the Distance | 13

## High school students encouraged to enter safety video contest

Aspiring young Steven Speilbergs across Oregon are invited to create a 30-second public service announcement promoting young worker safety and health. All videos will be shown on the big screen at Portland's Laurelhurst Theater on Feb. 21, 2009. The top three winners will also take home cash prizes ranging from \$200 to \$400. Students must be between the ages of 14 and 18.

The video contest is designed to increase awareness about safety on the job for young people, with the theme of "Save a Friend. Work Safe." Students are encouraged to develop a slogan, use humor, and get creative while emphasizing ways to protect themselves at work.

Bilingual or multilingual PSAs are welcomed, especially in languages commonly spoken in



Oregon (such as Spanish and Russian). The deadline for submissions is Feb. 13, 2009. For contest rules and entry forms, go to [www.orosha.org/psacontest/](http://www.orosha.org/psacontest/).

The Oregon Young Worker Coalition for Health & Safety, Oregon OSHA, SAIF Corporation, American Society of Safety Engineers - Columbia-Willamette Chapter and the Santiam Section, and the Oregon Health and Science University Center for Research on Occupational and Environmental Toxicology are sponsoring the contest.

## RESOURCE

**Oregon Health and Safety Resource** is published every other month by the Oregon Occupational Safety and Health Division of the Department of Consumer and Business Services.



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# Administrator's message: Is the glass half full — or half empty?

By Michael Wood

A couple of months ago, I spoke to a small group meeting here in Salem that is part of the worldwide Optimists organization. Preparing for my comments that day, along with reading some electronic discussions since then, has gotten me to thinking about the perspective that we bring to the world as health and safety professionals.

Of course, generalizations are always dangerous. The thousands of health and safety professionals working in Oregon are all different people, with different personalities and different perspectives on life in general. But it's probably fair to say that the nature of our work does give us some common experience on which to build.

My dictionary defines optimism as "an inclination to put the most favorable construction upon actions and events or to anticipate the best possible outcome." I actually think that definition gets at two very different elements.

Optimism can sometimes be simply a matter of seeing the "silver lining" in the clouds we face in life. That's the approach suggested by the television ad about the boy swinging at a baseball (itself clearly based on a country music song of a few years back). You've probably seen it. As he tosses the ball in the air, the boy declares he's the best hitter in the world. After several unsuccessful swings, he's not discouraged – he's come to realize that he's actually the best *pitcher* in the world.

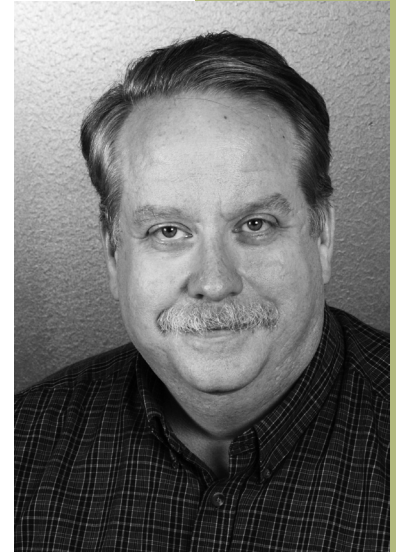
But there are more fundamental questions about what we believe and how we approach the world. I've recently seen an e-mail declaring that health and safety professionals are essentially pessimists – because we are always trying to figure out what could go wrong (and, some might say, are never satisfied that things are "good enough"). I suppose that there is some truth to that.

But I would suggest that the real pessimists are those who look at a "dangerous" industry such as construction or logging and declare that "it's just the work" – or the people who said 40 years ago that industry was as safe as it could be – and who have been proven wrong by the dramatic reductions in injuries of the intervening decades. So what about the people who say today that they've already done everything that they can and "accidents happen?" Are they realists?

Or are they pessimists who are limiting what will be tried to what they believe can be done?

When I spoke to the Optimists Club, I actually suggested to them that we have a lot in common. Some of us may, I suppose, be too inclined to focus on the negative when we investigate an injury, illness, or fatality. We may at times be discouraged by the reality of reported fatalities that clearly did not need to occur. And, of course, we do spend a lot of our time thinking about things that could go wrong – in the worst-case scenario.

