



NSMS May 2006 DIGEST

Welcoming Our New 2006 NSMS Members

On behalf NSMS President Roosevelt, the NSMS Executive Committee and the NSMS Board of Directors, we like to thank all members who have renewed their 2006 membership to the National Safety Management Society. We would also like to acknowledge and welcome the following new members to our Society:

- § Brian E. Mckay, Bechtel Corporation – (Anchorage, AK)
- § Theodore J. Pruitt, CL Coatings – (Lakeland, FL)
- § Derek Russell, Republic Indemnity Company of America (San Francisco, CA)

We appreciate your interest in furthering your skills, knowledge and abilities in the management of safety and risks, as well as your interest to networking and professional development. Welcome again to NSMS!

Calling All NSMS Members: Volunteers Are Needed for Our National Conference Planning Committee

NSMS is still seeking volunteers to form a working committee for planning our 2006 National Conference. We need the efforts and support of all members to keep the information exchange and networking possible. Without a working group, our goal of a conference may not be met this calendar year. If you are interested in participating, please email us at nsmsinc@yahoo.com or call and leave a message at (800) 321-2910. Please spread the word and get involved! Thank you.



May is Healthy Vision Month

May is Healthy Vision Month. This year's theme is reducing occupational eye injuries by understanding vision hazards and by wearing appropriate, properly fitted protective eyewear. Healthy Vision Month is co-sponsored by the National Safety Council, the National Eye Institute and NIOSH in collaboration with the American Association of Occupational Health Nurses Inc. Visit the [Healthy Vision Month Website](#) for more information on the importance of reducing eye injuries.

FREE ACCESS: Online Certified Safety and Health Manager (CSHM) Educational and Exam Preparation Reference Materials

As a benefit for our current and future dues-paying members, NSMS is **permanently** offering free access to the Certified Safety and Health Manager (CSHM) preparation and educational materials. The online resources, created by NSMS member Steve Geigle, can be found at www.cshmprep.com and the only action an NSMS member needs to take is to email Steve requesting access from that website. You will need to include your current NSMS member number (found on your membership card and certificate). Once the number is verified, you will be granted a username and password to access the online reference materials. This is a great opportunity to brush up on your safety management and technical knowledge and prepare for a successful passing of the CSHM certification examination.

National Electrical Safety Month set for May

May is National Electrical Safety Month. According to the Electrical Safety Foundation International, Alexandria, VA, electricity kills nearly 400 people and injures thousands each year—most of which could be avoided with an increased awareness of electrical safety. Power line contact with construction equipment, ladders and gardening tools are among the leading cause of electrocutions. Use of ground fault circuit interrupters to protect against lethal electrical currents also can reduce electrocutions.



Senate Confirms Foulke as OSHA Administrator

Edwin G. Foulke Jr. began his term as OSHA administrator April 3. On March 13, the Senate confirmed Foulke in a unanimous consent vote. An attorney and former chairman of the Occupational Safety and Health Review Commission, Foulke succeeds John Henshaw, who resigned in December 2004. Jonathan L. Snare has been serving as acting OSHA administrator.

OSHA Schedules APFs' Release for July 2006

Federal agencies have published their semi-annual regulatory agendas this week, listing priorities for near-term actions and projects that are on the shelf with no completion date listed. If these new agendas prove to be accurate, OSHA will propose a table of Assigned Protection Factors in July 2006, thus completing the final Respiratory Protection standard (29 CFR 1910.134) it issued in January 1988 with APFs reserved.

APFs are numbers that describe the effectiveness of respirators at reducing employees' exposure to airborne contaminants. Two accepted APF tables are in use — not always in harmony; one developed by NIOSH in the 1980s and the other found in a consensus standard, ANSI Z88.2-1992. Respirator manufacturers and end users have been awaiting OSHA's APFs for years; the agenda said about 5 million employees wear respirators as part of their regular job duties and listed an estimated compliance cost for a proposed APF rule of \$4.6 million.

Other agenda highlights include: a confined spaces in construction proposed rule coming in October 2006; employer payment for personal protective equipment included as a "final rule stage" item; a hearing conservation rule for construction listed as "final rule stage"; and the Mine Safety and Health Administration listing a respirable crystalline silica standard as a long-term action. OSHA listed occupational exposure to crystalline silica as a "prerule stage" item, along with several other items including Hazard Communication and revised standards for power presses.

