OSHA’s Voluntary Protection Programs Offer Advantages

Here’s one way you may not have thought of to reduce workers’ compensation premiums and cut lost workday incidence rates by as much as 52% below your industry average: the Voluntary Protection Programs (VPP) of the Occupational Safety and Health Administration (OSHA). Those, and other results, have been achieved by companies that have participated in VPP.

What is VPP? Started in 1979, it is a comprehensive safety and health management program. Basically, worksites are rewarded for cooperative relationships between manage-
Achieving Star VPP Status

(Continued from page 1) launched the "Safety Challenge," and the entire Ames facility, along with its 40+ outside contractors and vendors, now receives yearly interactive safety training from a team of employee trainers. The four-hour sessions deliver pertinent safety information in a fun, interactive manner. Each year employees walk away with valuable safety knowledge, and the sessions are one of the greatest team-building events the company goes through.

In January 2003, we submitted our final application to IOSHA and in December received formal recommendation to become a VPP Star facility. In May 2004, a formal celebration will occur with awards, a flag-raising and a celebration for all employees. After all, employees are the most valuable resource to Sauer-Danfoss, and this achievement wouldn’t have been possible without them.

Sauer-Danfoss Inc. is a worldwide leader in the design, manufacture and sale of engineered hydraulic and electronic systems and components, for use primarily in applications of mobile equipment. Sauer-Danfoss has more than 7,000 employees worldwide and revenue of more than $1 billion. For more details please contact Bruce Gartin at bgartin@sauer-danfoss.com or visit www.sauer-danfoss.com.

A team approach that includes physicians, physical therapists, psychologists, vocational counselors and social workers may be the answer. Using this approach, the Spine Rehabilitation Program in the University of Iowa Department of Orthopaedics and Rehabilitation has seen promising results with chronic back pain patients.

Each member of the team plays a vital role in resolving the employee’s chronic back pain. The physician will employ various medications to treat the pain such as amitriptyline, neurontin, non-steroidal anti-inflammatory drugs (NSAIDs), Ultram or opiates. The physical therapist will develop stabilization exercises and aerobic conditioning to help alleviate pain. Psychologists will work with the employee on coping skills, relaxation training, and stress and pain management. In vocational retraining, the employee will learn to overcome his/her feeling of "I can’t go back to work" or "I don’t want to go back to work." And the social worker will help the person alter his or her focus from "I can’t work and need disability for the rest of my life" to "I can do some work."

How successful has the UI Spine Rehabilitation Program been? Of 129 patients who completed the program, 68% had returned to work at the two-year follow-up.

Before being accepted into the Spine Rehabilitation Program, an employee goes through a full-day evaluation by all team members. Following the evaluation, the team meets to discuss whether the patient/employee is motivated to resolve their pain and willing to address all aspects of the program including medication dependence, work retraining, smoking cessation, family issues, and psychological or personality issues. If accepted into the program, the patient/employee undergoes an intensive two-week rehabilitation program with follow-up visits at one, three and six months.

Check with your local WORKSAFE IOWA associate for a similar program in your area or for information on the UI program.
Tune Up Your Hearing Conservation Training

Your hearing conservation training sessions may need a periodic tune-up to ensure they don’t become nap time for the participants. Fortunately, interesting, informative materials are available from a variety of sources.

One source of technical support for hearing conservation training is the Aearo Company, which produces audio tapes, CD’s, and videos (described at /www.aearo.com/html/industrial/tech01.asp#training). For example, “Listening in Noise: The Virtues of High Fidelity Hearing Protectors” is a two-part (15 minutes each) Aearo Co. program on basic acoustical concepts. It also covers the effects of noise-induced audio clips on the audio tapes or CD’s demonstrate the ability to hear in a noisy environment using various hearing protectors. The company’s videos run from 5-20 minutes in length and range from an overview of a hearing conservation program (“Hearsafe”), to a trip through a 20-foot ear (“It’s Up To You”) to discussions with celebrities (“Listen Up with Norm Crosby”). In “Sound of Sound,” workers talk candidly about deafness and the loneliness of hearing loss.

