

# Occupational Health Management™

*A monthly advisory for occupational health programs*

## INSIDE

■ Ergonomics program should encourage reporting to OSHA . . . . . 2

■ Ergonomics rule changed from earlier version . . . . . 4

■ Nerve test called unreliable for diagnosing carpal tunnel syndrome . . . . . 5

■ AAOHN endorses privacy legislation for medical records . . . . . 7

■ Scaffolding problems lead to OSHA fines . . . . . 7

■ Ship loader cited for safety defects again . . . . . 9

■ Employers sentenced to prison for lying to OSHA. . . 10

■ Special warning issued about wood chipper hazards . . . . 10

**JANUARY  
2000**

**VOL. 10, NO. 1  
(pages 1-12)**

American Health Consultants® is  
A Medical Economics Company

## Feds finally release ergonomics rule amid resistance, but some welcome it

*Much delayed proposal slips past legislative roadblocks*

If nothing else, the Occupational Safety and Health Administration should get credit for being persistent. Despite years of opposition, including a very real threat from Congress to slash the agency's funding, OSHA has released its proposed ergonomics rule for American businesses, which appears to be well on its way to being written into law.

The fight is long from over, but the release of the proposed rule indicates that OSHA is not going to back down any time soon. U.S. Secretary of Labor Alexis Herman said in a press release that an average of 300,000 workers can be spared from painful, potentially disabling injuries, and \$9 billion can be saved each year under the proposed ergonomics program standard. **(For information on how to review the proposal, see resource box, p. 3.)**

"Work-related musculoskeletal disorders such as back injuries and carpal tunnel syndrome are the most prevalent, most expensive, and most preventable workplace injuries in the country," Herman said. "Real people are suffering real injuries that can disable their bodies and

## EXECUTIVE SUMMARY

The Occupational Safety and Health Administration has released its ergonomics proposal, which has been delayed for years due to fierce opposition from Congress and business leaders. The rule could prevent thousands of musculoskeletal injuries per year, according to OSHA, but critics say it will be unnecessarily expensive and restrictive.

- Women workers could benefit more than men.
- The rule still could be changed in response to comments from business leaders and occupational health professionals.
- If the rule is enacted as described in the proposal, it could represent new business opportunities for occupational health providers.

**OHM IS NOW AVAILABLE ON-LINE!**

**Go to [www.ahcpub.com/online.html](http://www.ahcpub.com/online.html) for access.**

## Program must encourage reporting of problems

Under the ergonomics proposal from the federal Occupational Safety and Health Administration in Washington, DC, about 1.6 million employers would need to implement a basic ergonomics program that includes the following:

- assigning someone to be responsible for ergonomics;
- providing information to employees on the risk of injuries, signs and symptoms to watch for, and the importance of reporting problems early;
- setting up a system for employees to report signs and symptoms.

Full programs would be required only if one or more work-related musculoskeletal disorder (MSD) actually occurred.

The proposal's "Quick Fix" alternative to setting up a full ergonomics program works this way: Correct a hazard within 90 days, check to see that the fix works, and no further action is necessary. In addition, a "grandfather" clause gives credit to firms, which already have effective ergonomics programs in place and are working to correct hazards.

The OSHA proposal identifies six elements for a full ergonomics program:

- management leadership and employee participation;

- hazard information and reporting;
- job hazard analysis and control;
- training;
- MSD management;
- program evaluation.

OSHA intends that ergonomics programs be job-based, i.e., cover just the specific job where the risk of developing an MSD exists and jobs like it that expose other workers to the same hazard. Ergonomics programs need not cover all the jobs at the workplace.

The proposal would require that workers who experience covered MSDs receive a prompt response, evaluation of their injury, and follow-up by a health care professional, if necessary. Workers who need time off the job to recover from the injury could receive 90% of pay and 100% of benefits to limit economic loss as a result of their injuries. Workers on light duty would receive full pay and benefits.

This provision is designed to encourage early reporting to catch problems before they result in injuries. Strong evidence shows that employees are reluctant to report symptoms if doing so might cause them to take time off from work, reducing their paycheck.

Most employers in general industry will incur minimal costs. Employers who need to correct problems will spend an average of \$150 per year per workstation fixed. The total cost to employers would equal \$4.2 billion each year. ■

destroy their lives. The good news is that real solutions are available."

The proposed ergonomics program standard relies on what OSHA calls "a practical, flexible approach that reflects industry best practices and focuses on jobs where problems are severe and solutions well understood." It would require general industry employers to address ergonomics for manual handling or manufacturing production jobs. Employers also would need to fix other jobs where employees experience work-related musculoskeletal disorders.

About one-third of general industry work sites, 1.9 million, would be affected and more than 27 million workers would be protected by the standard. OSHA claims that implementing these measures would generate average savings of \$9 billion annually in workers' compensation and other direct costs alone. Fewer than 30% of general industry employers have effective ergonomics programs in place today, Herman says.

After a period of public debate and revision, OSHA says the ergonomics plan will be finalized

as a rule by the end of 2000.

Though there are many details still to assess, the ergonomics rule is welcomed by **William Patterson, MD, FACOEM, MPH**, chair of the Medical Policy Board at Occupational Health and Rehabilitation in Wilmington, MA. He says occupational health professionals should find it a useful tool in helping employers prevent on-the-job injuries.

