Job Safety & Health Quarterly

JSHQ

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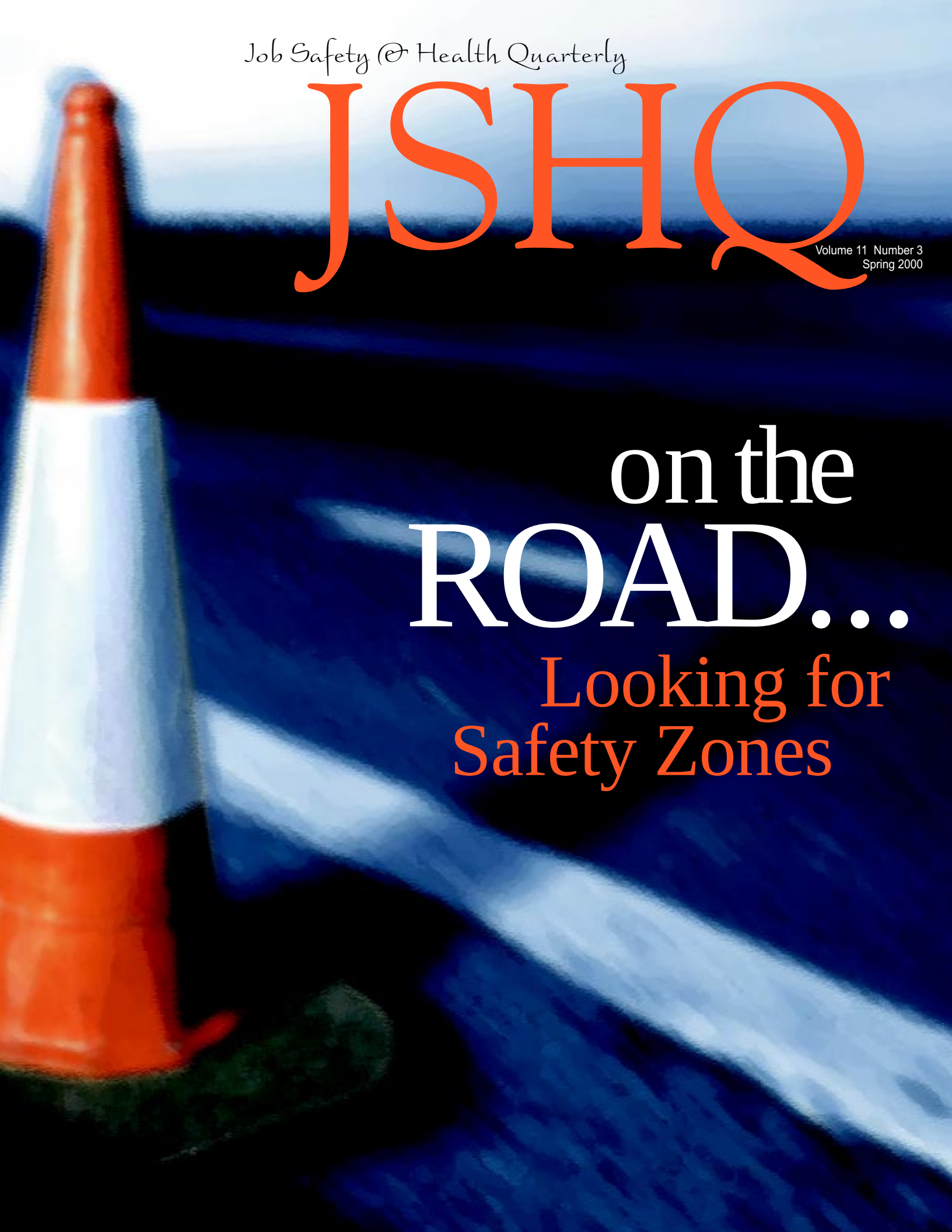
Spring 2000



on the ROAD...

Looking for Safety Zones

U.S. Department of Labor
Alexis M. Herman, Secretary

Occupational Safety and Health Administration
Charles N. Jeffress, Assistant Secretary

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From the Editor...

As the summer months quickly approach and thoughts turn to vacations, we're reminded of the men and women who work in dangerous construction zones along the highways we'll be traveling. Our cover story takes a look at OSHA's efforts to raise awareness about highway workers' safety and the importance of those familiar orange cones along the road.

Also in this issue, we're treating our readers to something a little different. Our photo essay and feature story on occupational safety and health photojournalist, Earl Dotter, explores the life of a photographer who has devoted his life to capturing the compelling stories of workers in hazardous industries across the country. Other stories include a short piece comparing the more than 30-year-old Standard Industrial Classification Codes system with the new system recently adopted throughout the Federal Government and a short article on OSHA's recent website addition, the "Workers' Page."

Tear-out fact sheets on Taxi and Livery Driver Safety and our *FatalFacts* appear in the back of this issue. Our regular columns—*What's Happening?, Mark Your Calendar, and Q&A*—contain information on new publications, upcoming events and classes, and frequently asked questions.

In my new role as Managing Editor, I continue to recognize the importance of our readers' input. By telling us what you'd like to see in future issues, you help shape the content of *JSHQ*. Our staff looks forward to bringing you more of what you need to know about occupational safety and health. Look for future articles on several partnerships underway as well as the latest agency initiatives.

Kerri L. Lawrence
Managing Editor

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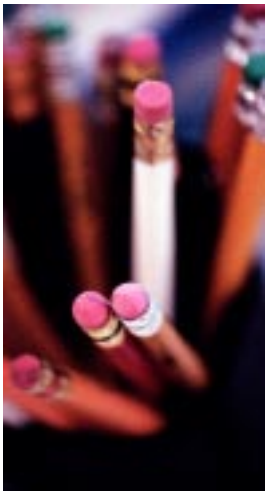

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Assistant Secretary's Message

Over the past 6 years, occupational injury and illness rates have declined by 22 percent. That's very good news. It means that in 1998 alone, 1.3 million workers went home safe and sound instead of injured or ill. That's the number of workers who would have been hurt if we still had the same rates as in 1992. Fatalities are also on a downward trend, with fewer deaths in 1998 than in any year on record.

This decline has occurred even while U.S. employment has nearly doubled from 56 million workers at 3.5 million worksites to 105 million workers at nearly 6.9 million sites. Unemployment is down, and the economy is booming.

I am proud of the impact that OSHA has had in reducing injuries, illnesses, and fatalities on the job. Clearly, awareness of the importance of safety and health in the workplace has greatly increased over the past three decades. And employers and employees have responded by taking steps to reduce hazards and prevent accidents.

Of course, some workplaces still have a long way to go. For the past 4 years, OSHA has solicited injury and illness data from 80,000 employers in high-hazard industries. We want to know which specific employers are doing a good job in protecting their workers and which require more attention to help them eliminate hazards at their sites.

Under President Clinton, our goal has been to fine tune enforcement to focus on the workplaces that most need our help. That's a strategy supported by the Congress and the business community. OSHA should go where the problems are, and we are doing that.

This year, I again sent letters to about 13,000 employers from the database of 80,000. The letters advised these employers that they had above-average injury and illness rates for 1998 and encouraged them to address safety and health problems in their workplaces.

Under our Site-Specific Targeting Program, we plan to inspect up to 4,200 of these high-rate sites this year, beginning with companies that have 14 or more injuries per 100 workers—that's more than four times the average rate for private sector businesses in the U.S. These account for about one-third of the companies that received the letters.

Employers who want to improve their records can seek help from a number of sources. Trade associations, insurance companies, and private consultants can all provide assistance. Small employers also can call on the free OSHA consultation program available from state authorities in all 50 states.

In addition, employers can turn to OSHA's website, www.osha.gov, for a wealth of information and for interactive help on a number of complex issues via our expert advisors computer software.

Further, OSHA is expanding its ability to offer employers and employees training and education through our local offices. With additional funds in 1999 and this year, OSHA has added 44 new compliance assistance officers in its area offices. The President's budget for next year would add more, enabling us to put one in every area office.

We are pleased with the improvements in worker safety and health, but we have a lofty goal. We want to send *every* worker home whole and healthy. And we will use all our resources, energy, and creativity to achieve further progress toward that end. JSHQ

Charles N. Jeffress
Assistant Secretary of Labor
for Occupational Safety and Health

Q&A

Q OSHA is promoting awareness about safety at roadside construction sites. What are the details?

A OSHA is vigorously carrying out inspections at highway construction zones in Illinois, Wisconsin, and Ohio and is taking part in a major, nationwide outreach and education program to inform the public about the dangers of roadside construction activities. In the Midwest, OSHA inspectors are setting out to identify and remove potential risks to road construction workers. The agency will conduct nearly 300 construction zone inspections by October 1, 2000. "There is a clear need to take a proactive approach to save lives and prevent injuries," says OSHA Chicago Regional Administrator Michael G. Connors.

In addition, to ensure that OSHA compliance officers identify appropriate hazards during the inspections in these zones, OSHA is working with the National Safety Council to provide joint training for agency inspectors. The agency has consulted with the road building industry, labor organizations, state police, and the Departments of Transportation in Illinois and Wisconsin to better understand the hazards and problems of road construction work. OSHA will conduct quarterly meetings with road construction contractors to design ways of making construction zones safer for workers and motorists.

OSHA kicked off the outreach effort by joining the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the American Traffic Safety Services Association to inaugurate an annual Workzone Safety Awareness Week this April. The three organizations have formed a partnership designed to highlight the dangers workers and motorists face at highway work zones. The nationwide campaign will help increase public awareness of the need for greater caution and care while driving through work zones, establish safety tips for motorists, and set up a nationwide program to promote work zone safety.

For more information, see our cover story on page 18.

Q Has OSHA recently entered into any new partnerships in the construction industry?

A OSHA and a voluntary labor-management organization, PRIDE—Productivity and Responsibility to Increase Development and Employment—of St. Louis, MO, recently joined forces to enhance construction workers' safety and health in Region VII. PRIDE promotes construction productivity, cost-effective construction, safe jobsites, and work force training and development.

Although establishing partnerships with the private sector to improve safety and health is one of OSHA's major goals, this is the first joint venture with an organization that represents the entire construction industry within a geographic area.