14,000 Employers Notified Their Worksites Have Injury, Illness Rates Higher Than Average

OSHA has notified approximately 14,000 employers that injury and illness rates at their worksites are higher than average, stating that assistance is available to help them fix safety and health hazards.

In a letter this month to those employers, OSHA explained that the notification was a proactive step to encourage employers to take steps now to reduce those rates and improve the safety and health environment in their workplaces.

"This identification process is meant to raise awareness that injuries and illnesses are high at these facilities," said OSHA Administrator Edwin G. Foulke Jr. "Injuries and illnesses are costly to employers in both personal and financial terms. Our goal is to identify workplaces where injury and illness rates are high, and to offer assistance to employers so they can address the hazards and reduce occupational injuries and illnesses."



Establishments with the nation's high workplace injury and illness rates were identified by OSHA through employer-reported data from a 2005 survey of 80,000 worksites (the survey consisted of data from calendar year 2004). The workplaces identified had 6.0 or more injuries or illnesses resulting in days away from work, restricted work activity, or job transfer (DART) for every 100 full-time workers. The national average during 2004 was 2.5 DART instances for every 100 workers.

Employers receiving the letters also were provided copies of their injury and illness data, along with a list of the most frequently violated OSHA standards for their specific industry. The letter

also offered the agency's assistance in helping turn the numbers around, suggesting, among other things, the use of free safety and health consultation services provided by OSHA through the states, state workers' compensation agencies, insurance carriers, or outside safety and health consultants.

The 14,000 sites are listed alphabetically, by state, on OSHA's Web site at http://www.osha.gov/as/opa/foia/hot_12.html.

The list does not designate those earmarked for any future inspections. An announcement of targeted inspections will be made later this year. Also, the sites listed are establishments in states covered by federal OSHA; the list does not include employers in the 21 states, and Puerto Rico, who operate OSHA-approved state plans covering the private sector.

OSHA's data collection initiative is conducted each year to provide the agency with a clearer picture of those establishments with higher than average injury and illness rates.

OSHA Unveils Case Studies on Motor Vehicle Safety

OSHA has released two case studies on reducing motor vehicle accidents (MVA): one discussing a new behavior-based safety program to reduce rear-end collisions and the other describing a problem-solving methodology called "Six Sigma" to find the root causes of MVAs.

The case studies are the product of OSHA's alliance with The Dow Chemical Company (Dow). Through the alliance, originally signed in 2003, Dow worked to identify the root causes of MVAs and implement effective motor carrier and vehicle safety programs.

"These case studies offer useful information and demonstrate the correlation between safety and health excellence and business excellence," said Jonathan L. Snare, acting assistant secretary of Labor for OSHA. "They provide practical examples of how this correlation can enhance worker safety and health, improve employee morale, and increase quality, efficiency, and profitability."

Motor Carrier Safety Case Study: A Collaborative Approach to Reducing Motor Carrier Incidents



(http://www.osha.gov/dcsp/success_stories/alliances/dow/motor_carrier_case_study.html) describes how Dow worked with one of its motor carriers to implement a new behavior-based safety program to reduce rear-end collisions. Drivers served as observers of critical causes and submitted their data anonymously. The data were collected, posted, and discussed by the drivers during safety meetings. A group of drivers met to identify the causes of certain types of accidents, evaluate them, and establish preventative measures. The goal for the project was an annual 60-percent reduction in rear-end collisions, but in the first year, the reduction was 82 percent.

Motor Vehicle Accident Case Study: The Dow Chemical Company's Use of "Six Sigma" Methodology

(http://www.osha.gov/dcsp/success_stories/alliances/dow/motor_vehicle_case_study.html) traces how a Dow business unit used a problem-solving methodology called "Six Sigma" to find the root causes of MVAs and offer innovative ways to reduce them. At Dow, MVAs were the largest single cause of occupational fatalities for the period 1992 through 2002. Dow implemented its program in 2002, and by 2004 the company reduced its MVAs by 30 percent.

The case studies are available on OSHA's Alliance Program Web site (<http://www.osha.gov/dcsp/alliances/index.html>) and can be used in business and other training curricula that address management skills and occupational safety and health issues.