"Any practicing occupational health physician must recognize that occupational injuries are a far more common cause of suffering and loss of income to employees, and insurance costs and lost productivity to employers, than are occupational illnesses," he says. "Given the tremendous economic and social impact of occupational injuries, it is high time that OSHA issued a standard aimed at preventing occupational injuries. My experience is that prevention is cost-effective and works."

Most employers will find that the ergonomics rule offers an opportunity to prevent a significant number of injuries, Patterson says. Occupational

health providers will play an important role in helping them get the most out of complying with the rule, he says.

“It’s about time that OSHA made a standard that addresses the common problems, not the uncommon problems,” he says. “This is a rule that will have a lot of impact on American employers.”

### **Rule endorsed by AAOHN, other groups**

The release of the proposed rule also is welcomed by **Deborah DiBenedetto**, MBA, RN, COHN-S, ABDA, president of the American Association of Occupational Health Nurses (AAOHN) in Atlanta. AAOHN supports the rule’s concept, even though there may still be some details to work out before the rule is finalized, she says.

“Employee advocates have long awaited release of this proposal, and now it appears that legislative attempts to block its release have failed,” she says. “It is important to get this proposal out for public comment. We don’t have specific comments on the proposal yet, but the association supports development of a standard that will be of benefit to both business and the national work force.”

One of the greatest benefits of the proposed rule may be ensuring equal protection for workers across the country, DiBenedetto says. Many employers already recognize the need to prevent musculoskeletal injuries, but some have not yet accepted the idea. The federal rule may bring the latecomers into the fold and ensure that all workers are protected in the same way, she says.

Though workers stand to gain a great deal from the rule, DiBenedetto points out that employers all will benefit — and occupational health professionals should be sure they recognize that point. When an ergonomics program is implemented well, the employer can expect to see reductions in lost work time and workers’ compensation costs, as well as a boost in productivity, she says.

The American College of Occupational and Environmental Medicine (ACOEM) also has come out in favor of the proposed rule, though the president expresses the same hesitance as the nursing group to endorse all aspects without a closer look. **Robert McCunney**, MD, MPH, director of environmental medicine at the Massachusetts Institute of Technology in Boston, says the ACOEM supports OSHA’s efforts to establish an ergonomic standard, and the group’s

ergonomics committee will be studying the proposal in depth.

“The college recognizes the relatively high prevalence of work-related musculoskeletal disorders that can be attributed to repetitive activities and the physical stress associated with certain jobs,” he says. “Interventions can be extraordinarily helpful in reducing the incidence and severity of those ailments.”

Employers should welcome the rule if they understand how it can benefit them, as well as their employees, McCunney says. Most interventions are relatively inexpensive, costing less than \$1,000 in most cases, he says. The return on that investment can be significantly more, in the form

## **RESOURCES**

- ✓ **Written comments**, postmarked no later than Feb. 1, 2000, must be submitted in duplicate to the Occupational Safety and Health Administration (OSHA) Docket Office, Docket No. S-777, Room N-2625, U.S. Department of Labor, 200 Constitution Ave. N.W., Washington, DC 20210. Telephone: (202) 693-2350. Comments of 10 pages or less may be faxed to the Docket Office at (202) 693-1648.
- ✓ **Comments may also be submitted electronically** through OSHA’s Web site: [www.osha.gov](http://www.osha.gov). Information such as studies, journal articles, etc., cannot be attached to the electronic response and must be submitted in duplicate to the above address. Such attachments must identify the respondent’s electronic submission by name, date, and subject, so they can be attached to the correct response.
- ✓ **Informal public hearings** will begin at 9:30 a.m. on Feb. 22, 2000, in the auditorium of the U.S. Department of Labor (Frances Perkins Building), 200 Constitution Ave. N.W., Washington, DC. Hearings will also be held beginning March 21 at the Benson Hotel, 309 S.W. Broadway, Portland, OR, and beginning April 11 at James R. Thompson Center, State of Illinois Building, 100 W. Randolph St., Chicago.
- ✓ **The ergonomics proposal was published in the Nov. 23, 1999, *Federal Register***. Copies of the proposed regulatory text, introduction, and public participation sections are available on OSHA’s ergonomic Web site: [www.osha-slc/ergonomics-standard/](http://www.osha-slc/ergonomics-standard/). OSHA also is making available, at no charge, a CD-ROM with the regulatory text, the preamble, the complete regulatory analysis, and the full discussion of health effects. Both the CD-ROM and printed copies can be ordered on the Web or by calling (202) 693-1888.

## Some Provisions Changed from February Ergonomics Proposal

The Occupational Safety and Health Administration has made a number of changes to its economic analysis and its proposed ergonomic standard since the draft proposal was first released in February 1999. These are some of the major changes from the draft proposal:

### NOVEMBER 1999 PROPOSAL

- Work Restriction Protection: 100% pay and benefits for light duty; 90% pay, 100% benefits for time off work to recover from injury (reduces costs for employers by \$300 million).
- Quick Fix option added.
- Cost estimates reviewed and increased in response to small business concerns that OSHA's estimates were too low — annual costs to employers now estimated at \$4.2 billion — more than two times greater than earlier estimates.
- Problem job fix required for the “same” job in which a covered musculoskeletal disorder (MSD) occurred.
- Incremental abatement process added (don't have to eliminate all MSDs to be in compliance).
- Training need not be repeated if employees already have received ergonomics training.
- Covered manufacturing and manual handling jobs identified with examples.