The 3-year agreement between OSHA and PRIDE provides incentives for participating construction contractors to voluntarily improve their safety and health performance under strict guidelines set by the partnership. In return, OSHA will recognize contractors with demonstrated exemplary safety programs. OSHA anticipates that the partnership will reduce the need for inspections of participating contractors.

"This is a model for public-private cooperation that can benefit an entire industry," says Assistant Secretary of Labor for OSHA

Charles N. Jeffress. "This program will create private sector incentives to improve safety in an industry that has traditionally had a high number of accidents and injuries."

PRIDE will administer non-policy administrative matters through a Stakeholder Steering Committee. The committee will consist of representatives from contractor association members and AFL-CIO representatives. OSHA will provide assistance and oversight. The committee will establish criteria for evaluating applications that will include meeting with the contractor and inspecting at least one jobsite. Once a contractor is accepted into the partnership, the committee will periodically conduct onsite quality-control visits to ensure continued compliance with safety and health criteria.

Contractors participating in the partnership, in addition to complying with OSHA standards, must have an effective, written safety and health program that includes training for managers and employees and annual safety and health program reviews.

Other organizations that have pledged support and are taking part in the partnership include the St. Louis Building and Construction Trades Council, the Associated General Contractors of St. Louis, the St. Louis Council of Construction Employers, the Kansas City OSHA Regional Office, and the St. Louis Council of Construction Consumers.

Q What is OSHA doing about workplaces with high injury and illness rates?

A Using employer-reported data from a 1998 survey of 80,000 worksites, OSHA identified establishments with the country's highest lost-workday injury and illness rates. The agency sent letters to 13,000 businesses across the country with 8 or more injuries and illnesses resulting in lost-workdays for every 100 full-time workers, versus the national average of 3 injuries and illnesses per 100 workers.

Included in the letters OSHA issued are data on the companies' illness and injury rates as well as a list of the most frequently violated OSHA standards for their specific industry. The letters recommend that employers review their facilities and take the necessary steps to improve safety and health conditions. As a result, up to 4,200 of the sites may be targeted for comprehensive safety and health inspections by OSHA over the next 10 months.

"We recognize that an elevated lost-workday injury and illness rate does not necessarily indicate a lack of interest in safety and health on the part of your business," Assistant Secretary of Labor for OSHA Charles N. Jeffress says in the letter. "Whatever the cause, however, a high rate is costly to your company in both personal and financial terms," he continues. A list of the 13,000 employers is available on OSHA's website, www.osha.gov under **Library**, Current E- FOIAs. JSHQ

What's Happening?

OSHA

Lyme Disease Advisory

Outdoor workers could benefit from a new *OSHA Hazard Information Bulletin* and a fact sheet addressing the perils of Lyme disease. The publications advise employers on how to implement an effective protection program and what steps workers can take to avoid the infection. If left undiagnosed or untreated, the tickborne disease may cause chronic arthritis, heart disease, and/or neurologic disorders. Outdoor workers in occupations such as construction, landscaping, and forestry, working in heavily wooded or grassy areas, are at risk of exposure to ticks carrying Lyme disease. If recognized early, most cases can be successfully treated with a standard antibiotic regimen. The areas in the U.S. with the highest risk for the disease are in the northeast, from Massachusetts to Maryland; the north-central region including Wisconsin and Minnesota; and an area in northern California in the pacific-coastal region. For copies of the bulletin and fact sheet, see OSHA's website, www.osha.gov.

More detailed information regarding Lyme disease and its prevention also is available from the Centers for Disease Control website at www.cdc.gov.

New Website Page

OSHA recently added "The Workers' Page" to its website. This new page allows workers to file complaints electronically about possible safety problems and hazardous conditions at worksites. The page became available on Workers' Memorial Day, April 28.

Previously, workers who wanted to file complaints with OSHA and its state partners had to call or write. Last year about 50,000 persons called the agency to report hazardous conditions in their workplaces. For more information, see page 36 or visit the new page at www.osha.gov.

NIOSH

Publications

A new *Alert*, "Preventing Worker Injuries and Deaths from Explosions in Industrial Ethylene Oxide Sterilization Facilities," (DHHS/NIOSH Publication No. 2000-119) gives an overview of safety concerns and current standards, identifies steps workers should take to protect themselves, and recommends ways to prevent EtO-related explosions.

Single copies of the publication are available free from NIOSH—Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226-1998; (800)35-NIOSH (1-800-356-4674) phone; (513) 533-8573 fax; or E-mail at pubstaft@cdc.gov.

Transcripts Available

Proceedings of the Second National Fishing Industry Safety and Health Workshop held in Seattle, WA, are now available from NIOSH. The workshops are an opportunity for professionals from the occupational safety and health community to discuss issues and problems and to offer solutions to safety and health problems in the commercial fishing industry. The 2 days of discussions covered topics such as the financial and human costs of commercial fishing, legislative histories, fishing vessel stability, why safety is "good business," and how safety training makes a difference. Single copies of the publication are available free from NIOSH—Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226-1998; (800)35-NIOSH (1-800-356-4674) phone; (513) 533-8573 fax; or E-mail at pubstaft@cdc.gov.

Nurse Internships

OSHA's Office of Occupational Health Nursing (OOHN) is accepting applications for the agency's Nurse Intern Program for 2001. There are two categories for candidacy: (1) registered nurses enrolled in a graduate-level program in either occupational health or public health with a specialty in occupational health, and (2) registered nurses who are board-certified in occupational health nursing with 5 years of occupational health experience and enrolled in a graduate-level nursing program. According to OOHN, the internships facilitate professional relationships among graduate students, OOHN, and OSHA representatives through research opportunities and educational experiences in the field of worker safety and health. Application information is available online at www.osha.gov. For more information, contact OOHN at (202) 693-2120 phone; (202) 693-2502 fax. The deadline for completed applications is November 30, 2000.

Partnerships

OSHA's innovative Strategic Partnership (OSP) program continues to grow, with 65 partnership agreements now operating across the country. These partnerships—which involve more than 4,000 employers and cover more than 100,000 workers—focus on unique safety and/or health issues, prompting employers and employees, professional trade associations, universities, and state and local governments to develop strategies and pool resources to promote worker safety and health in their industry. The agency sees these partnership agreements as an effective way to improve worksite safety and health, lower workers' compensation and other related injury and illness costs, and build cooperative relationships between employers, workers, and OSHA.

OSHA recently partnered with television tower owners in the Philadelphia area, including the local NBC, ABC, CBS, and Fox television stations and the International Brotherhood of Electrical Workers (Local 1241). The primary goal of the partnership is to prevent all accidents, injuries, and fatalities resulting from work on or from telecommunications towers. The agreement calls for implementing comprehensive safety and health programs at six towers and developing a pre-work, tower-specific safety and health checklist to ensure compliance with OSHA regulations and to heighten safety awareness.

Another partnership between OSHA and the Pelican and Bayou Chapters of the Associated Builders and Contractors, Inc. (ABC) in Louisiana opens communication between OSHA and ABC when developing and improving safety training programs for the construction industry and OSHA personnel. Key elements of the partnership include sharing best industry technologies, innovations, and work practices as well as promoting and recognizing construction safety excellence.

Revised Publication

An updated edition of the popular OSHA booklet, *All About OSHA* (No. 2056) is now available. Presented in a new, simple, easy-to-understand question and answer format, the booklet covers all aspects of the agency from its development in 1970 to how OSHA can help you today. Topics include what OSHA covers and how to find out more about the agency's mission, workers' rights and responsibilities under the *OSH Act*, how OSHA enforces its standards, and what happens during and after an OSHA inspection. A single copy of the booklet is available free from the OSHA Publications Office, P.O. Box 37535, Washington, DC 20013-7535; (202) 693-1888 phone; (202) 693-2498 fax, or online at www.osha.gov.

Safe Work Advisory

OSHA recently issued guidelines for recommended protective measures taxi drivers can take against robberies and other crimes. Asserting that assaults and homicides against taxi drivers nationwide borders on "epidemic," Secretary of Labor, Alexis Herman, says the fact sheet contains 10 major recommendations designed to secure drivers' safety.

Assistant Secretary of Labor for OSHA, Charles N. Jeffress, stresses that the fact sheet does not represent new OSHA enforcement policy, nor does it substitute for any current standards. He said the fact sheet is a "tool" to provide drivers and their employers with information they may use to help ensure worker safety. "We hope that employers and drivers will consider the information and then implement the safety measures," Jeffress adds.

Copies of the fact sheet are available through the agency's publications office and OSHA's website at www.osha.gov. See also page 37 in this issue for a tear-out copy of this important and informative fact sheet.

VPP Update

Star Program

New

- Dick Corporation, PNC Bank Firstside Center, Pittsburgh, PA
- General Electric Power Systems, Schenectady, NY
- GE Transportation Systems, Erie, PA
- Hazelton Pumps, Inc., Hazelton, PA
- High Steel Structures, Inc., Lancaster, PA
- International Paper's Fine Papers Westfield Plant, Westfield, MA
- International Paper's Lafayette Container Div., Lafayette, LA
- International Paper's Sugg Ranch Field, Sterling County, TX
- Frito-Lay, Inc., Gothenburg, NE
- Frito-Lay, Inc., Technology Process Center, Dallas, TX
- Georgia-Pacific Corporation, Palatka, FL
- Georgia-Pacific Corporation, Idabel, OK
- Lucent Technologies, Lisle/Naperville, IL
- Montenay Islip, Inc., Ronkonkoma, NY
- Solectron Texas South, Austin, TX

15-Year Star

- Tenneco Packaging Corp., Tenneco Packaging - Covington Plant, Covington, GA

12-Year Star

- Russell Corporation, Coosa #1 Yarn Plant, Alexander City, AL
- Russell Corporation, Plant #4, Alexander City, AL

10-Year Star

- Entergy Services, Inc., Little Gypsy Power Plant, Montz, LA
- Entergy Services, Inc.,Waterford 1 & 2 Power Plant, Killona, LA

7-Year Star

- International Paper, Leola Lumber Mill, Leola, AR

6-Year Star

- Milliken and Company, Duncan Plant, LaGrange, GA
- Milliken and Company, Valway Plant, LaGrange, GA
- Solutia, Inc., Anniston, AL

5-Year Star

- International Paper DePere Facilitt, DePere, WI

4-Year Star

- GE Specialty Chemicals, Morgantown Site, Morgantown, WV
- PACTIV, Canandaigua Technology Center, Canandaigua, NY

Upcoming Events and Symposia

Integrating Research and Practice in Occupational Safety and Health, scheduled for August 7-8, 2000 in Bethel, ME. For more information, call Lynne Lamstein, Maine Department of Labor, Bureau of Labor Standards at (207) 624-4600.