But we spend our time working on these issues because we believe we can make a difference. We believe that workplaces can be safer, and that injury, illness, and death rates can be forced down still further. At heart, that's the work of an optimist. And that hope for "the best possible outcome" is what brings me to work every day.



Michael Wood, Administrator



# WINTER DANGER

## Developing a defense against Mother Nature

*By Melanie Mesaros*

In January 2005, a lumberyard worker was in the process of strapping a semi-trailer load of lumber in Portland. He climbed the ladder, placed against the side of the trailer, to strap the top of the load. When he stepped from the ladder onto the load, he slipped and fell about 11 feet to the asphalt below. Ice was found on top of the plastic-covered load and no fall protection was used. The worker later died from head and neck injuries.

The case above may seem extreme, but snow, ice, and rain are winter hazards that can make day-to-day duties even more dangerous for workers. Planning ahead can save lives and reduce accidents this season. Businesses can

start by talking to workers about their concerns in a safety committee meeting.

“The importance of the meeting would be to ask employees, ‘What do you see as problems?’” said Oregon OSHA’s safety

*“You usually know three or four days in advance if a big storm is coming.”*

– Gary Beck

manager Sam Drill. “Draw on past experiences and talk about potential weather hazards.”

When the Portland area was hit with a severe winter storm in January 2004, streets turned into snow-covered skating rinks. Workers’ compensation accepted disabling claims (at least three days of missed work) spiked, with falls on wet surfaces and ice making up 14 percent of the total claims that month. Slips and falls typically increase during winter months and follow weather patterns.

When Oregon OSHA conducts an accident investigation, the enforcement officer asks the employer how they were prepared.

“What did you do to plan or train someone for those types of conditions?” Drill said.

Training and preparation can be especially important for workers who drive for their job. If an employee is making a trip alone, make sure someone knows where the employee is headed and have the employee check in when he or she arrives.

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**“If it’s not essential and it’s hazardous outside, do you want to expose your people?” said Drill. “The answer is probably not.”**

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Preparing vehicles for winter includes creating and using a checklist for emergencies. Workers should make sure the vehicles contain properly fitting chains, flares, food, water, and a blanket in the event of being stranded. Workers should also turn on cell phones and fill the gas tank before heading out.



“You usually know three or four days in advance if a big storm is coming,” said Gary Beck, Oregon OSHA safety enforcement analyst. “Make sure you review safety hazards and precautions at that time. Plan your work based on the weather.”

Because specific hazards vary so much by industry, it’s important to tailor training and procedures. Slippery floors may become

continued on page 6



***“What did you do to plan or train someone for those types of conditions?”***

— Sam Drill

## “Winter Danger” *continued*

an issue for restaurant workers, while icy equipment may be a hazard for those on exposed construction sites.