### FEBRUARY 1999 WORKING DRAFT

- Medical Removal Protection — 100% pay and benefits for light duty and time off work to recover from injury.
- Full program required for all covered MSDs.
- Preliminary annual costs for comparison purposes would have been \$1.75 billion.
- Problem job fix required for “similar” job to job in which a covered MSD occurred.
- No definition of when employer is in compliance.
- Full training for all current and new employees in problem jobs.
- No examples of manual handling jobs covered.

of reduced absenteeism and medical costs.

ACOEM will offer oral and written testimony on the rule, McCunney says. The group's only significant concern at this point is the importance of an accurate diagnosis.

“Obviously, the same conditions can occur outside of work, and the same symptoms can be from disorders that have no bearing on the job. So we want to be sure that the final rule ensures an accurate diagnosis, especially since the employer has responsibilities once the diagnosis is made,” he says.

**Charles Jeffress**, assistant secretary of labor for occupational safety and health, says the proposal includes some unique provisions to expand flexibility for employers because “one size doesn't fit all.”

The proposal includes a “Quick Fix” option as well as a grandfather clause, both designed to limit what employers need to do while effectively protecting workers. Three-quarters of general industry employers would not need to do anything until a documented, work-related injury actually occurs, he says.

Each year, 1.8 million U.S. workers experience work-related musculoskeletal disorders, such as

injuries from overexertion or repetitive motion. About one-third of these injuries, 600,000, are serious enough to require time off from work. Work-related musculoskeletal disorders (MSDs) account for one-third of all workers' compensation costs each year because these injuries can require a lengthy recovery time.

According to OSHA, women disproportionately

### SOURCES

For more information on the proposed regulation, contact:

- **William Patterson**, Medical Director, Occupational Health & Rehabilitation, 66B Concorde St., Wilmington, MA 01887. Telephone: (978) 657-3826.
- **American Association of Occupational Health Nurses**, 2920 Brandywine Road, Suite 100, Atlanta, GA 30341. Telephone: (770) 455-7757. Web: [www.aaohn.org](http://www.aaohn.org).
- **American College of Occupational and Environmental Medicine**, 1114 N. Arlington Heights Road, Arlington Heights, IL 60004. Telephone: (847) 818-1800. Fax: (847) 818-9266. Web: [www.acoem.org](http://www.acoem.org).

suffer some of the most severe MSDs. The reason is not because their bodies are more vulnerable to MSDs, but because a large number of women work in jobs associated with heavy lifting, awkward postures, or repetitive motion. Women suffer 70% of the carpal tunnel syndrome cases and 62% of the tendinitis cases that are serious enough to warrant time off work. Each year more than 100,000 women experience work-related back injuries that cause them to miss work. ■

## Past suggests difficulties ahead for ergonomics rule

Though the Occupational Safety and Health Administration appears to be intent on establishing an ergonomics rule, past experience suggests that there may still be some hurdles to overcome. In June 1995, an earlier version of the ergonomic proposal failed in a significant way.

The administration had been promising an ergonomic standard since 1990 and had released proposed versions of the standard. OSHA was progressively weakening the proposals in response to employer protests. A 1994 draft would have covered all U.S. employers, about 6.1 million employers with 96 employees, but the 1995 proposal would have covered only employers with evidence that hazards exist, about 2.6 million

employers with 21 million employees.

Business leaders vigorously opposed the proposal, saying it would put too much of a burden on employers. Congressional leaders heard their complaints and exerted extraordinary pressure on OSHA. Though OSHA technically has the power to issue an ergonomic standard over the protests of Congress, the agency's funding can be a sensitive spot. In 1995, Congress put a quick end to the debate by threatening to cut \$3.5 million from the OSHA budget — the estimated cost to OSHA of implementing an ergonomics standard.

Soon after, Barbara Silverstein, the Clinton administration's top official in charge of creating the ergonomics standard, resigned on the same day that OSHA director Joseph Dear issued a statement saying no standard would come forth soon.

More recently, the House Committee on Education and the Work force voted to require OSHA to delay publication of its ergonomic standard until the National Academy of Sciences completes a research review, which is expected in 2001. Though the House accepted the committee's recommendation, the Senate never acted on the requirement, leaving OSHA free to issue the rule. With Congress adjourned at the end of 1999, OSHA acted quickly to release the proposal and get the wheels moving for finalizing the rule.

Some changes were made to the earlier 1999 version in response to criticism. (See box, p. 4, for a comparison.) ■

## Test for carpal tunnel syndrome found unreliable

A nerve test widely used to diagnose carpal tunnel syndrome may not be reliable, according to a new study from the University of Michigan (U-M) in Ann Arbor. People without any typical carpal tunnel syndrome symptoms can have abnormal results on nerve conduction tests, casting doubt on the test's usefulness, the study says.