Future Research Needs for Improving Risk Assessment Methods is set for August15-18, 2000 in Snowmass Village, CO. For more information, contact Estella Lazenby at (301) 588-6000 ext. 239.

31st Annual Institute on Mining Health, Safety, and Research will be held August 27-30, 2000 in Roanoke, VA. For more information, contact Terry Pettinger at (540) 231-2525.

National Occupational Research Injury Symposium is scheduled for October 17-19, 2000 in Pittsburgh, PA. For more information, contact Judy Fields at (304) 285-6047.

Iowa Governor's Safety Conference, November 1-3, 2000 at the Des Moines Airport Holiday Inn, 6111 Fleur Drive, Des Moines, IA. For more information, contact Joyce Chamberlain at (515) 281-8067.

3-Year Star

- Alcoa Extruded Construction Products, Magnolia Division, Magnolia, AR
- Entergy Operations, Inc., Arkansas Nuclear One, Russellville, AR
- Equistar Chemicals, L.P. at Matagorda Operations, Bay City, TX
- ExxonMobil, Hull Terminal, Hull, TX
- ExxonMobil, Refinery, Beaumont, TX
- Fisher Service Co., Gonzales, LA
- GE Specialty Chemicals, Inc., Morgantown, WV
- Huntsman Corporation, Jefferson County Operations, C4 Plant, Port Neches, TX
- International Paper, Mobil Container Plant, Bay Minette, AL
- Mead Containerboard, Milwaukee, WI
- Occidental Chemical Corporation, Muscle Shoals, AL
- Phillips Petroleum Co., Phillips Research Center, Bartlesville, OK
- Solutia, Inc., Augusta Plant, Augusta, GA
- Solutia, Inc., Delaware River Site, Bridgeport, NJ
- Sterling Chemicals, Inc., Texas City, TX
- Weyerhaeuser Container Packaging, Amarillo, TX
- Winpak Portion Packaging, South Chicago Heights, IL
- Woodpro Cabinetry, Inc., Cabool, MO

Merit To Star

- Fort James Corporation, Muskogee, OK
- The Glidden Co./ICI Paints, Oakwood, GA
- Joseph E. Seagram's Tropicana North America, Bradenton, FL
- Mead Corporation, School and Office Products Division, Atlanta, GA
- Solutia Inc., W.G. Krummich Plant, Sauget, IL
- West Point Stevens, Dunson Mill, LaGrange, GA
- Clark Manufacturing, COSMAIR, Subsidiary of L'Oreal of Paris, Clark, NJ
- Lima Memorial Hospital, Lima, OH

Demonstration

- C. A. Turner Construction Company, Huntsman's A&O Plant, Port Arthur, TX
- C. A. Turner Construction Company, Huntsman's C-4 Plant, Port Arthur, TX
- Zachary Construction Corporation, Monsanto, Luling, LA
- Science Application International Corporation, Houston, TX
- Mundy Contract Maintenance, Inc., Ticona Polymers, Inc., Bishop, TX

Merit

- Canam Steel Corporation, Jacksonville Division, Jacksonville, FL
- GPM Gas Corporation, Okarche Gas Plant, Okarche, OK
- Huntsman Corporation's Longview Site, Longview, TX
- Phillips 66 Co., Borger Refinery and NGL Center, Borger, TX
- Yonkers Contracting Co., Inc., Atlantic City/Brigantine Connector Project, Atlantic City, NJ

This brings the total participants to **494** sites in the Federal VPP: **422** in ***Star***, **49** in ***Merit*** and **23** in ***Demonstration***.

For more information on OSHA's Voluntary Protection Programs, write the OSHA Directorate of Federal-State Operations, 200 Constitution Avenue, N.W., Room N-3700, Washington, DC 20210; or call (202) 693-2213. See also **Outreach** on OSHA's website at www.osha.gov. JSHQ

OSHA Training Institute Schedule

121 Introduction to Industrial Hygiene for Safety Personnel

Introduces the general concepts of industrial hygiene, including the recognition of common health hazards, such as air contaminants and noise, hazard evaluation through screening and sampling, control methods for health hazards, including ventilation and personal protective equipment, and criteria for referral to industrial hygiene personnel.

Tuition: $1,200
Dates: 08/22/00 - 09/01/00

205 Cranes and Rigging Safety for Construction

Discusses the various types of mobile cranes used in construction operations. Students receive basic information about crane operations, crane inspection and maintenance, rigging inspection, reading load charts, and corresponding OSHA and consensus standards. Includes exercises in applying OSHA and ANSI standards, reading load charts and rigging tables, and preventing accidents. Includes a field trip to inspect mobile cranes.

Tuition: $480
Dates: 8/22/00 - 8/25/00

226 Permit-Required Confined Space Entry

Provides "how to" on recognizing, evaluating, preventing, and abating safety and health hazards associated with confined space entry. Focuses on the specific requirements of *Title 29 Code of Federal Regulations* (*CFR*) Parts 1910.146(a) through (k). Technical topics include recognizing confined space hazards, basic information about instrumentation used to evaluate atmospheric hazards, and general permit space ventilation techniques. Course includes workshops on permit entry classification and program evaluation.

Tuition: $480
Dates: 8/15/00 - 8/18/00

310 Applied Spray Finishing and Coating Principles

Focuses on the hazards associated with spray finishing and coating operations. Includes a review of industrial processes and related equipment and materials, applicable OSHA requirements, NFPA standards, engineering controls, work practices, and personal protective equipment.

Tuition: $480
Dates: 9/26/00 - 9/29/00

311 Fall Arrest Systems

Provides an overview of state-of-the-art technology for fall protection and current OSHA requirements. Topics include the principles of fall protection, the components of fall arrest systems, the limitations of fall arrest equipment, and OSHA policies regarding fall protection. Features a 1-day field exercise demonstrating fall protection equipment.

Tuition: $480
Dates: 8/08/00 - 8/11/00

500 Trainer Course in Occupational Safety and Health Standards for the Construction Industry

Private sector personnel interested in teaching the 10- and 30-hour construction safety and health outreach program learn the most hazardous aspects of the construction industry, using OSHA standards as a guide. Discusses effective instructional approaches and the use of visual aids and handouts.

Tuition: $624
Dates: 8/14/00 - 8/18/00

To register for courses or to obtain a training catalog, write the OSHA Training Institute, 1555 Times Drive, Des Plaines, IL 60018; or call (847) 297-4913. See also **Outreach** on OSHA's website at www.osha.gov.

OSHA Training Institute Education Centers

The OSHA Training Institute also has a program for other institutions to conduct OSHA courses for the private sector and federal agencies. These include Eastern Michigan University/ United Auto Workers, Ypsilanti, MI (800) 932-8689; Georgia Technological Research Institute, Atlanta, GA, (800) 653-3629; Great Lakes OSHA Training Consortium, St. Paul, MN, (800) 493-2060; Keene State College, Manchester, NH, (800) 449-6742; Metropolitan Community Colleges—Business and Technology Center, Kansas City, MO, (800) 841-7158; National Resource Center for OSHA Training, Washington, DC, (800) 367-6724; National Safety Education Center, DeKalb, IL, (800) 656-5317; Niagara County Community College, Lockport, NY, (800) 280-6742; Red Rocks Community College and Trinidad State Junior College, Lakewood, CO, (800) 933-8394; Texas Engineering Extension Service, Mesquite, TX, (800) 723-3811; University of California, San Diego, CA, (800) 358-9206; and University of Washington, Seattle, WA, (800) 326-7568.

For tuition rates and registration information, contact the institution offering the courses. For course locations noted in parentheses, please contact the institution for more information.

201A Hazardous Materials

Location:	Georgia Technological Research Institute	Dates: 08/28/00 - 09/01/00
Location:	University of California, San Diego	Dates: 08/14/00 - 08/17/00

222A Respiratory Protection

Location:	Eastern Michigan United Auto Workers (Livonia, MI)	Dates: 09/18/00 - 09/21/00
Location:	Great Lakes OSHA Training Consortium (Cincinnati, OH)	Dates: 08/07/00 - 08/10/00
Location:	Metropolitan Community Colleges Business and Technology Center	Dates: 08/14/00 - 08/17/00
Location:	National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 09/25/00 - 09/28/00
Location:	Niagara County Community College	Dates: 09/18/00 - 09/21/00
Location:	University of California, San Diego	Dates: 09/25/00 - 09/28/00

225 Principles of Ergonomics Applied to Work-Related Musculoskeletal and Nerve Disorders

Location:	Great Lakes OSHA Training Consortium (St. Paul, MN)	Dates: 08/23/00 - 08/25/00
Location:	Metropolitan Community Colleges Business and Technology Center	Dates: 09/25/00 - 09/28/00
Location:	Niagara County Community College	Dates: 09/18/00 - 09/21/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 09/06/00 - 09/08/00
Location:	Texas Engineering Extension Service (San Antonio, TX)	Dates: 09/06/00 - 09/08/00
Location:	University of California, San Diego	Dates: 08/14/00 - 08/17/00

226 Permit-Required Confined Space Entry

Location:	Eastern Michigan United Auto Workers (Ypsilanti, MI)	Dates: 09/26/00 - 09/28/00
Location:	Great Lakes OSHA Training Consortium	Dates: 08/09/00 - 08/11/00
Location:	National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 08/14/00 - 08/16/00
Location:	National Safety Education Center	Dates: 08/08/00 - 08/10/00
Location:	Niagara County Community College	Dates: 08/21/00 - 08/24/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/14/00 - 08/16/00
Location:	University of California, San Diego	Dates: 08/21/00 - 08/23/00

309A Electrical Standards

Location:	Metropolitan Community Colleges Business and Technology Center	Dates: 08/07/00 - 08/10/00
Location:	Niagara County Community College	Dates: 09/11/00 - 09/14/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/01/00 - 08/04/00
Location:	University of California, San Diego	Dates: 09/18/00 - 09/21/00