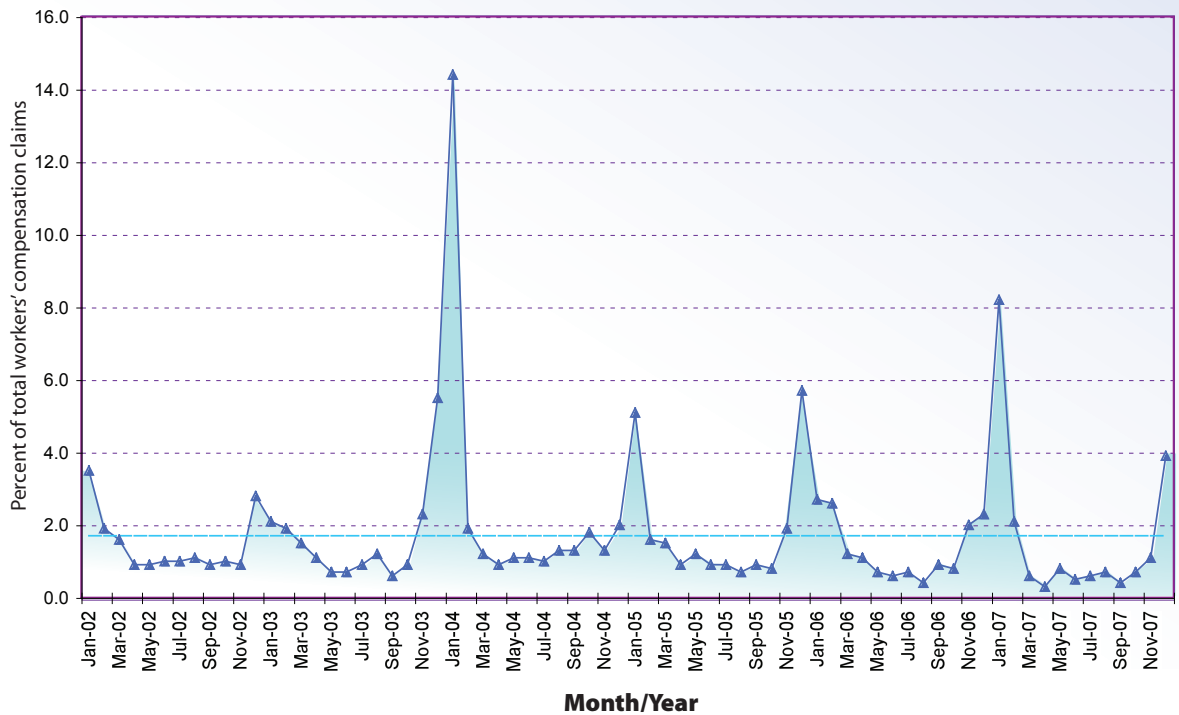
“Roofers may want to continue to work when there’s snow on the ground but they need to take precautions,” said Drill. “Torch down the roof, make sure ladders aren’t icy, work with proper foot wear, and use the appropriate fall protection equipment.”

Talking with employees about specific concerns and planning for what Mother Nature can bring are the best strategies to avoid accidents.

### Oregon OSHA encourages employers to take the following precautions:

- ▲ Keep walkways clear from ice and snow and provide entry mats to avoid indoor accidents.
- ▲ Review bad weather procedures with employees and discuss specific job hazards.
- ▲ Prepare a roadside emergency kit for company vehicles that includes items such as water, food, flares, a blanket, a window scraper, and chains (when required).

**Falls to the same level due to wet floor, ice, as a percent of total accepted disabling claims, by month of injury**



Data provided by Information Management Division, Department of Consumer and Business Services

# Ask Technical


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

**Q:** How often must an employer/safety committee conduct building inspections? Are there different requirements for government buildings versus the private sector?



**A:** Safety committee rules require workplaces to be inspected every quarter. The current rule, covering most employers and effective until Jan. 1, 2009, requires the safety committee do the inspections. The new rule also requires the inspections but they may now be done by an employer and an employee representative (two-person inspection team) at fixed locations and in office environments. Quarterly inspections may be done by a designated person at infrequently visited sites, mobile, auxiliary, or satellite locations. In either case, people trained in hazard identification must conduct the inspections. There is no longer a requirement that the quarterly inspections be done by members of the safety committee.

The requirement does not differ between government buildings or privately owned buildings.