NIOSH Rescinds Emergency Escape Respirator's Approval

NIOSH's National Personal Protective Technology Laboratory alerted users on April 28 that the NIOSH certificate of approval TC-13F-28 for International Safety Devices Inc.'s Model 5000 Air Capsule 5-Minute Emergency Escape Breathing Apparatus has been rescinded, effective immediately.

NIOSH said it rescinded the certificate "because of the respirator's failure to meet the performance requirements" of 42 CFR Part 84. "During product audit testing conducted by NIOSH," the agency added, "ISD failed to ensure effective quality control procedures over this respirator." Rescinding means the company can no longer manufacture, assemble, sell, or distribute respirators bearing this approval number.



The Respirator User Notice is available at <http://www.cdc.gov/niosh/npptl/usernotices>.

E-mail alerts from NPPTL also are available through a quick and easy sign-up; visit <http://www.cdc.gov/niosh/npptl> or contact the Pittsburgh lab by calling (412) 386-4000 or E-mailing npptl@cdc.gov.

Safe Lifting and Movement of Nursing Home Residents: NIOSH Publication No. 2006-117 –

NIOSH has released a reference document intended for nursing home owners, administrators, nurse managers, safety and health professionals, and workers who are interested in establishing a safe resident lifting program. The guide can be accessed at <http://www.cdc.gov/niosh/docs/2006-117>.

Research conducted by the National Institute for Occupational Safety and Health (NIOSH), the Veterans' Health Administration (VHA), and the University of Wisconsin-Milwaukee has shown that safe resident lifting programs that incorporate mechanical lifting equipment can protect workers from injury, reduce workers' compensation costs, and improve the quality of care delivered to residents. This guide also presents a business case to show that the investment in lifting equipment and training can be recovered through reduced workers' compensation expenses and costs associated with lost and restricted work days.

Report Calls For Stepped-Up Effort To Protect Workers From Health Risks Posed By Nanomaterials

The federal government is not providing sufficient funding and other resources to understand and manage risks that nanomaterials pose to the health of workers in the rapidly growing nanotechnology industry, participants in a workshop hosted by the RAND Corporation concluded.

On April 25, RAND issued a report on the October 2005 workshop that brought together nanotechnology and health experts and representatives from industry, insurance firms, labor unions, and occupational health and safety organizations.

Nanotechnology involves the study and manipulation of engineered materials down to the size of a nanometer -- one billionth of a meter, or about one one-thousandth the thickness of a human hair. Because of their extremely small size, these nanomaterials can take on unusual physical and chemical properties that allow novel uses, but at the same time can create new health risks.

Although based on substances scientists already understand, nanomaterials essentially are new substances that can have properties that are very different from the bulk forms of the same chemicals. When present as small particles, some of these nanomaterials can penetrate deeply into the lungs, go through the skin, collect in various organs, and even pass through the blood-brain barrier.

According to the RAND report, government resources should focus on assessing the toxicity of nanomaterials, understanding how workers are exposed to such materials, and determining the effectiveness of measures to safeguard the health of workers. The multibillion-dollar investments in nanotechnology being made by private firms and the federal government will continue to be at risk if such steps are not taken, according to workshop participants.

"There are going to be hundreds of new nanotechnology products coming into the market over the next 10 years," said James Bartis, a RAND senior policy researcher and lead author of the report. "The system cannot handle that. Responsible development means devoting more funding and other resources to safety issues, especially as it applies to worker safety."

The federal government has directed more than \$1 billion annually toward the development of nanotechnology. But less than \$10 million -- 1 percent of the total -- is being spent on research relevant to understanding and managing the risks of occupational exposure to nanomaterials.

Several federal agencies currently have separate efforts underway dealing with managing the potential risks of nanomaterials in the workplace. These efforts are coordinated under the National Nanotechnology Initiative (<http://www.nano.gov>), which is part of the president's National Science and Technology Council. The RAND report raises questions about the value of these separate efforts and discusses development of a unified federal program to protect workers from nanomaterials.

"Nanotechnology is an emerging area of science that holds broad promise for industry, medicine and many other areas," Bartis said. "Nanomaterials such as carbon nanotubes are already being used in manufacturing and workers are already being exposed. But we don't know what exposure levels are safe and where serious health consequences could occur."

During the workshop, participants repeatedly expressed concern that not enough funding and staff were being utilized to study the occupational risks of emerging nanomaterials.