500 Trainer Course in Occupational Safety and Health Standards for the Construction Industry

Location:	Eastern Michigan United Auto Workers (Ypsilanti, MI)	Dates: 09/18/00 - 09/21/00
Location:	Georgia Technological Research Institute	Dates: 08/14/00 - 08/18/00
Location:	Great Lakes OSHA Training Consortium (Cincinnati, OH)	Dates: 09/12/00 - 09/15/00
Location:	Keene State College	Dates: 09/11/00 - 09/15/00
Location:	National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 09/18/00 - 09/21/00
Location:	National Safety Education Center (Hillside, IL)	Dates: 08/21/00 - 08/25/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/07/00 - 08/10/00

Location:	Texas Engineering Extension Service (Mesquite, TX)	Dates: 08/07/00 - 08/11/00
Location:	University of California, San Diego (Los Angeles, CA)	Dates: 09/18/00 - 09/21/00

501 Trainer Course in Occupational Safety and Health Standards for General Industry

Location:	Eastern Michigan United Auto Workers (Ypsilanti, MI)	Dates: 08/14/00 - 08/17/00
Location:	Georgia Technological Research Institute (Nashville, TN)	Dates: 08/14/00 - 08/18/00
Location:	Great Lakes OSHA Training Consortium (Cincinnati, OH)	Dates: 09/11/00 - 09/14/00
Location:	Keene State College	Dates: 08/21/00 - 08/25/00
Location:	Metropolitan Community Colleges Business and Technology Center	Dates: 08/10/00 - 08/18/00
Location:	National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 09/11/00 - 09/14/00
Location:	National Safety Education Center (Itasca, IL)	Dates: 09/18/00 - 09/22/00
Location:	Niagara County Community College	Dates: 08/07/00 - 08/10/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/14/00 - 08/17/00
Location:	Texas Engineering Extension Service (Mesquite, TX)	Dates: 08/14/00 - 08/18/00
Location:	University of California, San Diego	Dates: 09/11/00 - 09/14/00
Location:	University of Washington (Portland, OR)	Dates: 08/21/00 - 08/24/00

502 Update for Construction Industry Outreach Trainers

Location:	Eastern Michigan United Auto Workers (Livonia, MI)	Dates: 09/18/00 - 09/20/00
Location:	Keene State College	Dates: 09/25/00 - 09/27/00
Location:	Metropolitan Community Colleges Business and Technology Center	Dates: 09/25/00 - 09/27/00

Location:	National Resource Center for OSHA Training (Morgantown, WV)	Dates: 08/09/00 - 08/11/00
Location:	National Safety Education Center (Hillside, IL)	Dates: 08/29/00 - 08/31/00
Location:	Niagara County Community College	Dates: 08/30/00 - 09/01/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/21/00 - 08/23/00
Location:	University of Washington	Dates: 09/25/00 - 09/27/00

503 Update for General Industry Outreach Trainers

Location:	Eastern Michigan United Auto Workers (Livonia, MI)	Dates: 09/11/00 - 09/13/00
Location:	Metropolitan Community Colleges-Business and Technology Center	Dates: 08/21/00 - 08/23/00
Location:	National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 08/28/00 - 08/30/00
Location:	Niagara County Community College	Dates: 09/06/00 - 09/08/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/23/00 - 08/25/00
Location:	University of Washington (Portland, OR)	Dates: 08/21/00 - 08/23/00

510 Occupational Safety and Health Standards for the Construction Industry

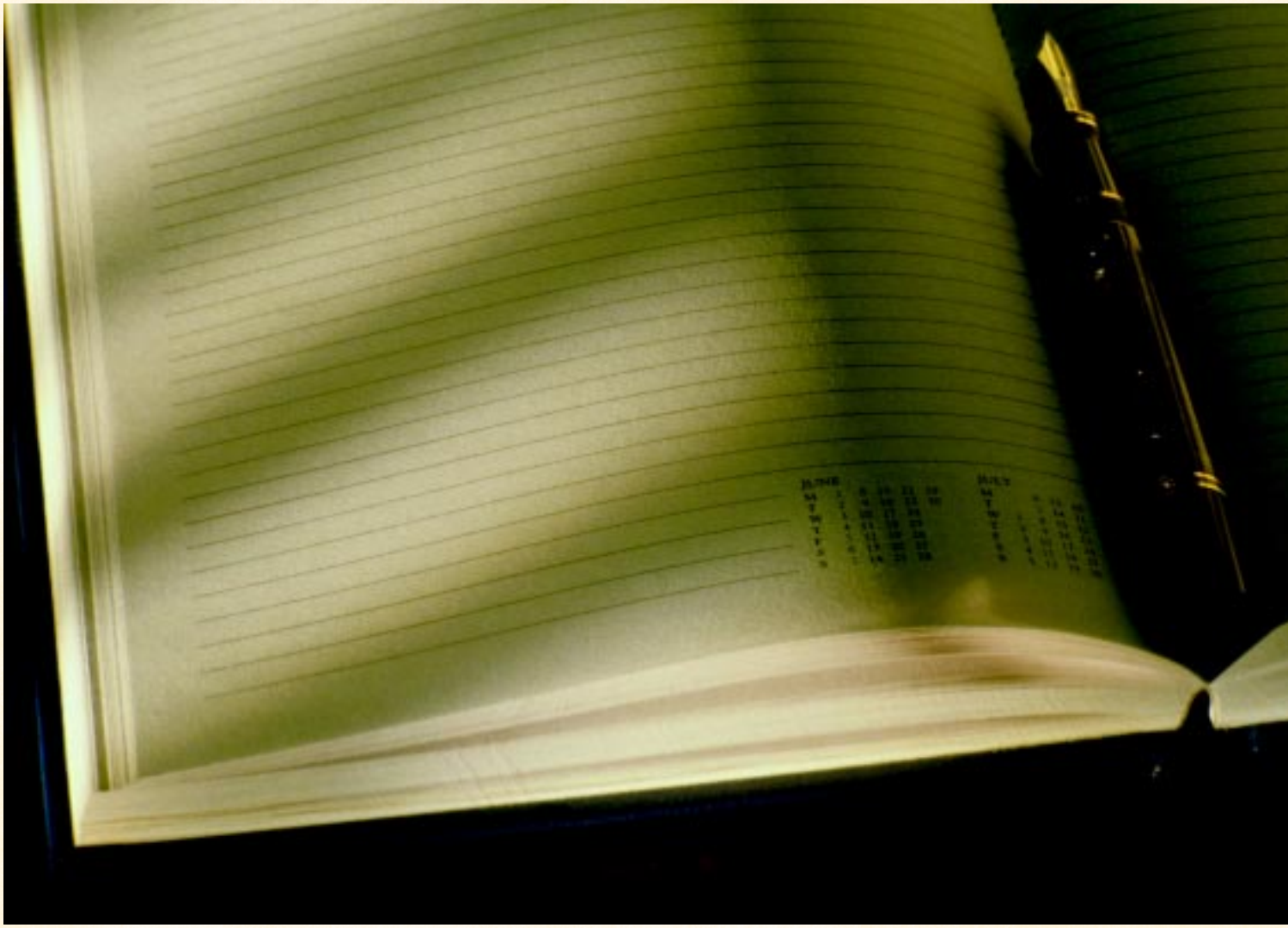
Location:	Keene State College	Dates: 08/07/00 - 08/11/00
Location:	Metropolitan Community Colleges Business and Technology Center	Dates: 09/18/00 - 09/21/00
Location:	National Safety Education Center (Hillside, IL)	Dates: 09/18/00 - 09/22/00
Location:	Niagara County Community College	Dates: 08/28/00 - 08/31/00
Location:	Texas Engineering Extension Service	Dates: 09/11/00 - 09/14/00
Location:	University of California, San Diego	Dates: 09/11/00 - 09/14/00

521 OSHA Guide to Industrial Hygiene

Location:	National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 08/07/00 - 08/10/00
Location:	Texas Engineering Extension Service (Mesquite, TX)	Dates: 08/21/00 - 08/24/00

600 Collateral Duty Course for Other Federal Agencies

Location:	Niagara County Community College	Dates: 09/25/00 - 09/28/00
Location:	Red Rocks Community College/Trinidad State Junior College	Dates: 08/29/00 - 09/01/00
Location:	University of California, San Diego	Dates: 08/21/00 - 08/24/00
Location:	University of Washington JSHQ	Dates: 08/07/00 - 08/10/00



Federal

Developed biannually, the agenda includes all regulations expected to be under development or review by the agency during that period. The following list is from the agenda as published in the ***Federal Register, March 2000.***

Prerules

Title and Regulation Identifier Number (RIN)*

Cotton Dust
1218-AB74

Grain Handling Facilities
1218-AB73

Hearing Loss Prevention in Construction Workers
1218-AB89

Occupational Exposure to Perchloroethylene
1218-AB86

Process Safety Management of Highly Hazardous Chemicals
1218-AB63

Safety Standards for Scaffolds Used in the Construction Industry Part II
1218-AB68

Sanitation
1218-AB87

Proposed Rules

Electric Power Transmission and Distribution; Electrical Protective Equipment in the Construction Industry
1218-AB67

Occupational Exposure to Ethylene Oxide
1218-AB60

Permissible Exposure Limits (PELs) for Air Contaminants
1218-AB68

Plain Language Revision of the Flammable and Combustible Liquids Standard
1218-AB61

Plain Language Revision to Spray Applications
1218-AB84

Plain Language Revision of the Mechanical Power-Transmission Apparatus Standard
1218-AB66

Prevention of Needlestick and Other Sharps Injuries
1218-AB85

Signs, Signals, and Barricades
1218-AB88

Standards Improvement (Miscellaneous Changes) for General Industry, Marine Terminals, and Construction Standards
1218-AB54

Final Rules

Consultation Agreements
1218-AB79

Employer Payment for Personal Equipment
1218-AB24

Ergonomics Programs Preventing Musculoskeletal Disorders
1218-AB36

Nationally Recognized Testing Laboratories Programs: Fees
1218-AB57

Occupational Exposure to Tuberculosis
1218-AB46

Plain Language Revisions to the Exit Routes Standard
1218-AB55

Recording and Reporting Occupational Injuries and Illnesses (Simplified Injury/Illness Recordkeeping Requirements)
1218-AB24