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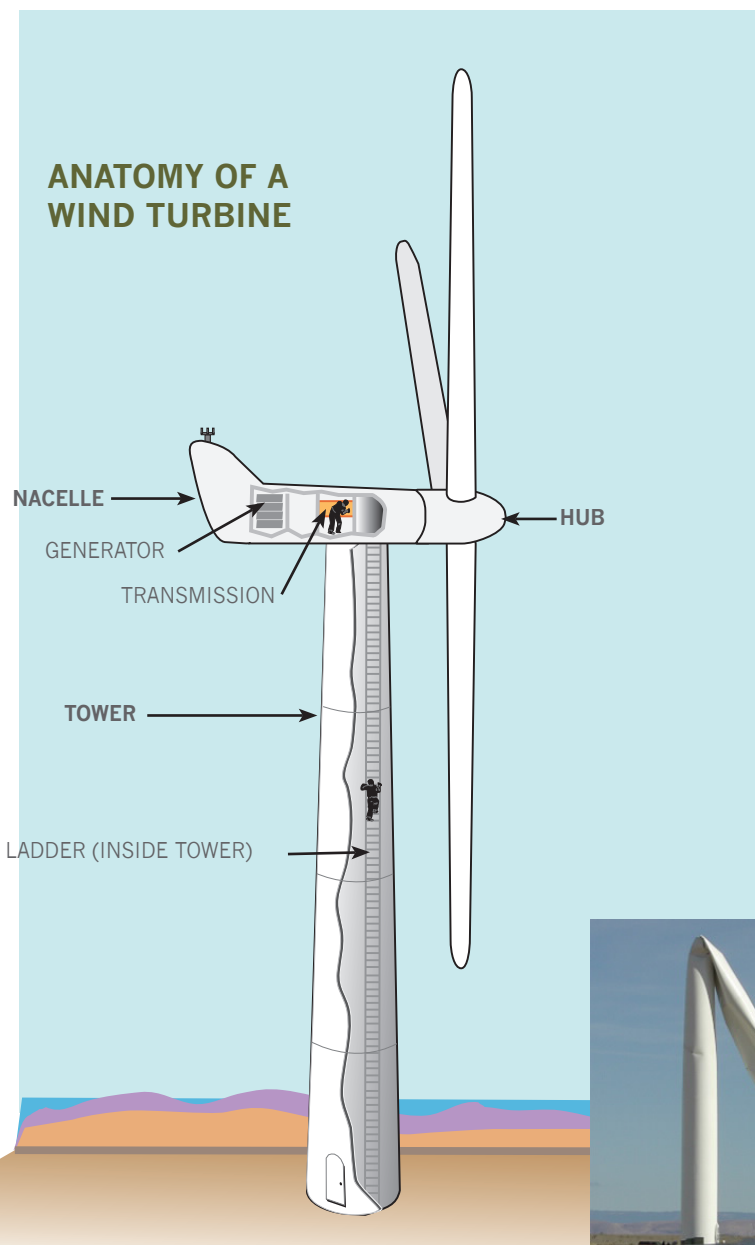
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**January 26, 2009**  
**The Riverhouse Resort and Conference Center**  
**Bend, Oregon**

### Description of accident

The wind turbine is erected on a steel tower and is approximately 230 feet tall. A ladder inside the tower provides climbing access to the Nacelle, a mechanical room on top of the tower that houses a transmission and generator. On the front of the Nacelle are three 150-foot blades connected to a center hub. The wind rotates the blades, resulting in energy generation.