Part of the problem lies in the fact that the test results are greatly influenced by the person doing the test, according to the study. Published in a recent issue of the journal *Muscle & Nerve*, the study is the first of its size and kind.<sup>1</sup> A team of experts from several areas of the university concluded that doctors should use a continuous scale to evaluate test results rather than the current practice of choosing a cutoff point to distinguish

between normal and abnormal results.

"When job placement or surgery hangs in the balance, the reliability of a test like this becomes even more important," says co-author and U-M health scientist **Deborah Salerno**. "The results of our study were mixed, and, at times, the difference in reliability was striking. For reliable

### EXECUTIVE SUMMARY

New research suggests that nerve conduction tests are not reliable for diagnosing carpal tunnel syndrome.

- The expertise of the person conducting the test can be a factor in the test's reliability.
- Categories of test results, rather than absolute cutoff points, may be more useful for diagnosing patients.
- Other tests should be used to confirm a diagnosis of carpal tunnel syndrome.

results, you want to have an experienced examiner do the test and use appropriate criteria to see if the results are normal.”

The study involved 158 workers, mostly women, whose work included a large amount of time spent at a computer keyboard. Not all subjects complained of symptoms typical of carpal tunnel syndrome. All participants underwent two rounds of nerve conduction tests, spaced three weeks apart, that electrically stimulated two nerves in the wrist. The difference in response time was examined.

Two physicians performed the tests. In the first round, each physician tested both wrists of each subject. In the second round, three weeks later, tests were performed by one of the physicians in the dominant wrist only. The examiners tested two nerves for abnormalities:

**1. the median nerve**, which runs down the middle of the arm and wrist and controls the palm, thumb, and several fingers;

**2. the ulnar nerve**, which runs through the outer arm and wrist to control the back of the hand and the small and ring fingers.

The median nerve is more affected by carpal tunnel syndrome, in which overuse of the hand and wrist causes tissue swelling. This swelling, in turn, narrows the gap between the carpal (or wrist), bones, and ligaments through which the nerve runs, which causes pressure on the nerve. Women between ages 30 and 60 are most commonly affected.

Although a variety of tests can detect conditions such as carpal tunnel syndrome, nerve conduction studies have been used as the gold standard. The test uses a small jolt of electricity to stimulate each nerve. Next, the time it takes for the stimulus to reach the muscle is measured. A second stimulation of the same nerve at a different spot, or of the other major nerve, allows the lag time (known as the latency) to be compared. This comparison lets doctors spot the existence and the extent of nerve damage in different locations.

In the study, the results recorded by each examiner for each patient were compared, as were each examiner’s results from both their exams of the workers. In both cases, results showed that certain tests were better than others. Between examiners and within the same examiner, median nerve tests were more reliable than ulnar nerve tests.

A key question was how differences between examiners would affect a diagnosis of carpal

tunnel syndrome. That is, would the first examiner rate a test result as “normal” when the second rated it as “abnormal”?

To explore this, the researchers used two cutoff points to define “normal.” The first defined a difference of 0.5 milliseconds (Msec) or more between the median and ulnar tests in the same wrist as abnormal. The second used a difference of 0.8 Msec or more. Results showed that between examiners, both cutpoints had good to excellent reliability. Using the two definitions of normal, however, resulted in marked differences in results. Each examiner had higher reliability with the higher cutoff point.

“Presumably, the higher cutpoint reflected more serious nerve problems. This would make the abnormalities easier to notice, and results more reliable,” says Salerno.

In light of this, the researchers concluded that a system with more ordered categories (such as normal, equivocal, mild, or definite abnormality) would better describe results, rather than using absolute cutoff points to define “normal.”

Interestingly, between the two examiners, 36 (22%) of the workers in the first round had abnormal results. In contrast, over half (53%) of the workers in the study reported pain, burning, tingling, or numbness in the hands or wrists, which are typical symptoms of certain nerve disorders.

“Nerve conduction studies have been considered the gold standard for carpal tunnel syndrome; but abnormal results alone, without symptoms, do not define the disorder,” says Salerno. “Both symptoms and physical findings are critical for accurate test interpretations.” Accurate and reliable testing — using tests beyond nerve conduction studies — should be performed, considering that a diagnosis of carpal tunnel syndrome can lead to work-area and duty adjustments, prescription of medication, or surgery, the researchers conclude.

## Reference

1. Salerno D, Werner R, Albers J, et al. Reliability of nerve conduction studies among active workers. *Muscle & Nerve* 1999; 22:1,372-1,379. ■

## SOURCE

For more information on the study, contact:

- **Deborah Salerno**, University of Michigan, 412 Maynard, Ann Arbor, MI 48109-1399. Telephone: (734) 662-1572.

# Efforts to protect patient records' privacy supported

The American Association of Occupational Health Nurses (AAOHN) in Atlanta has announced its support for the Department of Health and Human Services' (HHS) efforts to protect the privacy of individually identifiable health information through regulations for electronic health information.

AAOHN president, **Deborah DiBenedetto**, MBA, RN, COHN-S, ABDA, says the AAOHN advocates passage of comprehensive federal legislation to safeguard the confidentiality of health information that would expand protection to include information collected and maintained in the workplace. AAOHN advocates protections to prevent inappropriate use of personal health information by employers, but not so stringent as to prevent them from accessing important information needed to administer laws, such as the Americans with Disabilities Act, and for disability management purposes.