You can also find attention-getting teaching materials through the National Aeronautics and Space Administration (NASA). The sounds of NASA’s Glenn Research Center—an industrial blower, jet aircraft takeoff/landing, wind tunnel startup sequence—are heard as “Auditory Demonstrations in Acoustics and Hearing Conservation.” Developed for NASA’s own hearing conservation training programs, the CD has each demonstration on a separate track, introduced by a preceding track of descriptive or instructional comments, so you can select the tracks that fit your training. A second demonstration disc (“Auditory Demonstrations II”) illustrates the impact of hearing loss on everyday listening situations, such as recordings of music that demonstrate auditory changes due to progressive noise-related hearing loss.

For more information on these resources, go to http://facilities.grc.nasa.gov/atl/index.html

And, of course, many print materials are available, from brief pamphlets to longer booklets. Aearo Co., for example, has “An Earful of Sound Advice About Hearing Protection” and “Life Can Be Loud: Know Your Hearing Protection.” These guides to noise hazards and hearing protection are written in language accessible to an interested adult reader.

Entire publications are available online in the Hearing Loss and Occupational Noise Library at http://www.nonoise.org. Some examples: a comprehensive but not highly technical OSHA publication entitled “Noise Control: A guide for workers and employers” or the North Carolina Department of Labor’s “Guide to Developing and Maintaining an Effective Hearing Conservation Program.” Some final tips, courtesy of Cindy Baldwin, CIH, senior industrial hygienist with Terracon, who spoke at the Sixth Annual Occupational Health Symposium in Iowa City.

• OSHA’s guidelines and required components for

New Rules for Federal Workplace Drug Testing

The Substance Abuse and Mental Health Services Administration (SAMHSA) of the Department of Health and Human Services is proposing a new rule that would allow federal agencies to use sweat, saliva, and hair in federal drug testing programs that now only test urine. The proposal allows specimens to be tested immediately upon collection rather than require testing off-site. Federal agencies will choose whether to use the new tests.

The proposed rule has the potential to affect more than 400,000 federal workers—those in testing-designated positions and others who may be involved in a workplace accident or show signs of possible drug use. The rule was printed in the Federal Register the week of April 5 and will be open for comment for 90 days.

Source: SAMHSA Website accessed on April 8, 2004 at http://www.samhsa.gov/hottopics/click_drugtesting.html

(Continued on page 5)
Chemical manufacturers and importers are required to evaluate the hazards of the chemicals they produce or import and provide information about them through labels on shipped containers and MSDS’s. John Henshaw, Assistant Secretary of Labor for Occupational Safety and Health told the US Senate Subcommittee on Employment, Safety and Training that since the HCS was adopted, the availability of chemical information in workplaces has increased dramatically, and the provision of labels and MSDS’s with products has become a standard business practice. Surveys conducted by OSHA have shown that employers rely on MSDS’s to select less hazardous substitutes and identify appropriate protective measures.

There are, however, concerns about the quality of information disseminated under the HCS, in particular, whether information is consistently accurate on MSDS’s. A new OSHA hazard communication tool kit addresses these issues by providing substantive guidance to employers who are evaluating hazards, offering worker training, and preparing MSDS’s; implementing an alliance with the Society for Chemical Hazard Communication, a professional society with expertise in the development of labels and MSDS’s; launching an enforcement initiative to identify critical information on a number of chemicals for OSHA’s compliance staff to use when reviewing MSDS’s for those chemicals (supplemented by an MSDS review tool and compliance staff training); creating a web page, accessible from the home page, that consolidates these and other hazard communication resources.