Steel Erection (Part 1926) Safety Protection for Ironworkers
1218-AA65

Long Term

Access and Egress in Shipyards (Part 1915, Subpart E) (Phase I) (Shipyards: Emergency Exits and Aisles)
1218-AA70

Accreditation of Training Programs for Hazardous Waste Operations (Part 1910)
1218-AB27

Register

Confined Spaces in Construction (Part 1926): Preventing Suffocation/Explosions in Confined Spaces
1218-AB47

Consolidation of Records Maintenance Requirements in OSHA Standards
1218-AB78

Control of Hazardous Energy (Lockout) in Construction (Part 1926) Preventing Construction Injuries/Fatalities; Lockout)
1218-AB71

Fall Protection in the Construction Industry
1218-AB62

Fire Protection in Shipyard Employment (Part 1912, Subpart P) (Shipyards: Fire Safety)
1218-AB51

General Working Conditions for Shipyard Employment
1218-AB50

Glycol Ethers: 2-Methoxyethanol, 2-Ethoxyethanol, and Their Acetates: Protecting Reproductive Health
1218-AA84

Indoor Air Quality in the Workplace
1218-AB37

Longshoring and Marine Terminals (Parts 1917 and 1918)—Reopening of the Record (Vertical Tandem Lifts (VTLs))
1218-AA56

Metalworking Fluids: Protecting Respiratory Health
1218-AB58

Occupational Exposure to Beryllium
1218-AB76

Occupational Exposure to Crystalline Silica
1218-AB70

Occupational Exposure to Hexavalent Chromium (Preventing Occupational Illness: Chromium)
1218-AB45

Oil and Gas Well Drilling and Servicing
1218-AB83

Respiratory Protection (Proper Use of Modern Respirators)
1218-AA05

Revocation of Certification Records for Tests, Inspections, and Training
1218-AB65

Safety and Health Programs for Construction
1218-AB69

Safety and Health Programs for General Industry and the Maritime Industries
1218-AB41

Scaffolds in Shipyards (Part 1915-Subpart N)
1218-AA68

Walking Working Surfaces and Personal Fall Protection Systems (Part 1910) (Slips, Trips, and Fall Prevention)
1218-AB80

Completed Actions

Control of Hazardous Energy Sources (Lockout/Tagout) (Section 610 Review)
1218-AB59 JSHQ

*Office of Management and Budget (OMB) Identification Number. For copies of OSHA final rules published in the *Federal Register,* contact the Superintendent of Documents, Government Printing Office, Washington, DC 20402. GPO products also can be ordered online at www.gpo.gov.


on the
ROAD...

Looking for Safety Zones

by Camille Villanova

Time for An Orange Cone?

It's summer and time for an orange cone. You jump in the car with your family, only to get stuck in traffic caused by a highway work zone and lots of orange cones. Although not the delicious melt-in-your-mouth treat you expected, these orange cones are good for everyone—especially for the workers they protect.

On June 9, 1998, the Congress approved a 6-year program for improving existing roads and bridges, new construction, and other transportation issues. Passed as a public law and known as the *Transportation Equity Act for the 21st Century*, or TEA-21, the act includes approximately $217 billion for a variety of transportation programs. The most visible are those marked with the orange cones and barrels indicating a highway work zone. Other coverage includes historic covered-bridge preservation, seat belt and child passenger protections, high-speed rail, transit planning and research, recreational trails, and new vehicle technologies.

Highway work zones may be found everywhere from new road and highway construction to pothole repair. The Department of Transportation's Federal Highway Administration (FHWA) develops and issues regulations and designs for the safety of the public in and around these work zones. Occupational Safety and Health Administration (OSHA) standards, which reference some Department of Transportation (DOT) regulations, apply to the employers and workers within these work zones. OSHA standards cover specific items such as traffic control signs, devices, barricades, and signaling methods by flaggers as well as much broader construction safety and work practices for the construction industry.[1]

Highway Safety Zones

The first orange cone you are likely to see on the road usually follows a sign indicating a highway work zone and/or speed reductions ahead. Orange is used as the warning signal for construction and maintenance in the area. The orange cones may indicate short-duration repairs for pot holes or utilities, or the beginning of a taper to redirect the traffic or to close a lane. Barrels and barricades, impact attenuators, rumble strips, screens, more signs, flaggers, and concrete barriers may follow the orange cones. These devices and speed reductions are used to balance both traffic flow and the need to reduce hazards for workers. Highway construction work can be very hazardous. According to the Bureau of Labor Statistics data, 104 workers died in Fiscal Year 1998

[1] *Title 29 of the Code of Federal Regulations (CFR)*, Part 1926.

National Work Zone Safety Awareness Week

SAFETY TIPS TO LIVE BY

1. **STAY ALERT!**
   Dedicate your full attention to the roadway.
2. **PAY CLOSE ATTENTION!**
   Signs and work zone flaggers save lives.
3. **TURN ON YOUR HEADLIGHTS!**
   Workers and other motorists must see you.
4. **DON'T TAILGATE!**
5. **DON'T SPEED!**
   Note the posted speed limits in and around the work zone.
6. **KEEP UP WITH THE TRAFFIC FLOW!**
7. **DON'T CHANGE LANES IN THE WORK ZONE!**
8. **MINIMIZE DISTRACTIONS!**
   Avoid changing radio stations and using mobile phones while driving in the work zone.
9. **EXPECT THE UNEXPECTED!**
   Keep an eye out for workers and their equipment.
10. **BE PATIENT!**
    Remember the work zone crew members are working to improve your future ride.

Source note: Reprinted with permission of the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the American Traffic Safety Services Association.

from highway, street, bridge, and tunnel construction,[2] an increase of 22 worker fatalities from Fiscal Year 1997. Highway construction means working side by side with 3,000 pounds of metal speeding along 2 to 3 feet from you 8 hours a day!

Highway work zone safety combines public and occupational safety concerns. The American Traffic Safety Services Association (ATSSA), using National Highway Traffic Safety Administration (NHTSA) data, estimates that, on average, 760 neighbors, relatives, friends, and workers died from work zone crashes during 1993-1995.[3] The trend had been decreasing until 1998 when there was a 10-percent increase in fatalities. The number of all persons injured in work zone crashes is even more alarming. It was approximately 39,000 in 1998. And these fatalities and injuries increase by almost 30 percent during the summer.

But it doesn't have to be that way. The public and the construction industry can work together to reduce the hazards of these jobs. Drivers should follow the speed limits and instructional signs. Work zone construction sites should have appropriate protections, such as solid barriers, trucks with crash barriers, and workers wearing highly visible protective gear.

Do you remember the driver's education class about stopping distance is roughly your speed in feet? Well, that distance can be considerable more. NHTSA has found that a small car traveling at 20 miles an hour has an average stopping distance of 17 to 20 feet; a medium size car going 20 miles an hour has an average of stopping distance of 19 feet. As most everyone has observed, highway work zones often give motorists only inches between the flagger or barriers. If you are speeding through a work zone at 40 miles an hour in a small car, you will need approximately 70 to 80 feet to stop—And

[2] Bureau of Labor Statistics, 1998 and 1997, "Annual Data from the Census of Fatal Occupational Injuries," Table A-1, Fatal occupational injuries by industry and event exposure.

[3] American Traffic Safety Services Association, "1998 Workzone Crashes Fact Sheet."

there are a lot of workers and equipment within that 70 feet of work zone!

Partners in Safety

One of OSHA's strategic goals is to reduce worker fatalities by emphasizing safety and health in highway work zones. Several OSHA offices in OSHA's Chicago region have begun a local emphasis program for "Road Construction Work Zone Activities." This program combines enforcement and outreach as well as collaboration with the National Safety Council (NSC), the American Road and Transportation Builders Association, the Illinois Road Builders, Illinois DOT and State Police, Laborers International Union, International Union of Operating Engineers, and The Insurance Industry. This provides an excellent forum for exchanging information on safety and health practices in highway work zones.

The NSC will train the construction industry and assist in training OSHA inspectors who conduct highway work zone inspections. And OSHA inspectors will be able to help employers develop safe traffic control patterns in accordance with Federal and State DOT guidelines and *29 CFR 1926.20* (b)(2), utilize personal protective equipment that contrasts with the background and reflects light, and determine alternate methods to stop or direct traffic.

Even before the Chicago program began, OSHA field personnel had been working to reduce hazards in highway work zones. Since 1995, the Parsippany and other area offices in OSHA's New York region have been working to improve worker safety in highway work zones. These offices continue to work closely with the New Jersey State Police, the New Jersey Department of Transportation, the FHWA, the New Jersey OSHA Consultation program, the Utilities and Transportation Contractor's Association, Rutgers University, and local county police departments to reduce work zone fatalities.

This collaboration began with specialized training for the New Jersey State Police on the hazards found in and around highway work zones, such as struck-by, fall, caught in/between, and electrocutions. New Jersey has established a State Police Construction Unit to work with local police forces to identify and eliminate hazards in highway work zones. As a result, they identified and estimated 2,927 hazards and removed approximately 6,275 workers from these dangerous areas.[4]

Through partnerships and leveraging resources, OSHA continues to create much safer and more healthful working conditions for your neighbors, relatives, and friends who work in a highway work zone.

Work zone construction should have appropriate protections, such as solid barriers, trucks with crash barriers, and workers wearing highly visible protective gear.

Other federal agencies and employer and employee groups have recently joined together to increase worker and public awareness and call for more caution in highway work zones. The week of April 3, 2000 was the the first "National Highway Work Zone Safety

[4] OSHA, April 25, 2000, "Update: The New Jersey Highway Construction Work Zone Collaborative Coalition."