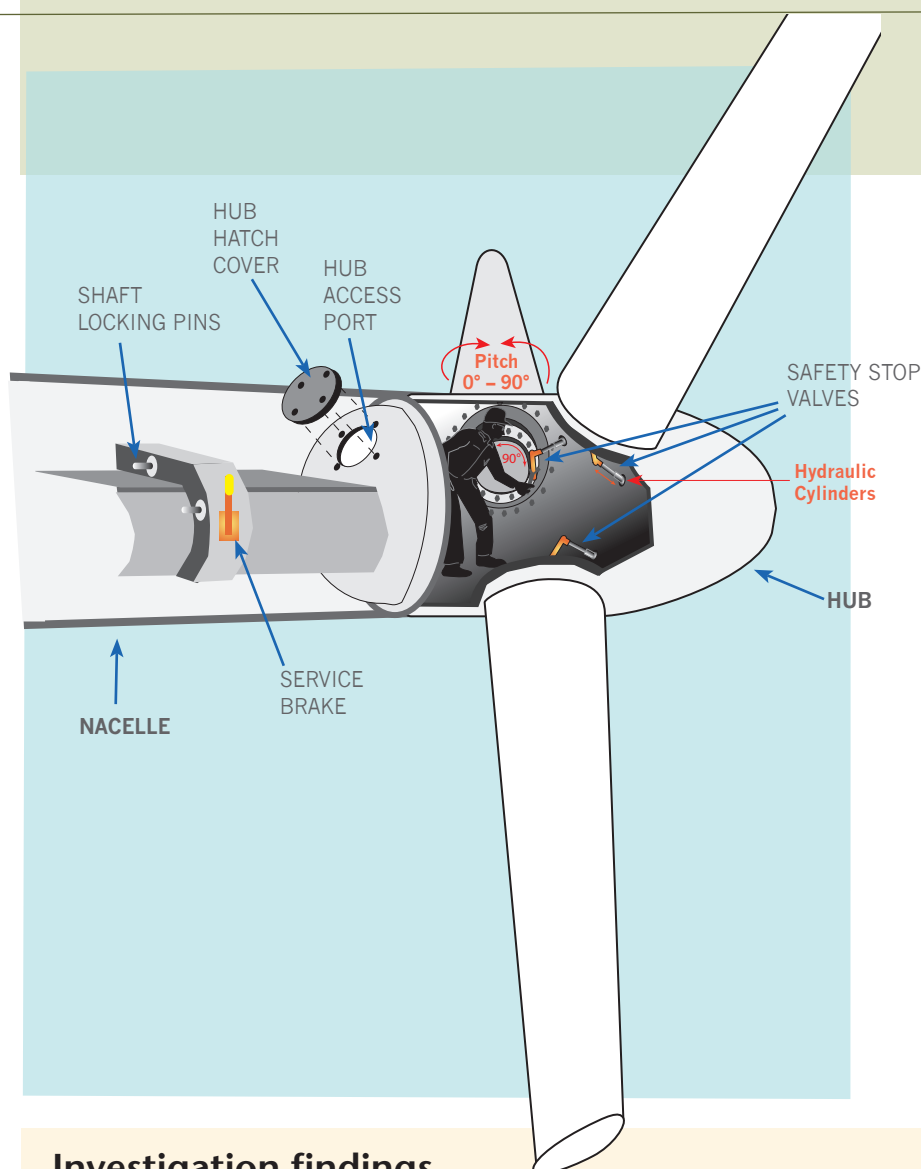
Rotating the blade on the hub is referred to as pitch. Pitch of the blade varies from zero degrees to 90 degrees and the wind exerts pressure depending on the blade pitch. Hydraulic cylinders inside the hub rotate blades to the desired pitch.



Routine service is an important part of safe turbine operation. Three trainee-level technicians were performing service at the time of the accident. One entered the hub for blade-pitch calibration. The technician pitched all three blades to the zero-degree position (wind exerts maximum pressure on blades) and closed the safety stop valves. But the technician failed to reopen the safety stop valves before exiting the hub. Wind was blowing between 25 and 35 miles per hour, stronger than it should for maximum blade-pitch position. With blade-pitch cylinders unable to operate due to closed safety stop valves, the computer could not readjust the blade pitch. The blades then began to spin out of control.







Computer records indicate several failed attempts by the technician to reapply the service brake before the over-speed condition. Wind pressure caused one of the blades to flex enough for the tip to strike the tower, buckling the tower and sending the Nacelle crashing to the ground.

The technician inside the Nacelle was killed in the accident and a second technician inside the tower's ladder suffered serious injuries.

## Investigation findings

- Lockout/tagout devices were not affixed to the lock pins and safety stop valves by the employee.
- The employer had not determined, through regular supervision, that each employee had complied with required safety-related work practices by re-opening three safety stop valves for blade pitch control in the hub.

## Applicable standards

### 1910.269 (a)(2)(iii)

The employer shall determine, through regular supervision and through inspections conducted on at least an annual basis that each employee is complying with the safety-related work practices required by this section.

### 1910.269 (d)(6)(iv)

Lockout or tagout devices shall be affixed to each energy-isolating device by authorized employees.

## Oregon OSHA adopts revision to simplify safety rule

Oregon OSHA has revised a key rule to provide greater clarity and flexibility to employers seeking to involve their workers in discussions of health and safety on the job.