"These proposed regulations are the first step toward protecting health information privacy of electronically transmitted and related health care records," she says.

However, these regulations have significant limitations, DiBenedetto says. "For comprehensive protection, the American people need legislation that also applies to health records maintained in paper form only as well as health information collected and maintained by employers."

The HHS proposal, announced by President Clinton on Oct. 29, follows Congress's inability to meet its Aug. 21 self-imposed deadline to pass privacy protection for health information. There are currently no federal laws protecting personal health records in any format. As more electronic databases are used to maintain worker health/medical records, the potential for inappropriate use of information increases, she says.

The proposed regulation would cover health care providers, health plans, and health care clearinghouses that transmit information electronically. Protection would start when the information becomes electronic and would stay with the information as long as it is in the hands of a covered entity. The proposal provides for:

- requiring written authorization by the individual for use and disclosure of electronic health information;

- creating a set of fair information practices to inform people about how their information is used;
- limiting the amount of information disclosed to the minimum amount necessary to accomplish the relevant purpose;
- receiving written notice of information practices from health plans and providers;
- giving individuals the right to obtain access to protected health information about them and requesting amendment or correction of protected health information that is inaccurate or incomplete. ■

## OSHA Actions

### Scaffolding problems lead to willful violation charges

Federal safety officials have cited New England Brickmaster Windows and Exteriors of Tewksbury, MA, for alleged willful and serious scaffolding safety violations at a job site in Winthrop, MA, and have proposed penalties totaling \$150,800 for those alleged violations. The company and its predecessors have a long history of similar safety violations, according to the Occupational Safety and Health Administration.

Similar fall protection violations and a number of other problems were found at a school site elsewhere in the state.

The New England Brickmaster charges were not the first for the company, says **Brenda Gordon**, OSHA area director for Boston and Southeastern Massachusetts. She says the most recent alleged violations were discovered during an inspection of a job site on May 14, 1999.

"Typically, for this company, what our compliance officers found, was a litany of scaffolding safety hazards to which employees of this company seem to be regularly exposed," says Gordon. "Unfortunately, this firm and its predecessor company have a long history of similar safety violations, all having to do with unsafe scaffolds."

Gordon notes that New England Brickmaster Windows and Exteriors has been inspected four times previously by OSHA. In addition, the

company is the offspring of a now defunct company with significant OSHA inspection history. New England Brickmaster, also of Tewksbury, was inspected by OSHA four times, with six serious and two repeat violations of the scaffold standards.

That company was dissolved in March 1992, and its assets were sold in an involuntary auction. New England Brickmaster Windows and Exteriors immediately re-opened with the employees and management from New England Brickmaster.

### ***Scaffold appeared close to collapse***

On May 14 at the Winthrop site, employees of the company were observed working at elevations of 13 feet and 20 feet above the ground while supported on a poorly constructed wood scaffold system. They were observed working without fall protection and without safe access on a scaffold that appeared structurally unsound and in danger of collapse.

Consequently, Gordon says, the company is being charged with the following alleged scaffold-safety violations:

- **Four alleged willful violations**, carrying total proposed penalties of \$140,000, for:
  - failing to ensure that a wooden scaffold system was erected in accordance with the design of a qualified person;
  - failing to provide a safe means of access to each of the three working levels of a 20-foot high wood scaffold system;
  - allowing employees to work at elevations up to 20 feet on scaffolding with damaged or weakened parts (scaffold planks and brackets not able to support their own weight and four times the maximum intended load);
  - failing to ensure that a guardrail system was installed along all open sides and ends of platforms on a wooden scaffold system.
- **Six alleged serious violations**, including proposed penalties totaling \$8,600, for:
  - employees potentially exposed to dropped tools or materials not wearing protective headgear;
  - employees exposed to falling nails not wearing protective eye wear;
  - the 2 inch x 6 inch boards used as scaffold planks were placed so their ends extended up to 4 feet beyond the end supports;
  - a competent person did not inspect the scaffold as required;
  - toeboards and screens were not provided to

protect workers from falling materials;

— employees were exposed to falls while standing unprotected on a second floor balcony railing.

Gordon notes that a health inspection was also conducted, which resulted in two alleged serious violations, carrying proposed penalties totaling \$2,200, for: failing to develop a written respirator program for employees required to mix silica-containing products and failing to assess employee exposure to respirable quartz and particulates; failing to develop and implement a written hazard communication program; and failing to conduct hazard communication training.

OSHA launched a special emphasis program in the past year aimed at reducing fatal fall hazards in New England. The program is designed to help employers and workers identify and eliminate fall hazards in construction, where falls are the leading cause of death, and in general industry, where fall hazards may not be as obvious. The program's four major components combine outreach efforts, compliance assistance, an increased emphasis on identifying and addressing fall hazards during general industry inspections, and targeted inspections of workplaces where fall hazards are observed.

### ***Nearly \$70,000 in fines at school site***

In a related case, OSHA cited Davis Sheet Metal, a New Bedford, MA, contractor performing roofing work at the William H. Taylor School, also in New Bedford, for alleged willful, repeat, and serious violations and has proposed penalties totaling \$69,400.