National Work Zone Safety Awareness Week

FACT SHEET

- Over the last 5 years the number of persons killed in motor vehicle crashes in work zones has gone from a high of 828 in 1994 to a low of 693 in 1997, for an average of 760 fatalities per year.
- In 1998, 772 fatalities resulted from motor vehicle crashes in work zones of which 222 resulted from large truck crashes.
- On average from 1994 to 1998, 16 percent of the fatalities resulting from crashes in work zones were non-motorists (pedestrians and bicyclists).
- Approximately 39,000 people were injured as a result of motor vehicle crashes in work zones.
- Approximately 3,000 people were injured in large truck work zone crashes in 1998.
- In 1998, more than half of all work zone crashes occurred during the day, while about three-quarters of fatal large truck work zone crashes occurred during the day.
- Almost three times as many work zone crashes occurred on weekdays compared to weekends.
- Fatal work zone crashes, regardless of whether a large truck was involved or not, occurred most often in the summer and the fall.
- The percentage of fatal work zone crashes occurring on urban interstates was more than twice the percentage of all fatal crashes occurring on urban intersections (14 percent compared to 6 percent).
- For fatal large truck crashes, the percentage of work zone crashes occurring on urban Interstates was twice as high compared to all fatal truck crashes (20 percent compared to 10 percent).
- The majority of fatal work zone crashes for all vehicles and large trucks occurred on roads with speed limits of 55 miles per hour or greater (59 percent and 71 percent, respectively).

Source note: Reprinted with permission of the U.S. Department of Transportation, the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the American Traffic Safety Services Association.

Awareness Week," sponsored by the State of Virginia, FHWA, American Association of State Highway and Transportation Officials (AASHTO), and ATSSA. More than 30 federal agencies, state and local governments, highway patrol officers, and associations contributed to the campaign kickoff in Springfield, VA, or conducted seminars throughout the nation. The theme—"Stay Alert, Stay Alive"—focused on increasing awareness of this important message to the public, employers, and workers. When work zone safety is followed, everyone can return home safely at the end of the day.

Plans are already underway for next year's event from April 9-13, 2001. And although the name has been slightly modified to "National Work Zone Awareness Week," the spirit of the program—safety and mobility through our nation's work zones—remains the same.

In December 1999, the National Institute for Occupational Safety and Health (NIOSH) held a workshop "Preventing Vehicle- and Equipment-Related Occupational Injuries in Highway and Street Construction Work Zones." Representatives from associations of road constructors, labor unions, and various governmental agencies participated in an exchange about how to reduce worker exposures during highway construction. They discussed four main topics: pedestrian worker safety around traffic vehicles, safe operation of construction vehicles and equipment in highway work zones, planning for safe operations within work zones, and special safety issues associated with night work in highway construction. NIOSH plans to publish a document summarizing the ideas, recommendations, and utilization of new

technologies discussed at this workshop sometime in 2000.

These efforts are really just the beginning; much more needs to be done to increase driver and worker awareness and safety about highway work zones. But you can help. Take a look at our tips for the road. Make the trip for your orange cone safer for you and others on the highway as well as for the workers in the work zones you see along the way.

Sources of Assistance

For more information, contractors and workers can find best practices at www.fhwa.dot.gov under **FHWA Programs**, *Best Practices-Work Zones*. A summary of the practice or policy is included along with the benefit and a contact for each state. Later this year, the FHWA and AASHTO will publish a document containing these best practices, which will be available on FHWA's website.

Another source of information is the Work Zone Safety Information Clearinghouse at http://wzsafety.tamu.edu. This site is a cooperative partnership with the FHWA, the American Road and Transportation Builders Association (along with the National Utility Contractors Association and Institute of Transportation Engineers), and the Texas Transportation Institute. This site also links to the FHWA best practices and contains information and links to topics such as new equipment and technologies, crash/accident data, and research projects. JSHQ

Villanova is an occupational safety and health specialist in OSHA's Directorate of Construction, Washington, DC.

Looking Forward: Industry Classification System Changing

by Susan Hall Fleming

Where does OSHA direct its inspections and focus its educational efforts? Where the problems are, of course.

Since its creation nearly 30 years ago, the agency has sought to pinpoint specific industries and, more particularly, individual worksites that need help in reducing occupational injuries and illnesses. To do that, OSHA relies on data developed by the Bureau of Labor Statistics (BLS) to estimate annual injuries, illnesses, and fatalities by industry and the agency's own database, which began in 1995 from the records of about 80,000 worksites that send records to OSHA each year.

These data help OSHA identify the most hazardous industries, follow the individual firms with the worst records, and discover trends such as the emergence of musculoskeletal disorders as a major problem for workers.

These data help OSHA identify the most hazardous industries, follow the individual firms with the worst records, and discover trends such as the emergence of musculoskeletal disorders as a major problem for workers.

For the past three decades, the agency has used the Standard Industrial Classification (SIC) system to categorize industries when tracking such data. The SIC system, developed by the Office of Management and Budget (OMB), provides a standard classification for all federal agencies and the private sector to distinguish discrete segments of the economy.

But that's all about to change. The SIC Code has been replaced by the North American Industry Classification System (NAICS). An outgrowth of the North American Free Trade Agreement (NAFTA), OMB adopted the new system in 1997 and will update it in 2002. NAICS will provide a consistent classification system for the three NAFTA signatories—Canada, Mexico, and the US.

How the Systems Differ

The SIC system uses 10 primary divisions to classify industries. Under SIC, industries may be identified by two, three, or four digits. NAICS breaks the economy into 20 major sectors in its 1,250-page listing of industries. It identifies 1,170 separate industries (in the U.S.), up from 1,004 in the SIC system. One of the most significant changes is splitting the SIC services division into seven sectors. NAICS also recognizes 350 new industries, acknowledged for the

first time as discrete categories including, for example, fiber optic cable manufacturing, temporary help supply, HMO medical centers, and bed and breakfast inns.

Instead of a four-digit code, NAICS uses a six-digit code. This system permits a larger number of sectors and provides more flexibility for designating subsectors. The first five digits are standardized across Canada, Mexico, and the US. The sixth digit can be used to identify subdivisions among industries needed in individual countries. NAICS also establishes a code to classify auxiliary functions within an organization, such as management and administrative work.

NAICS will be reviewed every 5 years so classifications can be adjusted to fit a changing economy. It follows a consistent approach by placing industries in sectors according to types of production activities performed rather than the mixture of production-based and market-based categories in the SIC Code.

For example under NAICS, in the new Information Sector 51, Broadcasting and Telecommunications is subsector 513. Telecommunications is classified as Industry Group 5133, and Wireless Telecommunications Carriers, Except Satellite, is Industry 51332. Finally, Paging is listed as U.S. Industry 513321.

What to Expect

Most agencies, including OSHA, have begun preparations for making the change to NAICS. BLS plans to switch to this system for data collected in 2003 and reported in 2004. OSHA will move to NAICS, both for injury and illness reporting and inspection classification, at the same time.

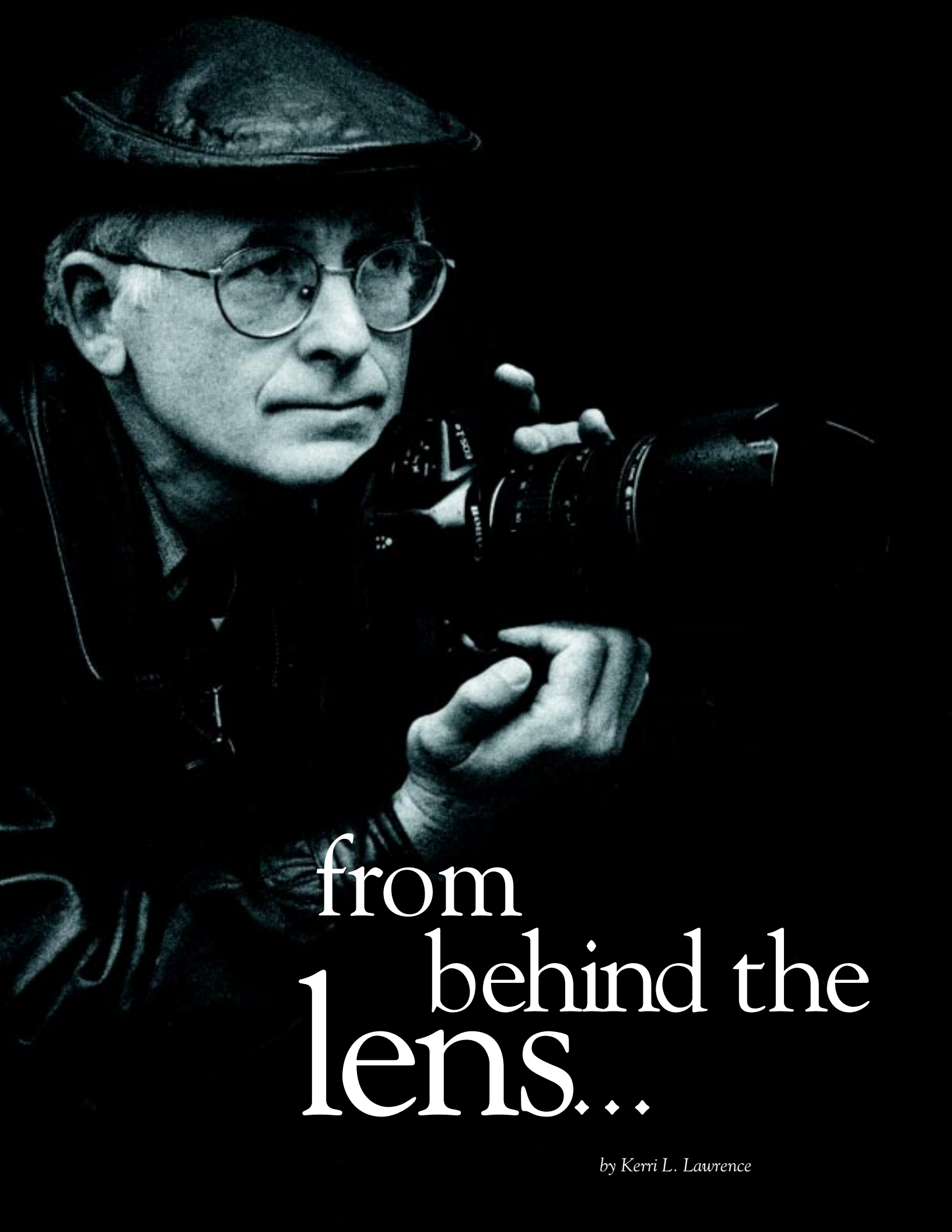
The changeover will affect virtually all OSHA inspection and targeting data as well as collection procedures and products.

About 60 percent of the SIC codes have been replaced or changed in the NAICS system. BLS considers the change a "break in series," which means that when the new system is used for reporting 2003 data in 2004, data users will not be able to compare results from the old SIC to the new NAICS.