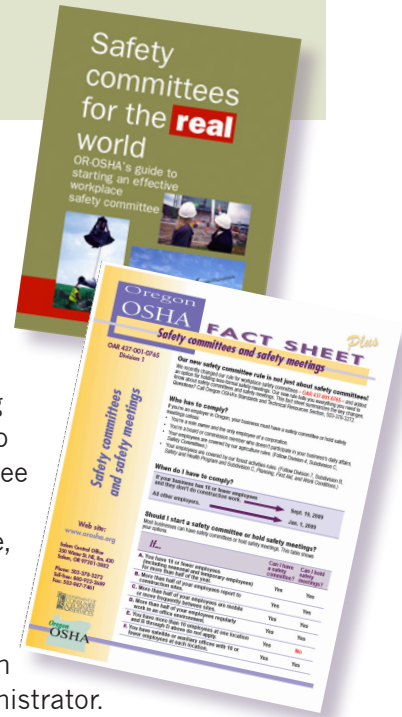
The rule puts into practice a legislative change adopted in 2007 requiring all employers to have a safety committee or hold safety meetings. Prior to Oregon OSHA's revision, smaller companies had to have a safety committee if they were in a high-risk industry or if they had a high rate of claims, meaning one claim required a small business to have a formal committee, despite employing few people.

"Small employers could slip in and out of the requirement depending on their claim history without any change in the way they did business – or in the risks their employees faced," said Michael Wood, Oregon OSHA administrator.

Now, smaller firms will have the more informal option of using safety meetings instead of forming a safety committee.

For those fixed-site employers who were administering safety committees in the past, the rule will have little effect. Construction employers, who typically were required to have safety committees under the previous rule, will have the option of using safety meetings. Even large construction companies can choose to rely upon the safety meeting model.

The rule takes effect for larger employers and construction industry employers on Jan. 1, 2009. On Sept. 19, 2009, the rule will take effect for small employers not in construction. The rule change also eliminates the mandatory penalty of \$100 for not having a safety committee.



## 2009 calendar celebrates safety in agriculture

Oregon OSHA joins the celebration to honor the state's past, present, and future with the production of a special 2009 Agricultural Safety and Health calendar.

It was created in partnership with the Oregon 150 campaign, the nonprofit organization planning Oregon's year-long, statewide sesquicentennial celebration in 2009.

The calendar features photographs, iconic images and logos, and safety tips that provide a historical perspective on Oregon's products and pioneers. Oregon is a state producer of more than 220 key agricultural commodities – more than any other state except California.

Images in the calendar date back to the early 1900s and were taken on farms from Troutdale to Tillamook and Canby to Hood River.

The calendar is available free to the public at the Oregon OSHA Resource Center in Salem. To request a copy, call 503-947-7447 or go to [www.orosha.org](http://www.orosha.org).



## Oregon OSHA nail salon brochure wins PRSA award

The Public Relations Society of America honored Oregon OSHA's safety brochure for nail salon workers with an Award of Excellence. Judges not only looked at the publication itself, but the research, planning, and media coverage that was also part of the effort.

The brochure features colorful illustrations designed to educate nail technicians about the health hazards associated with their industry. The pocket-size brochure has been translated into Vietnamese. According to Nails Magazine, a trade publication, more than 40 percent of nail salon workers nationwide are Vietnamese.

A story about the brochure received front-page placement in the *Medford Mail-Tribune* and also received coverage in *The Oregonian* (Oregon's largest newspaper), *Associated Press*, and other news outlets across the state. Within six months of its creation, it was downloaded more than 2,000 times from the Oregon OSHA Web site.



## Oregon OSHA forms alliance with Mt. Hood Community College

In an effort to promote and enhance workplace safety and health education, Oregon OSHA announces an alliance with Mt. Hood Community College. The college, located in Gresham, is one of the few Oregon higher education institutions to offer a degree related to workplace health and safety.

As part of the agreement, Oregon OSHA will be able to use the college's state-of-the-art campus instructional facilities to conduct workshops for employers, employees, businesses, and organized labor.

Attendees of any Oregon OSHA workshop will now be able to obtain college credits toward an associate degree or one-year certificate within

the college's Sustainability, Health, and Safety Program. For additional information about the program, visit the "Education" section at [www.orosha.org](http://www.orosha.org).