"We expected worries from labor and the occupational health experts," said Eric Landree, a RAND researcher and report co-author. "What surprised us was how strongly industry and the insurance sector supported this view. They are worried about their workers' health and also the potential legal consequences."

NIOSH, along with EPA, play a lead role in investigating the safety of nanomaterials. Participants in the RAND workshop suggested that other federal agencies -- such as the Department of Defense and the Department of Energy -- that are developing nanotechnology should also sponsor health and safety research relevant to the products they are creating.

In addition, federal safety efforts should coordinate closely with industry groups to make sure that findings move rapidly into the workplace, particularly among small and mid-sized companies that may have limited safety resources, according to workshop participants.

Additional information on "Nanomaterials in the Workplace: Policy and Planning Workshop on Occupational Safety and Health" (ISBN: 0-8330-3952-0) can be accessed at http://www.rand.org/pubs/conf_proceedings/CF227.

For additional information on NIOSH's nanotech activities, visit <http://www.cdc.gov/niosh/topics/nanotech>.

For more information about EPA's research in nanotechnology, go to <http://es.epa.gov/ncer/nano>.

Study: 7 Percent of Workers Drink on the Job

More than 7 percent of American workers drink during the workday—usually at lunch—and 9 percent have nursed a hangover in the workplace, according to a study by the University at Buffalo's Research Institute on Addictions. Young, single men are tied most often to workplace-related drinking, especially managers, salespeople, restaurant workers and those in the media, according to researchers. Researchers said the national study was meant to help managers develop workplace policy on alcohol use and to explore the causes and effects of workplace alcohol use.



Study: Forearm Supports Can Help Prevent Certain Musculoskeletal Disorders



Providing forearm support is an effective intervention to prevent musculoskeletal disorders of the upper body and aids in reducing upper body pain associated with computer work, according to researchers.

The study shows that use of large arm boards significantly reduces neck and shoulder pain as well as hand, wrist and forearm pain. "Based on these outcomes, employers should consider providing employees who use computers with appropriate forearm support," said lead author David Rempel, MD, MPH, director of the ergonomics program at San Francisco General Hospital and professor of medicine at the University of California, San Francisco (UCSF).

Study findings also show arm boards and ergonomics training provide the most protective effect, with a statistically significant reduction in both neck and shoulder pain and right hand/wrist/forearm pain in comparison to the control group, who did not receive forearm support. The boards reduced the risk of incidence of neck and shoulder disorders by nearly half.

According to the researchers, musculoskeletal disorders of the neck, shoulders and arms are a common occupational health problem for individuals involved in computer-based customer service work. Specific disorders include wrist tendonitis, elbow tendonitis and muscle strain of the neck and upper back. These health problems account for a majority of lost work time in call centers and other computer-based jobs, the researchers said. "Extended hours of mouse or keyboard use and sustained awkward postures, such as wrist extension, are the most consistently observed risk factors for musculoskeletal disorders," Rempel added.

The one year, randomized study evaluated the effects of two workstation interventions on the musculoskeletal health of call center employees -- a padded forearm support and a trackball. The forearm support is commonly called an arm board and attaches to the top front edge of the work surface. The trackball replaces a computer mouse and uses a large ball for cursor motion. The researchers tested employees from two customer service center sites of a large health maintenance organization.

Employees had to perform computer based customer service work for a minimum of 20 hours per week in order to qualify for the study. For one year, 182 participants filled out a weekly questionnaire to assess pain level in their hands, wrists, arms, upper backs and shoulders. Participants were randomized into four groups, each receiving a different intervention: ergonomics training, training plus a trackball, training plus forearm support, or training with both a trackball and forearm support.

Outcome measures included weekly pain severity scores and diagnosis of a new musculoskeletal disorder in the upper extremities or the neck-shoulder region based on physical examination performed by a physician. The trackball intervention had no effect on right upper extremity disorders.

"The trackball was difficult for some participants to use," Rempel said. "Employees with hand pain may want to try them, but they should stop if it is difficult to use."

The researchers also performed a return-on-investment calculation for the study to estimate the effects of ergonomic interventions on productivity and costs. Their calculations predicted a full return of armboard costs for employers within 10.6 months of purchase.

"Based on this study, it is in the best interest of the company and the employees to provide forearm supports and training," Rempel concluded.