As a longer-term approach to improving hazard communication, OSHA is also considering implementation of the Globally Harmonized System of Classification and Comprehensibility Labeling of Chemicals (GHS). The GHS addresses comprehensibility of hazard communication, for example with standardized approaches to labels and MSDS format.


Related to the overall hazard communication initiative, OSHA is developing an enforcement initiative for compliance officers to review and evaluate the adequacy of material safety data sheets (MSDS’s). Under this program, the agency will choose a certain number of chemicals, and following the requirements in the HCS, identify some critical elements (phrases, words, etc.) that should appear on an accurate MSDS.

Compliance officers would then use this information as they encounter these chemicals at worksites. Where MSDS’s are found that do not contain these critical elements, OSHA will notify the manufacturer in writing of the deficiencies or inaccuracies. Manufacturers will be required to correct and update their MSDS’s. They will then have to respond to OSHA and inform the agency of the steps taken to correct and update their data sheets. If manufacturers fail to respond or do not update their MSDS’s, they can potentially be fined under the HCS.

In addition, OSHA is alerting compliance staff and the public of the availability of International Chemical Safety Cards on OSHA’s web page. These cards, which provide information similar to MSDS’s, are internationally developed and peer reviewed, cover over 1300 substances, and are...
available in 14 languages. They are being modified to be consistent with the MSDS format, so they will be good screening tools to be used when reviewing MSDS’s for particular substances to be covered.


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**Proper Employee Training Under The HCS**

Employees are to be trained at the time they are assigned to work with a hazardous chemical. The intent of this provision (1910.1200(h)) is to provide information prior to exposure to prevent adverse health effects. This purpose cannot be met if training is delayed.

The training provisions of the Hazard Communication Standard (HCS) are not satisfied solely by giving an employee the data sheets to read. An employer’s training program is to be a forum for explaining not only the hazards of the chemicals in the specific work area but also how to use the information generated in the hazard communication program. This can be accomplished in many ways (audiovisuals, classroom instruction, interactive video), and should include an opportunity for employees to ask questions to ensure they understand the information presented to them.

Training need not be conducted on each chemical found in the workplace, but may be conducted by categories of hazard that are or may be encountered by employees during the course of their duties (e.g., carcinogens, sensitizers, acutely toxic agents). Furthermore, the training must be comprehensible. If the employees receive job instructions in a language other than English, then the training and information to be conveyed under the HCS will also need to be conducted in that language.


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**Tune Up Your Hearing Conservation Training**

(Continued from page 3)

A hearing program must be posted in your facility. That poster, and others, are available from Aearo Company (at http://www.aearo.com/html/industrial/poster6b.htm).

- If you use a CD for auditory demonstrations, set your volume level and don’t change it.
- To convince people to wear PPE, find out their hobby. It may well relate to the need for good hearing—a musician, for example, or a duck hunter with poor hearing who will miss the ducks flying behind him.
- Don’t forget to document your training: you need the names of individuals being trained, name and qualifications of trainer, materials used, and dates and times of training.

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**Hazard Warning: Do You Know the Symbol?**

Symbol hazard warnings provide basic information for determining which precautionary measures to use when handling hazardous chemical substances and/or dealing with a fire.

The National Fire Protection Association (NFPA) uses a symbol system designed as a diamond-shaped label containing four differently colored squares. A number (0 - 4) or an abbreviation is added to each square indicating the order of hazard severity.

**General Rating Summary**

**Health (Blue)**

4 Danger May be fatal on short exposure—specialized protective equipment required
3 Warning Corrosive or toxic—avoid skin contact or inhalation
2 Warning May be harmful if inhaled or absorbed
1 Caution May be irritating
0 No unusual hazard

**Flammability (Red)**

4 Danger Flammable gas or extremely flammable liquid
3 Warning Flammable liquid flash point below 100°F
2 Caution Combustible liquid flash point of 100°F to 200°F
1 Combustible if heated
0 Not combustible