The changeover will affect virtually all OSHA inspection and targeting data as well as collection procedures and products. And the agency may lose the ability to track results back to the previous SIC codes in certain industries. However, the more discrete categories in the NAICS will enable OSHA and individual worksites to better track their progress in reducing injuries and illnesses against others doing comparable work.

Prior to the new system being implemented, OSHA will include a copy of the NAICS listing on its website as well as links to BLS data on injuries, illnesses, and fatalities to help employers and workers identify their code and find information on agency inspections. JSHQ

Fleming is a public affairs specialist in OSHA's Office of Public Affairs, Washington, DC.



from behind the lens...

by Kerri L. Lawrence

The Many Faces of the American Worker

If a picture's worth a thousand words, then Earl Dotter's work must be worth millions. For nearly 30 years Dotter has observed and documented the lives of workers across America—not as a safety and health professional, industrial hygienist, or OSHA compliance officer, but as a photographer. From behind his camera lens, Dotter has explored the lives of workers in hazardous industries and exposed the often gritty realities of their workplaces. By capturing their compelling stories on film, he provides a brief, but telling glimpse into their worlds. And his passion for exposing their stories, accomplishments, and tragedies has caused many to take notice and take action to better protect the American workforce.

Dotter's first occupational safety and health photographs were of coal miners. He caught his first glimpse of the coal-mining industry, its people, and culture when he joined Volunteers in Service to America (VISTA) shortly after completing his studies at the School of Visual Arts in New York City, NY. Initially assigned to the Cumberland Plateau Region of Tennessee, Dotter remained in the area even after his VISTA assignment ended.

He explains that his experiences helped him come to know and respect the coal-mining way of life, including the hardships and struggles. "When I had the occasion to meet these men and women face-to-face, their lives became very real for me." And his photographs documented that reality. In turn, coal-mining families welcomed him into their homes. Dotter knew he had to tell their stories.

In 1972 Dotter photographed the rank-and-file movement to reform the United Mine Workers of America (UMWA). As a photographer for a reformist newspaper, *The Miner's Voice*, Dotter's photographs led to his assignment with the *United Mine Workers' Journal*, a publication of the UMWA. At the *Journal*, he recorded the intimate aspects of miners' daily lives—the dangers of mining underground, the hardships of living on abused land, and the contrasting sense of pride and rich culture that sustained coal field families. Dotter says that it became a decade of intense creative development for him as he began creating images with a visual and emotional impact. And he adds that the `lessons he learned during his coal field years still guide much of his work to this day.

Dotter's first encounter with OSHA came in the late 1970s when the agency noticed his photography of workers in American

cotton mills. At the time, OSHA was working on a standard to reduce worker exposure to cotton dust. Brown lung disease was a very serious problem for cotton mill workers, and Dotter's powerful photographs told their story.

Throughout the 1980s, Dotter continued to photograph people and their work. And his images began receiving national attention. In 1988, he received the "Leica Medal for Excellence" for his photographs featuring window washers working on the Empire State Building. During the decade, Dotter also published many of his photographs in a textbook entitled *Occupational Health* (Little Brown & Company). Then, *Audubon Magazine* commissioned him to provide photos for a 26-page photo essay entitled "The Mountains, The Miners, and Mister Caudill."

By 1992, William Serrin's book, *Homestead: The Glory and Tragedy of an American Steel Town* (Random House), featured Dotter's work, depicting the death of small-town America as industry dramatically declined due to technological advancements and foreign relocation.

In 1996, Dotter began touring with some of his most telling works. His exhibit, "The Quiet Sickness: A Photographic Chronicle of Hazardous Work," featured a variety of Americans and the hazardous jobs they face daily, such as Brooklyn Central Laundry employees exposed to sharps found in soiled bed linens shipped from local hospitals in New York, NY; a snowplow operator struggling to strap on tire chains during a storm in Tracy, MN; lettuce harvesters in Salinas, CA; a laborer at the Central Artery Tunnel in Boston, MA; and


GENERATOR:
CITY:
DATE:
DANGER
Contains Asbestos Fibers
Avoid Breathing Dust
Cancer and Lung Disease Hazard
RQ – ASBESTOS
9 – NA2212 –

a devastated widow burying her husband after the Scotia mine explosion in Over Fork, KY. The American Industrial Hygiene Association's Conference and Exposition in Washington, DC, was first to feature the 120-picture exhibit. A year later, the exhibit traveled to the 75th anniversary celebration of the Harvard School of Public Health in Boston, MA.

And just last fall, Dotter's photo exhibit debuted at the Department of Labor in Washington, DC, to coincide with Labor Day. Department officials saw Dotter's work as a fitting way to humanize what the Labor Department works to accomplish each day: mine safety, protection for construction workers, and the need for workplace ergonomic standards and safety measures to protect health care and textile workers, to name a few.

"As eloquently as any testimony offered before Congress, Earl Dotter's photographs show the need for such basic hard-fought health and safety advances as ventilation standards to prevent methane explosions in underground coal mines, fall-protection devices for window washers and other workers on scaffolds, and the cotton dust standard in the textile industry," says Secretary of Labor Alexis Herman.

Dotter recently completed a book—*The Quiet Sickness* (AIHA Press)[1]—based on his exhibit. He explains that the primary goal of the book is to "put a human face on the occupationally related tragedies that befall thousands of U.S. workers annually." He notes that

[1] For more information on Dotter's book, *A Quiet Sickness: A Photographic Chronicle of Hazardous Work in America*, see the author's website at www.earldotter.com.

he strives to allow the subjects in his pictures to communicate directly with the viewer.

Dotter's photography chronicles the whole worker—his life on the job, at home, and in the community. And over the years, Dotter's photographs have broadened from an emphasis on occupational health and safety to include environmental hazards to public health. He believes "this evolution was only logical since the adverse conditions that first affect people on the job—from their first exposure to carcinogens, toxins, and industrial waste—eventually make their way out of the worksite and into the air and water of the surrounding environment."

…as a photographer he is very aware that the lives of his subjects are often "far harsher and more painful" than of those who look at his pictures.

Dotter says that one of the most gratifying responses to his work came from an industrial hygienist viewing the exhibit who told him that "seeing the consequences of workplace-related injury, disease, and death faced by the real people who were featured reconnected him with his original motivation for entering the profession."

According to Dotter, "When you put a real individual in the photo, it resonates and gets us away from putting numbers on people's lives and their health and safety—*that* is the sobering message conveyed by the collection. The brighter picture is that some of these conditions no longer exist because of the improvements brought about by federal standards." He notes that he's encouraged by the progress that partnerships among the government, industry, and unions have made over the years to remove many hazards that once made hard labor a dangerous way to earn a living.

Dotter says that as a photographer he is very aware that the lives of his subjects are often "far harsher and more painful" than of those who look at his pictures. To bridge that gap, he states that he "looks for common ground" between the two. And to many who view these striking photos, that's what makes them so unique and captivating.

Dotter believes that if a photo is to be successful, "the viewer must be able to stand before it and feel the intensity of the moment" as he had felt it himself. "When I experience tragedy in the workplace—death, disability, and exploitation—I use the camera to explore not only the person or event, but also my own reaction to it." His goal, he says, "is not just to touch those viewers already sympathetic to the circumstances of my subjects, but to command the attention of those who normally would pass them by."

"I continually seek out those who are taking steps to improve their lives, and use the camera to engage them by giving testimony to their achievements," says Dotter. "The images that result tell of the satisfaction of their work as well as the dangerous and dehumanizing aspects."

Dotter most appreciates photographs that "look right into the eye of the viewer, creating a sense of eye contact." For this reason, he believes that his portrait of coal miner Lee Hipshire, which was taken as he exited the mine after a long day of work, is particularly effective. "You can see every coal-dust laden pore on his face." In fact, Dotter felt so strongly about this photograph that he chose it for the cover of his book. Other favorites—if he had to choose—

include the 1976 compelling photo of a pregnant widow graveside following a coal mine disaster. He describes the experience as "powerful" and feels his close relationship with the grieving family enabled him to stand back without intruding and observe the scene as it unfolded.

Dotter says he is not finished setting up his tripod just yet. His current mission—enabled in part by his award of the "Josephine Patterson Albright" fellowship from the Alicia Patterson Foundation—is to record the hazardous commercial fishing industry in New England. Dotter will spend the year traveling, researching, and photographing what he believes "has become one of the most dangerous occupations in America."

He adds that he still has many workplaces to explore and workers' stories to tell. And as American workplaces evolve, so too will his subjects and photographic challenges. Dotter notes with a great sense of pride that he'll continue to do his part to give testimony to the workers' achievements as well as their personal tragedies. By telling their stories, Dotter has the unique power to touch and motivate us to achieve safer and more healthful workplaces throughout the nation.

Lawrence is Managing Editor of ***Job Safety & Health Quarterly*** *and a staff writer-editor in OSHA's Office of Public Affairs, Washington, DC.*

Help Available: The Workers' Page

by Susan Hall Fleming

Workers now have their own corner on OSHA's website. Launched April 28, 2000, as part of the agency's observance of Workers' Memorial Day, the Workers' Page provides a portal for workers interested in more information about occupational safety and health.

A single click on the "Workers' Page" title or photo on OSHA's homepage at www.osha.gov transports the websurfer to a page that pulls together information of particular interest to workers. The page includes details on worker rights and responsibilities, instructions for filing safety and health complaints, information on whistleblower protection under OSHA, and links to additional resources.

More and more Americans use the Internet to search for information, order products, pay bills, or do their banking. About half of all homes now have a computer, and the number is rising steadily. Many public libraries also offer access to the Internet.

Over the past 5 years, OSHA's own presence in cyberspace has grown significantly from less than 2,000 pages of information to more than 40,000. Traffic on OSHA's website has increased 100-fold in just the past 4 years.

Last year, OSHA developed a special webpage for small businesses. Now the agency has done the same for workers.

Electronic Complaint Filing

A special feature of the Workers' Page is the electronic complaint filing system. Since August 1998, OSHA has permitted those who comment on regulations to send their comments electronically. Now worker complaints can be submitted electronically as well.