In the study, the researchers also outline other ergonomic-specific tasks that employees who use computers can do to relieve pain on their own. They suggest employees take scheduled breaks, maintain an erect posture, adjust chair height so thighs are parallel to the floor, adjust arm support and work surface height so the forearms are parallel to the floor, adjust the mouse and keyboard location to minimize the reach, and adjust monitor height so that the center of the monitor is approximately 15 degrees below the visual horizon.

Study: Exposure To *Pfiesteria* Does Not Pose Danger To Commercial Fishermen As Once Believed

Commercial fishermen do not face significant health risks from routine occupational exposure to *Pfiesteria* in estuaries, according to researchers.

In a study recently accepted for publication by *Environmental Health Perspectives*, researchers found no correlation between specific human health effects in "watermen" (commercial fishermen) and low-level exposure to the *dinoflagellate Pfiesteria* in areas of the Chesapeake Bay.



In the summer of 1997, a group of watermen working on the Pocomoke River off the Chesapeake Bay developed a pattern of deficits in learning and memory after exposure to areas that had been associated with several fish kills, which some scientists say were caused by *Pfiesteria* outbreaks. Research personnel studying *Pfiesteria* in the laboratory similarly reported neuropsychological deficits after exposure.

But less is known about the health risks of chronic, low-level exposure to *Pfiesteria* strains, which typically are found in estuaries of the U.S. Mid-Atlantic region in the summer and fall.

The current study is the first systematic, multiyear effort to correlate human health effects with exposure to waterways where *Pfiesteria* has been clearly documented.

The research team followed 88 watermen and 19 controls over a total of four years (1999-2002). Watermen averaged 10 hours or more per week on Maryland Chesapeake waters or tributaries. Controls -- community members matched to the watermen by zip code, age, and educational level -- had minimal contact with estuarine waters.

Study subjects were questioned biweekly about any symptoms, the amount of time they had been exposed to waters, and whether they had been exposed to any chemical toxicants. They underwent neuropsychological testing at the beginning and end of each year's summer fishing season. The two-hour tests were designed to assess a variety of cognitive functions that *Pfiesteria* research suggested could be affected by exposure.

The researchers analyzed more than 3,500 samples collected during the study period from the water column throughout the region where the watermen worked. Each year, *Pfiesteria* was most prevalent during the late summer and early fall, and then dipped below detection levels in the winter.

The researchers found no correlation between the watermen's work in any area where *Pfiesteria* was identified and any specific changes on tests or reported symptoms. The scientists point out that unique, isolated outbreaks of *Pfiesteria* or unusually toxic strains of the organism could plausibly cause human health effects. Absent these conditions, however, watermen do not appear to face significant health risks during routine occupational exposure to waters where *Pfiesteria* is found.

The lead author of the study was J. Glenn Morris of the Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine, Baltimore. Other authors included Lynn M. Grattan, Leslie A. Wilson, Walter Meyer, Robert McCarter, Holly A. Bowers, J. Richard Hebel, Diane L. Matuszak, and David W. Oldach. The article is available free of charge at <http://www.ehponline.org/docs/2006/8627/abstract.html>.

Comprehensive Study Finds Driver Distraction To Blame In Most Crashes, Near-Crashes

Driver inattention -- such as drivers who are chatting on cell phones or putting on makeup, or those who are drowsy -- is the leading factor in most crashes and near-crashes, according to a landmark research report released by the federal government.

Adding to the growing body of research on driver inattention, the National Highway Traffic Safety Administration (NHTSA) and the Virginia Tech Transportation Institute (VTTI) found that nearly 80 percent of crashes and 65 percent of near-crashes involved some form of driver inattention within three seconds before the event. Primary causes of driver inattention are distracting activities, such as cell phone use and drowsiness.



"This important research illustrates the potentially dire consequences that can occur while driving distracted or drowsy. It's crucial that drivers always be alert when on the road," said Jacqueline Glassman, acting administrator of NHTSA.

The 100-Car Naturalistic Driving Study tracked the behavior of the drivers of 100 vehicles equipped with video and sensor devices for more than one year. During that time, the vehicles were driven nearly 2,000,000 miles, yielding 42,300 hours of data. The 241 drivers of the vehicles were involved in 82 crashes, 761 near crashes, and 8,295 critical incidents.

"The huge database developed through this breakthrough study is enormously valuable in helping us to understand -- and prevent -- motor vehicle crashes," said Dr. Tom Dingus, director of VTTI.