**Reactivity (Yellow)**

4 Danger Explosive at room temperature
3 Danger May be explosive if shocked, heated under confinement, or mixed with water
2 Warning Unstable or may react violently if mixed with water
1 Caution May react if heated or mixed with water but not violently
0 Stable Not reactive when mixed with water

**Special Notice Key (White)**

W Water Reactive
OX Oxidizing Agent

In addition, there are "Special Precaution Symbols" that use pictures. Examples include:

- Flammable
- Explosive
- Corrosive
- Poison
- Radioactive
- Compressed Gas

Source: impi@cdc.gov accessed 04/02/04
NIOSH Resources Help with Program Assessment

The National Institute for Occupational Safety and Health (NIOSH) has a manual and companion site on the NIOSH web page to help employers assess and measure the effectiveness of their occupational safety and health programs or initiatives.

The manual, "Does It Really Work? How to Evaluate Safety and Health Changes in the Workplace," offers strategic guidance based on four steps:

1) forming a team,
2) collecting data,
3) analyzing the data, and
4) sharing the results.

The manual explains each step in easy-to-read, practical terms. It also provides case studies of interventions intended to reduce serious work-related injuries in four industries.

The case studies describe partnerships between employers and employees that addressed prevention of back injuries in nursing homes; strains to employees’ backs, arms, and hands in meat processing; cuts from case-cutting tools in a grocery store chain; and exposures to perchloroethylene in dry cleaning establishments.

The new web page at www.cdc.gov/niosh/docs/2004-135 presents the text of the manual, with links to the case studies, suggested steps for evaluating changes, and even forms and surveys that can be used in assessments.

Printed copies of the manual are available by calling 1-800-35-NIOSH (1-800-356-4674) or through the NIOSH home page at www.cdc.gov/niosh.

Upcoming Occupational Health Courses

NIOSH-Approved Spirometry Training for Workers
Screening Course
July 29-30, 2004
November 4-5, 2004
The University of Iowa, Oakdale Hall, Iowa City, IA
This NIOSH-approved course is designed to provide a comprehensive theoretical framework combined with practical training necessary to conduct spirometry testing and screening for workers. Enrollment is limited to 12 for each course date listed above. For details or to register, contact Colleen Gross-Advani at 319/335-4684 or by e-mail colleen-gross-advani@uiowa.edu.

Case Management Nursing Conference
Friday, October 22, 2004
Holiday Inn of Iowa City/Coralville, Coralville, IA
This annual conference is designed for case managers, occupational health nurses, and others who perform case management and return-to-work of employees. The one-day program is designed to provide up-to-date information and state-of-the-art solutions used in case management. Contact Kimberly Gordon at 319/335-4423 or by e-mail kimberly-gordon@uiowa.edu for more information.

Promoting Agricultural Safety and Health Policy
Thursday, October 28 and Friday, October 29, 2004
Iowa City, IA
The objectives of the conference are to provide an overview of previously recommended policy changes; educate partners on how policy change occurs; raise awareness of the role of advocacy in promoting public health; develop organizational and advocacy skills; facilitate working relationships between researchers, health care professionals, and farmers; and provide a workshop opportunity for collaborative policy effort.

For more information, contact Eileen Fisher at 319/335-4224 or by e-mail at eileen-fisher@uiowa.edu.

Sixth Annual Occupational Health Nursing Conference
Tentative date Friday, October 29, 2004
Location to be determined
This conference will allow participants to enhance their knowledge of current issues and opportunities related to occupational health nursing. The course is intended for occupational health nurses and other health care professionals who are responsible for occupational health and safety. Contact Kimberly Gordon at 319/335-4423 or by e-mail kimberly-gordon@uiowa.edu for more information.

For updated course listings see our website at http://www.public-health.uiowa.edu/Heartland/continuinged.htm
**Expert:**
G. Rodney Alberhasky, OD, Clinic Director, Alberhasky Eye Clinic, Iowa City, IA. Dr. Alberhasky spoke in March at the Sixth Annual Occupational Health Symposium co-sponsored by WORKSAFE IOWA.