Gordon says the alleged violations were discovered during an inspection conducted Oct. 7, 1999, at the Brock Road work site and encompass a cross-section of construction safety hazards, in particular, a lack of fall protection for employees working more than three stories above the ground. Davis Sheet Metal had 10 employees working on site at the time of the inspection.

"The inspection found employees working on the roof without any form of fall protection to prevent them from falling 35 feet to the parking lot below," she says. "Protection should have been supplied through the use of lifelines and safety belts and by erecting guardrails in hoisting areas at roof's edge where employees received materials lifted onto the roof by a crane."

The crane and its rigging had not been inspected for defects, such as the damaged

nylon sling that was used to lift materials to the roof, she says. This exposed employees to the hazard of the load failing and dropping on them.

Employees were also at risk of electric shock from ungrounded power tools, head injuries from failure to wear hard hats, and falls from inadequate or improperly used ladders. In addition, the workers had not been trained to recognize and address hazards such as these.

Gordon notes the considerable size of the fines proposed in this case reflect the classification of the fall protection citations as willful, the most severe category of OSHA citation, issued only when OSHA believes, based on the information gathered in its inspection, that the employer knew what safeguards were required to protect workers yet apparently elected to not provide them.

“This employer is no stranger to these worker safety requirements given its prior OSHA history and the fact that fall protection is a basic, well-known, and mandated safeguard for employees performing roofing work,” Gordon says. “The fact that no falls occurred on this job site is fortunate, but that in no way absolves an employer of the responsibility of providing a safe workplace.” ▼

## Ship loader fined \$89,000 for unsafe work practices

For the second time this year, the Occupational Safety and Health Administration has cited and fined the same Honolulu ship-loading company for knowingly allowing employees to work in hazardous conditions.

Hawaii Stevedores, based in Honolulu, was cited for serious violations of federal safety and health regulations following an OSHA investigation into a drowning that occurred May 25, 1999, when Edgar Fernandez accidentally drove a vehicle off a pier into 40-foot-deep water. The serious citation, and penalties of \$19,000, are for:

- the lack of 10-inch high curbs or similar barriers at work areas where forklifts and other vehicles are used to load and unload ships along the 500-foot-long pier;
- failure to develop and disseminate an adequate emergency action plan for the work site for emergency response should an accident occur.

The willful citation against Hawaii Stevedores includes penalties of \$70,000 for failure to provide curbing or some other barrier along the waterside edge of work areas.

Immediately following the fatal accident on May 25, OSHA took several steps to notify employers and employees of the hazards associated with working near pier edges without curbs. The agency posted a Notice of Imminent Danger to warn employers not to work with vehicles on the pier until temporary curbing was put in place.

### *OSHA sent out warnings, written notices*

OSHA then contacted the long shoring employers throughout the area in early June to warn them of the danger and advise them that they would be cited if they did not install temporary railing when working on piers without curbs. On June 11, OSHA sent written notice to the companies explaining that OSHA would issue citations to employers who did not comply with the federal regulation. OSHA then began conducting inspections of longshoring work sites.

“Our inspections of ship-loading companies in the Honolulu area indicated that all were following the regulations and installing temporary railings except for Hawaii Stevedores,” says **Alan Traenkner**, director of enforcement and investigations for OSHA in San Francisco. “In the case of Hawaii Stevedores, the hazards remained despite the fact that OSHA had notified the company of the hazard and the State of Hawaii Harbor’s Division had posted a warning to keep vehicles away.”

According to Traenkner, subsequent to the inspections, Hawaii Stevedores and all other ship loading companies have now installed effective temporary railings on the piers that will prevent additional accidents until permanent barriers can be erected.

Hawaii Stevedores has a history of 15 OSHA inspections since 1990 and has been cited for more than 40 violations, including previous willful citations. Last June, Hawaii Stevedores was cited for willful and serious violations and fined \$135,000 following an OSHA investigation into a Dec. 4, 1998, accident that seriously injured an employee who fell more than 30 feet from atop a stack of shipping containers. The employee, and another who also fell but was less seriously hurt, were not provided with required safety equipment to prevent falls. ▼

# False statements lead to prison for employers

It's not nice to lie to OSHA. Two company officials of LeMaster Steel Erectors, an Elkhart, IN, steel erecting company, recently were sentenced to prison following guilty pleas to charges that they made false statements to investigators from the Occupational Safety and Health Administration during the investigation of the death of an employee in Mason, OH, in 1996.

Officials of the company previously entered a guilty plea on behalf of the corporation to a charge that the firm willfully violated federal fall protection regulations and caused the death of the worker. Company Safety Director Michael Onyon, 44, of Goshen, IN, and Jay Holloman, 41, the West Chester, OH, regional manager for LeMaster, were each sentenced to six months imprisonment, three years supervised probation, and fined \$2,000 by U.S. District Court Judge Sandra Beckwith.

In addition to the sentences for the company officials, LeMaster Steel was fined \$300,000 and placed on five years probation, the maximum allowed by law. Terms of that probation include that the company must notify OSHA when opening any new job site and must conduct a job site safety analysis at each site. Additionally, the firm must adhere to stricter fall protection measures. OSHA standards call for fall protection at 25 feet for steel erection. LeMaster must take fall protection measures at six feet above the ground.