In addition, a follow-on analysis to the 100-Car Study also has been released. Focused on the types of driver inattention and their associated risk, key findings include:

- Drowsiness is a significant problem that increases a driver's risk of a crash or near-crash by at least a factor of four. But drowsy driving may be significantly under-reported in police crash investigations.
- The most common distraction for drivers is the use of cell phones. However, the number of crashes and near-crashes attributable to dialing is nearly identical to the number associated with talking or listening. Dialing is more dangerous but occurs less often than talking or listening.
- Reaching for a moving object increased the risk of a crash or near-crash by 9 times; looking at an external object by 3.7 times; reading by 3 times; applying makeup by 3 times; dialing a hand-held device (typically a cell phone) by almost 3 times; and talking or listening on a hand-held device by 1.3 times.
- Drivers who engage frequently in distracting activities are more likely to be involved in an inattention-related crash or near-crash. However, drivers are often unable to predict when it is safe to look away from the road to multi-task because the situation can change abruptly leaving the driver no time to react even when looking away from the forward roadway for only a brief time.

Officials with the Governors Highway Safety Association (GHSA) said that given longer commutes and time spent behind the wheel, it is not surprising that drivers suffer from drowsiness and increasingly feel the need to multi-task. Lt. Colonel Jim Champagne, GHSA chairman, cautioned lawmakers not to interpret these results as a need for new legislative initiatives. "While today's study provides a wealth of information, it is only one study and a piece of the puzzle. This project provides another set of data which needs to be considered by federal and state decision makers when developing a comprehensive highway safety program," he said.

The 100-Car Study and its follow-on analysis were co-sponsored by NHTSA, the Virginia Transportation Research Council (the research division of the Virginia Department of Transportation) and Virginia Tech.

The background and results of both studies are available on NHTSA's Web site under Research and Development at <http://www-nrd.nhtsa.dot.gov/departments/nrd-13/newDriverDistraction.html>.

See related article, [Study: Hands-Free Devices Impair Driving](#).

Tips: Handling Eye Injuries

Hundreds of eye injuries happen everyday, and they can happen anywhere -- even on the set of a popular television series. Such was the case with "Desperate Housewives" actress Teri Hatcher, who suffered an injury to her eye on April 25 from an exploding light bulb.

"While most eye injuries are preventable, freak accidents can happen anywhere," said Richard Bensinger, M.D., a Seattle-area ophthalmologist. "Like any other injury, the faster you get the proper medical treatment, the better your chances of avoiding further injury. In many cases, prompt and correct treatment can mean the difference between sight and blindness."

See below for American Academy of Ophthalmology recommendations regarding different types of eye injuries.

"The best way to treat eye injuries is to avoid them," Bensinger added. "So if you are going to be in a place where you may be at risk for eye injury, take the proper steps, including wearing proper eye safety glasses or goggles that can protect your eyes." Situations where you may be at risk for eye injury include while you are at work or during sports or recreational activities, yard work or hobbies.

For all eye injuries

- Do not touch, rub or apply pressure to the eye.
- Do not try to remove the object stuck in the eye.
- See a doctor as soon as possible.

If your eye has been cut or punctured

- Gently place shield or cup over eye.
- Do not rinse with water.
- Do not remove the object stuck in eye.
- Do not rub or apply pressure to eye.
- After you have finished shielding, see a physician immediately.



For more information on treating eye injuries, visit the Academy's Web site at <http://www.aaopt.org/patients>. Also see OSHA's Eye and Face Protection eTool at <http://www.osha.gov/SLTC/etools/eyeandface/index.html>.

NIOSH On-The-Job Training Guide

NIOSH has published an excellent new publication about coaching for on-the-job training. Various training methods have evolved to ensure that a trainee will absorb the information presented rather than simply emulate what the instructor is teaching. These methods have been brought together in a guide for developing an effective formalized OJT program.

www.cdc.gov/niosh/mining/products/product140.htm

This guide contains materials for teaching a one-day workshop that will better hone the knowledge and skills of trainers/coaches selected to conduct OJT. The guide has been formatted as a notebook divided into five sections:

1. Developing a coaching program discusses considerations for setting up a formal OJT program.
2. Conducting a workshop explains how to set up and conduct a workshop to train experienced workers to be successful OJT coaches.
3. Instructor's notes for workshop provides support for safety and training professionals who would like to conduct a workshop.
4. Slides for workshop gives hard copies of slides that can be used during the workshop.
5. Student workbook is trainee materials that coaches follow during the workshop and take with them to use as reference material as they practice their coaching skills.