**Question:**
With the increased use of computers at work and at home, are you seeing more patients with computer-related vision problems?

**Answer:**
Yes, about 10-20% of my patients schedule an appointment because of headaches, overall fatigue, burning or dry eyes, double vision and similar problems related to using a computer.

**Question:**
What types of problems are you seeing?

**Answer:**
The most common problem is Computer Vision Syndrome (CVS). CVS occurs because the eyes and brain react differently to characters on the screen (pixels) than they do to printed characters. Printed material is made up of dense black characters, which are consistent from edge to edge. This is the type of image that our focusing system is accustomed to seeing. Pixels on a computer monitor lack this contrast. Instead, these characters are darkest at the center and fade at the edges, thereby lacking a well-defined border. The eyes have difficulty maintaining focus on these images. When confronted with a pixel-type image the eyes drift out beyond the plane of the screen, to a point called the resting point of accommodation (RPA). The eyes continually shift back and forth, between the RPA and the screen. This can happen tens of thousands of times per day in someone who spends the bulk of their workday at the computer. This continuous contracting/relaxing of the eyes’ focusing muscles results in ocular and general fatigue, burning, tired eyes, blurred vision, headaches, and ultimately a decline in employee comfort and productivity.

According to a recent Harris Poll, CVS is the most common work-related complaint, far exceeding carpal tunnel syndrome. CVS affects nearly 90% of people who spend three or more hours a day at the computer. The American Optometric Association (AOA) indicates that 15% of eye exams are motivated by CVS.

**Question:**
How can you test a patient for CVS?

**Answer:**
Patients complete a questionnaire which asks about symptoms related to computer use prior to their examination. Based on their answers on the questionnaire and their occupation, it helps to determine if they have, or are at risk of developing, CVS. If there is significant symptomology, I use a pixel-based testing device (Prio unit) to examine them. The Prio tester accurately replicates the visual stimulus of the patient’s computer, thereby allowing me to observe how they interface with their monitor and make an appropriate diagnosis.

**Question:**
What can be done for patients with CVS?

**Answer:**
If a diagnosis of CVS is made, the next step is the prescription of lenses (Prio glasses) to be used specifically for working at the computer.

**Question:**
How are Prio glasses different from other types of computer glasses?

**Answer:**
Prio glasses are different in several ways. First and foremost, the prescription is derived using a pixel-based testing unit. The prescription is of little value if the testing stimulus that I use does not represent the causative agent.

Also, developing the prescription for Prio glasses includes users’ taking measurements at their workstation, such as the distance from the bridge of their nose to the monitor and the angle of the monitor. The primary colors used on the computer screen determine which coatings and tints to use on the lenses. All of these factors go into deriving the best lens combination for the patient.

**Question:**
Is there an ideal set-up for a computer workstation as it relates to vision?

**Answer:**
Ergonomic considerations such as altering the lighting at the workstation to reduce glare; adjusting the placement of the monitor, which ideally should be placed at 10-20 degrees below a person’s line of sight; and wearing glasses with Prio lenses, which have special coatings to reduce glare and the correction power to set the focusing system at rest on the plane of the screen, can all help minimize CVS.

**Question:**
Where can I go for additional information?

**Answer:**
For general information on vision problems, go to the American Optometric Association website at www.aoanet.org and for more information on Prio lenses, go to www.prio.com.
The Workplace Health and Safety Report is published three times a year by WORKSAFE IOWA for members of its Occupational Medicine Associates Network. WORKSAFE IOWA is an occupational and environmental health outreach program of the Department of Occupational and Environmental Health, College of Public Health, The University of Iowa. For more information on the WORKSAFE IOWA Occupational Medicine Associate in your area, please refer to the list at left.

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http://www.public-health.uiowa.edu/worksafe