The charges against Holloman, Onyon, the firm, and site foreman Ronald Lee Creighton, 38, of Sardinia, OH, stemmed from the Aug. 9, 1996, death of a construction worker at a Mason, OH, site who fell more than 25 feet from the roof of the building under construction and died when he hit the concrete foundation below. On July 14, Creighton pled guilty to making false statements to OSHA investigators. On Oct. 22, Creighton received a sentence of four months in prison, three years supervised release, and \$1,100 in fines.

The false statements concerned indications that fall protection was in place prior to the accident when in fact it was installed after the accident occurred in an effort to mislead OSHA inspectors.

"This is a particularly tragic and flagrant case where the employer not only failed to adequately protect its workers, but then tried to deceive OSHA in the investigation of a fatality," says Assistant Secretary of Labor for Occupational Safety and Health **Charles N. Jeffress**. "OSHA did not hesitate to seek criminal prosecution, and we will continue to seek prosecution in any case where an employer deliberately lies to us."

Regional Administrator **Michael G. Connors** of Chicago adds that "the case underscores the need to ensure that proper fall protection and safety equipment is provided and the need for all employers and employer representatives to be forthright and honest during any OSHA or other government inspection or investigation." ■

## Working near wood chippers is dangerous

The National Institute for Occupational Safety and Health (NIOSH) in Cincinnati has issued a special warning concerning the hazards of working near wood chippers. The dangerous tools can kill quickly, before the worker has a chance to react, NIOSH warns.

According to the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI), 11 workers lost their lives during 1992 through 1997 while working near mobile wood chippers. In seven of the incidents, the victim was caught by the feed mechanism and pulled through the chipper knives. The victims in four of the incidents were struck by hoods (guards that cover the rotating chipper knives) that separated from the machines after being improperly opened or closed while knives were still rotating.

During 1998, NIOSH received two more reports of worker deaths from operating wood chippers.

### COMING IN FUTURE MONTHS

■ More on helping employers with ergonomics rule

■ Osteopathy's role in occupational health

■ Workplace depression: How you can help

■ Creating alliances with other providers in your community

■ Lowering the overhead costs in your program

NIOSH says these incidents illustrate the two most common causes of fatal injury: being fed through the chipper knives or being struck by the chipper disc hood. The incidents were investigated as part of the NIOSH Fatality Assessment and Control Evaluation (FACE) program.

Self-feeding mobile wood chippers commonly used during tree-trimming operations consist of a feed mechanism, knives mounted on a rotating chipper disc or drum, and a power plant. Tree branches and the feed mechanism or chipper knives grab trunk sections fed manually into the machine's infeed hopper. The chipper disc or drum rotating between 1,000 rpm and 2,000 rpm cuts and propels wood chips through the discharge spout usually into a chip truck. The housing containing the chipper disc or drum is sectioned and includes a removable hood that allows access to machine components for maintenance.

Workers feeding material into self-feeding wood chippers are at risk of being fed through the chipper knives if they reach or fall into the infeed hopper or become entangled in branches feeding into the machine.

In one example offered by NIOSH, a 28-year-old groundsman died after he was caught and pulled into a wood chipper. The victim and two co-workers, a foreman and a climber, were cleaning up limbs after pruning a tulip poplar behind a town house. The coworkers were behind the building gathering loose branches while the victim was in front operating the chipper. The coworkers began dragging brush to the chipper. As the climber approached the chipper, he saw the victim's legs sticking out of the infeed hopper. Investigators concluded that the victim either fell or reached into the infeed hopper while feeding short branches. His hands were caught by the feed mechanism, which forced his head and upper torso into the chipper knives.

NIOSH also offers this example of the other type of hazard, in which the worker is struck by part of the equipment: A 46-year-old laborer at a municipal waste-management facility died after he was struck by the flying chipper disc hood from an operating brush chipper. He had been feeding material into a chipper that had been converted to a stationary machine.

He had shut off the chipper to remove jammed material, but he opened the hood before the chipper disc had stopped completely. The rotating disc hit the hood as he opened it and tore it loose from its hinges. The hood struck the victim in the head and chest. He died the next day without

regaining consciousness. Investigation showed that the hood hinges had been damaged, which allowed excessive side movement as the hood was swung open.

### *Tips to avoid getting caught in chipper*

To protect workers from being caught by the chipper feed mechanism, NIOSH offers these recommendations:

- Ensure that all safety devices and controls, such as emergency shut-off devices, are tested and verified to be functioning properly before the chipper is used.
- Make sure workers are trained in safe work procedures, including operating wood chipper safety devices and safety controls. These procedures should be based on the manufacturer's recommendations for each machine.
- Require that at least two workers are in close contact with each other when operating the chipper.
- Ensure workers wear close-fitting clothing,

**Occupational Health Management™** (ISSN# 1082-5339) is published monthly by American Health Consultants®, 3525 Piedmont Road, Building Six, Piedmont Center, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodical postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Occupational Health Management™**, P.O. Box 740059, Atlanta, GA 30374.

#### **Subscriber Information**

**Customer Service:** (800) 688-2421 or fax (800) 284-3291, (customerservice@ahcpub.com). Hours: 8:30-6:00 M-Th; 8:30-4:30 F.