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- ConocoPhillips Company's Portland Lubricants Plant
- The Sherwin-Williams Company — Purdy
- Georgia-Pacific Consumer Products LLC  
(three Portland worksites)



#### *Congratulations to these new SHARP employers:*

- Goodwill Industries of the Columbia Willamette  
(four Portland-area worksites)
- Boise Cascade LCC, Willamina Veneer

# Going the distance

## Meet a leading Oregon health and safety professional



### What do you do?

I am the director of the Toxicology Information Center, located in the Center for Research on Occupational and Environmental Toxicology (CROET) at Oregon Health and Science University. CROET is dedicated to the promotion of health, and prevention of disease and disability among working Oregonians and their families. We do this through basic and applied research, outreach, and education.

I serve CROET's outreach and education mission by providing information and consultation to workers, employers, medical professionals, occupational safety and health professionals, journalists, and the general public who may be concerned about exposure to chemical and physical agents in the workplace and home. I do this primarily through phone and e-mail interactions, but also via regularly attended Oregon OSHA conferences, involvement with various local and state government agencies, and presentations to community groups. My work is greatly facilitated by our Web resource page, CROETweb.com, which was developed at CROET and is maintained as a free Web resource to the public.

**Company:** Center for Research on Occupational and Environmental Toxicology (CROET)

**Health and Safety Professional:** Fred Berman DVM, PhD,  
Director, Toxicology Information Center

**Program Assistance:** Chemical Risk Information Services,  
1-800-457-8627 or e-mail [croetweb@ohsu.edu](mailto:croetweb@ohsu.edu)

**Hazards:** Pesticides, mold, heavy metals, herbicides, wood preservatives, air quality, etc.

Continued on Page 14

**OregonOSHA**

## **Can you describe some of the hazards you get the most questions about or detail common problems?**

People increasingly rely on the Internet for health and safety information; however, there is nothing to assure that only truthful, scientifically accurate information is posted. Many callers' concerns are misinformed, unfortunately, by inaccurate information from the Internet. I believe it is important to not only assure that callers receive good information, but also to help them learn how to find information that is reliable and factual. This may be one of the most common problems I see outside of the actual subject matter I am called upon to address.

Prior to starting a call database, I would have believed that most public inquiries were related to indoor mold exposures, but in actuality, only 8 percent of calls are about mold. Other common problem/question categories include heavy metals (12 percent); pesticides, which include insecticides, fungicides, herbicides, rodenticides, and wood preservatives (11 percent); medical ailments suspected to have a toxicological cause (11 percent); miscellaneous chemicals (10 percent); organic solvents (8 percent); and poor indoor air quality (7 percent). However, the complete categorical list of inquiries I receive is much, much longer than this.

## **What resources could you provide a business hoping to develop a solid health and safety program?**

CROET offers the fee-based Chemical Risk Information Service, a 24-hour, seven-day-a-week toxicological and risk information program, that offers both Employee-Right-to-Know and Product Stewardship programs. These programs enable employers to provide

their employees and customers round-the-clock access to Material Safety Data Sheets (MSDS) from a centralized source.

The Right-to-Know program is a computer-based program designed to help business and industrial clients comply with the OSHA Hazard Communication standard, which requires that employees be able to access MSDSs for the hazardous chemicals present in their workplace. We provide toll-free phone access and Web access to their MSDSs, as well as to licensed health care professionals, 24 hours a day, seven days a week. Chemical exposures or requests for medical advice are directed to the health care professionals at the Oregon Poison Center. This assures that all exposures are triaged and appropriate decontamination measures are instituted immediately to decrease health risks. The Oregon Poison Center can provide referral to a health care facility as needed. The Oregon Poison Center also offers consultation to medical personnel as needed for patient treatment, as well as follow-up after discharge from a health care facility.

The Product Stewardship program provides a toll-free number for clients to place on their product labels or packing information as a resource for customers who have safety questions concerning the product. These calls are handled in the same manner as the worker right-to-know calls, 24 hours a day, seven days a week. This program offers a convenient way for companies to provide their customers with global access to product safety information and product MSDSs.