Time for Springtime Safety Awareness - Pesticide Hazards Message

Spring is here and many of your employees will start (or intensify) their mission to keep their lawns free of pests. Why not include some information about the safe use of pesticides in your next newsletter or safety meeting? Here's something to get you started.

Pesticides and herbicides may be some of the most unpleasant and dangerous chemicals we use. No pesticide is 100 percent safe; even common products like 2,4-D, malathion, benomyl, and diazinon have been linked to a wide range of disorders, including an increased risk of cancer. Pesticides also kill beneficial insects and so, over time, may actually make your garden or lawn more susceptible to disease. If you must use pesticides in your yard or garden, take the following precautions to be as safe as possible.

Avoid overkill. Identify the pest or disease you want to eradicate, and then choose a product designed for that problem. Ask your local cooperative extension agent or a garden-supply dealer for advice.

Read the label carefully before buying a pesticide. Make sure it bears the manufacturer's phone number for emergency information.

Buy only the amount you think you'll use in the next month or two.



Long-term storage of pesticides is not recommended because even well-sealed containers can leak, and any evaporation alters the pesticide's strength/potency. If you must store a pesticide, put it in a locked cabinet in an area away from food, first-aid supplies, and cleansers. Leave it in the original container; for extra protection against leakage, place the entire container inside an airtight plastic container. Save all instructions and warning labels.

When transporting a pesticide home from the store, put it in the trunk of your car and make sure that it can't be knocked over if you should make a sudden stop.

Be certain that you use the proper formulation for diluting a concentrated pesticide.

Apply pesticides on a still day to lessen the chance that the wind will carry the chemical elsewhere, and warn your close neighbors before you spray.

Remove toys, lawn furniture, and barbecue grills from the area, or carefully cover them with plastic. Also cover pools or ponds, especially ponds that contain fish.

Never experiment with pesticides. Don't mix products together to kill two birds with one stone; you may kill a lot more than two birds.

Some weedkillers, such as those with sodium chlorate and potassium chlorate are explosive, particularly in the dry state. They may explode or cause fire if dropped or shaken violently.

Keep children indoors or send them elsewhere to play when the pesticides are applied. Check the instructions to see when the area will be safe for humans and pets. Some products require only a few hours, but others are not safe until it rains.

Close the windows of your house or car if they are near the area being treated. Avoid spraying near a well or other water supply.

Wear rubber gloves, a long-sleeved shirt, long pants, and a hat while applying pesticides. Choose rubber or vinyl shoes rather than those made of canvas, leather, or other permeable materials. Wearing a mask and goggles is also a good idea.

If possible, remove outer clothing and shoes before entering the house, and wash them separately from other laundry. An extra rinse cycle will remove any residue from the washer. Discard clothing that is doused with the chemical.

After applying the pesticide, thoroughly rinse the tools you have used. Then take a shower, carefully washing your skin and hair.

Be cautious when disposing of pesticides, even if the container is empty. The label will give you instructions, or you can contact your local health department.

Never pour leftover pesticides down the sink or toilet, and never burn pesticide containers or place them in an incinerator.

Safety Training Strategies – Safety CSI

Here is a great and dramatic icebreaker that could be used on a health and safety introduction course for some new workers. Make a body stuffed out of old clothes, with a balloon for a head. Lay it out in the middle of the training room, like a crime scene, with various possible causes around it ?- a stepladder, power tool and cable, some bits of wood, chemicals etc. The body was also wearing PPE incorrectly, and there was a jobsheet next to it with obviously too many jobs for one day (to suggest stress).

Cover up most of the body up with sheets before anyone arrives so you could only see parts of the causes and the body. It certainly will intrigue the employees as they arrived and register, and start your course with a dramatic revealing of the crime. Put them into investigation teams, where they had to guess what had actually caused the injury, and then how it might have been prevented. After about an hour of intense activity, you could actually have worked through about half of the content of the one day course, and they could have actively engaged in remembering it in great detail.

Safety Training Strategies – SNAP!