**Subscription rates:** U.S.A., one year (12 issues), \$399. Outside U.S., add \$30 per year, total prepaid in U.S. funds. One to nine additional copies, \$319 per year; 10 to 20 additional copies, \$239 per year. For more than 20 copies, call customer service for special arrangements. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. **Back issues**, when available, are \$67 each. (GST registration number R128870672.)

**Photocopying:** No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright owner. For reprint permission, please contact American Health Consultants®. Address: P.O. Box 740056, Atlanta, GA 30374. Telephone: (800) 688-2421. Fax: (800) 755-3151. World Wide Web: <http://www.ahcpub.com>.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Editor: **Greg Freeman**, (404) 320-6361.

Group Publisher: **Brenda Mooney**, (404) 262-5403, (brenda.mooney@medec.com).

Executive Editor: **Park Morgan**, (404) 262-5460, (park.morgan@medec.com).

Managing Editor: **Joy Daughtery Dickinson**, (912)

377-8044, (joy.dickinson@medec.com).

Production Editor: **Ann Duncan**.

Copyright © 2000 by American Health Consultants®.

**Occupational Health Management™** is a trademark of American Health Consultants®. The trademark **Occupational Health Management™** is used herein under license. All rights reserved.

#### **Editorial Questions**

For questions or comments, call **Joy Daughtery Dickinson** at (912) 377-8044.

gloves without cuffs, trousers without cuffs, and skid-resistant foot wear. Clothing should be kept tucked in.

- Ensure workers' hands and feet remain outside the infeed hopper.
- Instruct workers to feed brush and limbs into the infeed hopper butt end first.
- Position workers feeding material at the side of the machine to allow quick operation of the emergency shut-off device and minimize risk of entanglement in branches. Because of differences among machines, the manufacturer's operating manual should be consulted for guidance. Safe feeding of some disc-type chippers requires the worker to be on the right side.
  - Ensure workers walk away once the feed mechanism has grabbed the material.
  - Ensure workers lay short material on top of longer material that is feeding or use a longer branch to push it through the infeed hopper.
  - Ensure workers load small raked-up material such as twigs and leaves directly into the chip truck or in trash cans or bags instead of feeding it into the chipper.
    - Require workers to keep the area around the wood chipper free of tripping hazards.
    - Require workers to wear hard hats, eye protection, and hearing protection.
    - To protect workers against being struck by flying hoods covering chipper discs or drums, employers should take these steps:
      - Make sure wood chippers are inspected each working day before start-up for defects such as broken or missing hood latches and pins or cracked and worn hinges. Broken, damaged, or missing machine components should be repaired or replaced before the machine is placed in service.
      - Ensure that the hood covering the chipper knives is completely closed and latched, according to manufacturer's recommendations, before starting the machine.
      - Before processing material and unless the manufacturer recommends otherwise, run the machine at the lowest possible speed while workers listen for noise that might indicate broken or loose machine parts. If unusual noise is detected, shut down the machine immediately and have it evaluated by a competent person. If necessary, the machine should be repaired before being placed in service.
      - Make sure all internal machine parts have come to a complete stop before the hood covering the chipper disc or drum is opened. ■

## EDITORIAL ADVISORY BOARD

**Consulting Editor:**  
**William B. Patterson,**  
MD, FACOEM, MPH  
Medical Director of  
Massachusetts for Occupational  
Health & Rehabilitation  
Wilmington, MA

**Judy Colby,** RN, COHN-S, CCM  
President, California State  
Association of Occupational  
Health Nurses  
Program Director  
The Workplace  
Simi Valley Hospital and  
Healthcare Services  
Simi Valley, CA

**Annette B. Haag,**  
RN, BA, COHN  
Past President, American  
Association of Occupational  
Health Nurses  
President  
Annette B. Haag & Associates  
Simi Valley, CA

**Virginia Lepping,**  
RN, MBA, COHN  
Executive Vice President  
Providence Occupational  
Health Services  
Granite City, IL

**Charles Prezzia,**  
MD, MPH, FRSM  
General Manager  
Health Services and  
Medical Director  
USX/US Steel Group  
Pittsburgh

**Pat Stamas,** RN, COHN  
President  
Occupational Health and Safety  
Resources  
Dover, NH

**Melissa D. Tonn,**  
MD, MBA, MPH  
Medical Director  
Occupational Health Services  
Texas Health Resources  
Dallas

## Special offer for alternative medicine nursing newsletter

American Health Consultants, publisher of *Occupational Health Management* and *Alternative Medicine Alert*, is pleased to announce a new monthly publication for nurses on alternative medicine and holistic nursing.

Beginning this month, each issue will contain review articles of specific alternative therapies and modalities; abstract and commentary from current medical and nursing journal articles; and columns on controversies in holistic nursing, applying therapies to clinical nursing practice, and legal and ethical issues surrounding holistic nursing and alternative medicine.

Subscribers will be eligible to receive approximately 12 contact hours of nursing continuing education credits at no extra charge.

As a subscriber to *Occupational Health Management*, you will be able to purchase an annual subscription at \$149 — \$50 off the regular subscription price of \$199.

To reserve your subscription, please contact our Customer Service department at (800) 688-2421 or e-mail: [customerservice@ahcpub.com](mailto:customerservice@ahcpub.com). Reference "HNA 61760" to take advantage of this special offer. ■