Information about this program can be found at <http://www.ohsu.edu/xd/research/centers-institutes/croet/lab/chemical.cfm>

CROET also offers a free health and safety Web information resource page, [www.CROETweb.com](http://www.CROETweb.com), which is generally recognized by Oregon occupational safety and health professionals as a top source for health and safety information

on the Web. The information is maintained and updated on a daily basis, and frequent users can subscribe to our monthly electronic newsletter, which describes changes to the Web site. Employers interested in developing their health and safety programs should visit the topics Health and Safety Programs (<http://www.croetweb.com/links.cfm?topicID=52>) and Materials for Safety Talks (<http://www.croetweb.com/links.cfm?topicID=65>), which are both popular and useful.

### **What's changing in the industry that will have an impact on how future health issues are addressed in the workplace?**

I believe the question of gene-environment interactions will be one of the most important research areas to impact the future of workplace health. Our ever-increasing knowledge about how our bodies respond to environmental stressors at the level of gene regulation and how this translates into changes in health status, both among population groups as well as individuals, is going to greatly impact future health care practice and public health policy decisions.

The level of development of computers in the 1980s is probably where our current level of advancement in this area of research stands. I believe we'll see an increasing tide of new innovations in the pharmaceutical industry, medical practice, and preventive medicine. However, we will likely see increasing challenges in the public policy arena regarding basic individual privacy and social justice issues as they relate to health care and the workplace.



Fred Berman outside CROET's facility on the OHSU campus.

### **What are the current CROET research priorities?**

CROET scientists are trying to understand basic biological mechanisms that control development, maintenance, and repair of the neuromuscular system, as well as key behaviors, such as sleep and wakefulness. Through such understandings, it may some day be possible to effectively (and economically) tailor workplace environments and work schedules in ways that reduce risk for occupational injuries. This research could also lead to the discovery of safe therapeutic interventions that enhance recovery from workplace injuries and prevent the loss of alertness that can occur with odd work schedules.

Another important CROET research endeavor is to understand genetic control and expression changes that occur in toxic and disease states. We can learn a lot about the fundamental biology of disease at the cellular, organ, and whole-body level by looking at what goes on with gene regulation. Such understanding may enhance our ability to predict the risk and prevent harm from low-level exposure to workplace chemicals, physical and emotional stressors, and various lifestyle factors, among others.

Continued on Page 16

Health conditions that increasingly affect the workforce such as asthma, obesity, diabetes, cancers (skin, breast, prostate), and neurodegenerative disease are another priority area of research for CROET scientists. The toll in both lost job productivity and high health care costs is immense. If risk factors and biological mechanisms behind these diseases can be clearly understood, then we have the chance to effectively reduce the high costs on society and the workplace.

We are also conducting research within the workplace, including transportation, agriculture, services, offices, and other industry sectors where employees are at risk. For example, Dr. Ryan Olson is working with the commercial trucking industry to reduce risks for musculoskeletal disorders (MSDs); trucking MSDs account for 8 percent of all MSDs in U.S. workplaces. The total annual work-related costs are estimated at approximately \$4 billion. He is also working with truck drivers to improve lifestyle factors such as diet, exercise, and safety habits. Long and unusual work hours, combined with limited diet and exercise options, make living a healthy lifestyle very challenging for truckers.

Dr. Kent Anger is working with various agricultural sectors to develop a computer-based training program, cTRAIN, which utilizes a simple nine-button computer interface to provide health and safety training to workers of all education levels in any language. This work addresses the need to improve health and safety practices among the immigrant workforce, which is represented by many different cultures and languages. These are only two examples of many CROET-based research endeavors that directly involve the workplace. Interested people can learn more by visiting [www.ohsu.edu/croet](http://www.ohsu.edu/croet).



Fred Berman says many may not know CROET's services are available 24 hours a day, seven days a week.

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

It has been said that aircraft accidents are caused not by one single major factor, but instead are the result of a succession of small, seemingly unimportant errors. Don't disregard small errors; they may conspire to bite you. Also, stay current with advancing knowledge in your field (read, read, read) and regularly interact with your peers.