One approach to try with Lock out Tag out training is use a LOTO simulator-- a rat trap. Take the trap and write with bold letters on the audience side LOTO Trainer. Also drill a hole in the rat trap on the sprung side (that's the side that the trap bar lays when the trap is not set up. Have a squeeze horn available too and label it E-Stop.



During LOTO training, use the rat trap to demonstrate how fast a machine can bite you. Have a volunteer man the E-Stop and instruct them that you don't need lock out on the machine because he is watching the E-Stop for me. Instruct the watcher further to make sure he sets off the E Stop before you get hurt. Set the trap up and use a tool (a pencil) to work on the machine and then wait for the eventual snapping of the pencil when the watcher is not quick enough to activate the E Stop.

This approach provides an opportunity to talk about the proper lock out procedure and demonstrate the procedure on the rat trap, explaining how it's vital to be sure to release the stored energy. Then put your lock out lock and tag through the hole in the rat trap. Emphasize the most important part of a lock out by trying to make the machine work by pressing the activating switch. Simulate working on the machine safely and then reversing the procedure when complete. The snap of the trap and the breaking of the pencil are dramatic and a great demonstration of what could happen if LOTO is not followed even for a simple item like a rat trap.

Safety Tidbits (from "Safety Stuff" by Richard Hawk Inc. <http://www.richardhawking.com>)

- Every year, over 600 Parisians are hospitalized after slipping on doggy-dodo.
- The risk that a pedestrian struck by a car will die:
 - § In urban settings: 2%
 - § In rural ones: 5%
- Coca-Cola was once marketed as "the best cure for a hangover."
- Almost one in every five fatal farm accidents is caused by an animal.
- The worst U.S. tidal wave struck Hilo, Hawaii, in 1946, killing 179 people.
- Ernest Hemingway read his own obituary in papers after his plane crashed in 1954.
- Makes sense: Venice is the most frequently flooded city on the Earth
- Ex-Lax was originally called Bo-Bo's.
- The added risk of fatalities when interstate rural speed limits in the US went from 55 to 65 mph: 19%. Serious injuries increased by 40%.

Strange, But True ... Electric Underpants

Just when I think I've heard it all when it comes to what extent some people will go to to fake an injury, I find something like this!

Background: Marcus Danquah, 41 of Kirton Lindsey, England, sued British appliance maker Morphy Richards, seeking ?300,000. He claimed that a faulty clothes iron had given him an electric shock and a heart attack.

Exposed!: But the company alleged that he had wired the iron so that it became live and would give an electric shock to anyone who touched it. It also claims that he used the "amps-in-his pants" device in his underwear to create false reading on a hospital heart monitor.

Danquah, who'd already spent more than \$20,000 in legal fees, was ordered to pay the company's court costs. --*The Guardian*

HUMOR CORNER: "Do Humans Get Hair Balls Like Cats?"

Not exactly, but your own hair can kill you. Hair bezoars (trichobezoars) are pathological masses of swallowed hair that form, harden, and become lodged in the human gastrointestinal tract. We have the capacity to form bezoars, as do such animals as goats and Persian cats. Human bezoars can cause abdominal obstruction, hemorrhage, and perforations. Death results in 30 percent of diagnosed cases left untreated. A bezoar-related death is often prolonged and excruciatingly painful.

Hair bezoars occur occasionally in people who chew their hair, most frequently young girls and women. People who chew their hair inevitably swallow some too. If this is done habitually, a hair bezoar can result. The person suspects nothing until symptoms emerge. Hair bezoars are less of a health problem these days because hairstyles for both males and females are shorter.

Medical treatment for human bezoars can include endoscopy (viewing the bezoar through an inserted small, flexible fiberoptic tube), injecting the bezoar with an enzyme solution to fragment it, or surgery.

Articles on bezoars surface in the medical literature from time to time. In one of these, three Belgian doctors used the colorful name "Rapunzel Syndrome" to describe an unusual case of the trichobezoar in a fourteen-year-old girl who loved to eat her stuffed toy animals as well as the family carpet.

More Wacky News and Other Stuff

- Why was the blood donation unsuccessful? It was all in vein.
- In the news . . .
 - § *MAN KILLED OVER PHONE*
 - § *WATERSKIING ACCIDENT RULED ACCIDENTAL*
 - § *JUDGE NOT CONVINCED MURDER VICTIM IS ALIVE*
 - § *HOSPITALS SUED BY SEVEN FOOT DOCTORS*