Workers simply click on "How to File a Complaint with OSHA" to receive directions for electronically filing and to fill in the electronic complaint form. Electronic complaints are handled as informal complaints. That means that OSHA telephones the employer and faxes or mails details on alleged hazards to the company, requesting a response within 5 days. If the employer fails to reply or the complainant is dissatisfied with the response, OSHA can follow up with an onsite inspection.

Each worker who files a complaint will receive an immediate response verifying that the complaint has reached the office designated to handle complaints for his or her state. The message also alerts the complainant to expect a call from OSHA staff. If a worker prefers to call or write, OSHA office addresses (federal and state) and phone numbers are listed on the site.

A Brief Guide

Worker Rights

Under the *Occupational Safety and Health Act of 1970*, workers have the right to a safe workplace, free of recognized hazards. Specifically, workers have the right to:

- Get training from employers about workplace hazards and workers' rights.
- Request information from an employer about OSHA standards, worker injuries and illnesses, job hazards, exposure and medical records, and workers' rights.
- Request action from an employer to correct hazards or violations.
- File a complaint with OSHA if they believe that there are either violations of OSHA standards or serious workplace hazards.
- Be involved in OSHA's inspection of their workplaces.
- Find out results of an OSHA inspection.
- Get involved in any meetings or hearings to discuss any objections their employer has to OSHA's citations or to changes in abatement deadlines.
- File a formal appeal of deadlines for correction of hazards.
- File a discrimination complaint if they are fired or demoted or otherwise punished for exercising safety and health rights.
- Request a research investigation from the National Institute for Occupational Safety and Health (NIOSH) on possible workplace health hazards.

Complaints received from workers in states operating their own OSHA-approved occupational safety and health programs are forwarded to the appropriate state for response.

Many workers are able to bring safety and health issues to the attention of their employers and know that the problems will be resolved. Others are not so fortunate. In our increasingly wired society, the electronic complaint filing process provides an additional way to report complaints to OSHA and get employers to fix problems.

The Workers' Page also explains how workers should respond to imminent dangers and what protections may be available for workers who refuse to perform dangerous tasks. It gives an overview of employer responsibilities to help clarify for workers whether they may have a valid basis for complaint.

Whistleblower Complaints

The Workers' Page includes a section on whistleblower complaints. Workers are protected from discrimination for safety and health activities—such as filing complaints with OSHA. So if someone is fired, demoted, transferred, laid off, denied overtime, not promoted, moved to an undesirable shift, denied benefits, blacklisted, or expected to take a pay cut or to work fewer hours because of safety and health activities, he or she can report this to OSHA, and the agency will investigate the allegations.

OSHA administers the whistleblower provisions of 11 laws.[1] In most cases, workers must report discrimination within 30 days of experiencing it. So prompt action is critical for the agency to intervene.

Handy Links

If workers are interested in finding out whether their employer—or a prospective employer—has ever been cited by OSHA, they can jump from the Workers' Page to OSHA's establishment search. Or they can check out the most commonly cited violations in their industry through a link to another page on OSHA's site.

Another link sends workers to hazard information available on OSHA's website. Workers also can access individual publications of particular interest to them directly from the Workers' Page or click and view the entire catalog of OSHA materials. They can get a listing of OSHA labor liaisons for each of the 10 OSHA regions. In addition, there's a link to the State Occupational Safety and Health Plans Page, which provides background information on the 25 state OSHA programs as well as links to many individual state plan websites.

The Workers' Page links to other sites that focus on workers' rights, including the National Labor Relations Board, the Equal Employment Opportunity Commission, and other Department of Labor agencies. JSHQ

Fleming is a public affairs specialist in OSHA's Office of Public Affairs, Washington, DC.

[1] Laws with whistleblower protections administered by OSHA include the *Occupational Safety and Health Act*, the *Surface Transportation Assistance Act*, the *Asbestos Hazard Emergency Response Act*, the *International Safety Container Act*, the *Energy Reorganization Act*, the *Clean Air Act*, the *Safe Drinking Water Act*, the *Federal Water Pollution Control Act*, the *Toxic Substances Control Act*, the *Solid Waste Disposal Act*, and the *Comprehensive Environmental Response, Compensation and Liability Act.*

Risk Factors and Protective Measures for Taxi and Livery Drivers

U.S. Department of Labor
Occupational Safety and Health Administration

The Problem

Taxi and livery drivers are 60 times more likely than other workers to be murdered while on the job, according to the National Institute for Occupational Safety and Health (NIOSH).[1] In 1998, 48 taxi and livery drivers were murdered while attempting to earn a living.[2] Although this number has decreased from previous years, these drivers are still at high risk for becoming victims of homicide.

Drivers Murdered: 1992-98[2]						
'92	'93	'94	'95	'96	'97	'98
86	97	87	68	50	74	48

Taxi and livery drivers are also among those with the highest rates of nonfatal assault—183.8 per 1,000—exceeded only by police (306.0 per 1,000) and private security guards (217.8 per 1,000).[3]

The Occupational Safety and Health Administration (OSHA) is concerned about violence against taxi and livery drivers and is issuing this fact sheet to give drivers and their employers information that may help make their jobs safer. This fact sheet identifies risk factors that taxi and livery drivers face along with a list of potential safety measures that might help protect them. It also describes employer responsibilities and employee rights under the *Occupational Safety and Health Act (OSH Act)*.[4]

Risk Factors

A number of factors put drivers at risk, as identified by NIOSH:

- working with the public
- working with cash
- working alone
- working at night
- working in high-crime areas.

There is no "one-size-fits-all" solution. A number of measures may help reduce the risks encountered by taxi and livery drivers. Improving safety for drivers will require the efforts and commitments of vehicle owners, drivers, service providers, law enforcement agencies, regulatory officials, and local government regulators. A number of strategies are being tried, but the deterrent effect of many of these is unknown. Some may not prevent injury but may speed response time when an incident occurs.

Safety Measures

Potential safety measures include, but are not limited to, the following items:

- automatic vehicle location or global positioning systems (GPS) to locate drivers in distress;
- caller ID to help trace location of fares;
- first-aid kits for use in emergencies;
- in-car surveillance cameras to aid in apprehending perpetrators;

Detach Here

[1] U.S. Department of Health and Human Services, National Institute for Occupational Safety and Health, *Current Intelligence Bulletin 57: Violence in the Workplace-Risk Factors and Prevention Strategies*, Publication No. 96-100, Cincinnati, OH, 1996.
[2] U.S. Department of Labor, Bureau of Labor Statistics, *National Census of Fatal Occupational Injuries, 1998*, News Bulletin USDL-99-208, Washington, DC, 1999.
[3] Greg Warchol, Ph.D., "Workplace Violence, 1992-96," in *Bureau of Justice Statistics Special Report*, U.S. Department of Justice, Office of Justice Programs, Washington, DC, July 1998, p. 3.
[4] P.L. 91-596, December 29, 1970; as amended by P.L. 101-552, 3101, November 5, 1990.

- partitions or shields[5] to protect drivers from would-be perpetrators must be used properly to work effectively;
- protocol with police—owners and police need to track high-crime locations and perpetrator profiles;
- radios to communicate in case of emergency—e.g., "open mike switch";
- safety training to teach drivers, dispatchers, and company owners protective measures;
- silent alarms to alert others in the event of danger—e.g., "bandit lights"; and
- use of debit/credit cards—i.e., cashless fare systems—to discourage robbers.

Employer Responsibilities

OSHA citations can only be issued for violations of standards, regulations, and the General Duty Clause. Section 5(a)(1) of the *OSH Act*, or the "General Duty Clause," provides that "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees" [29 U.S.C. 654(a)(1)].

This fact sheet is not intended to create legal obligations and will not be used as the basis for an enforcement action brought under Section 5(a)(1) of the *OSH Act*. The failure to implement any potential measure listed in this fact sheet is not in itself a violation of the General Duty Clause of the *OSH Act*.

Taxi and livery companies that only use the services of drivers who are independent contractors are not subject to *OSH Act* coverage. It should be noted, however, that the potential safety measures listed here are likely to help reduce the risk for independent contractors to the same extent as employees.

Employee Rights

Section 11(c)(1) of the *OSH Act* provides: "No person shall discharge or in any manner discriminate against any employee because such employee has filed any complaint or instituted or caused to be instituted any proceeding under or related to this Act or has testified or is about to testify in any such proceeding or because of the exercise by such employee on behalf of himself or others of any right afforded by this Act" [29 U.S.C. 660 (c)].

Employers are required by law to communicate to employees these rights under the *OSH Act*. Posters containing these and other rights are available free of charge from OSHA's area offices or can be downloaded from OSHA's website—www.osha.gov.

Conclusion

It is the responsibility of employers to take measures to protect the health and safety of their employees; it is also incumbent upon each driver to practice safety. OSHA has provided this list of potential safety measures to help reduce work-related risks. This is not a new standard or regulation. This fact sheet is advisory in nature and informational in content.

Employers and employees alike may find this information useful in making the kinds of changes that may help prevent assaults upon taxi and livery drivers.

For more information, please contact OSHA Office of General Industry Compliance Assistance at (202) 693-1850 or write OSHA at Directorate of Compliance Programs, 200 Constitution Avenue, N.W., Room N-3107, Washington, DC 20210.

See also the following websites for related information: www.osha.gov; www.cdc.gov/niosh; www.taxi-l.org. JSHQ

[5] John R. Stone and Daniel C. Stevens, "The Effectiveness of Taxi Partitions: The Baltimore Case," the University of Tennessee Transportation Center, Knoxville, TN, June 1999. The study demonstrated that shields reduce assaults. Drivers of unshielded taxis are more likely to be assaulted than drivers of shielded taxis. The study also showed that shields are cost-effective—i.e., the benefits of reduction in injury and robbery losses substantially exceed the costs of shield installation.

Accident Report

From the U.S. Department of Labor
Occupational Safety and Health Administration
FatalFacts *No. 35*

Accident Summary

Accident Type	Struck by
Weather	Clear
Type of Operation	Road construction
Crew Size	5
Collective Bargaining?	No
Competent Safety Monitor Onsite?	Yes
Safety and Health Program in Effect?	No
Was the Worksite Inspected Regularly by the Employer?	Yes
Training and Education Provided?	Yes
Employee Job Title	Concrete finisher
Age/Sex	64/M
Experience at this Type of Work	Unknown
Time on Project	2½ days

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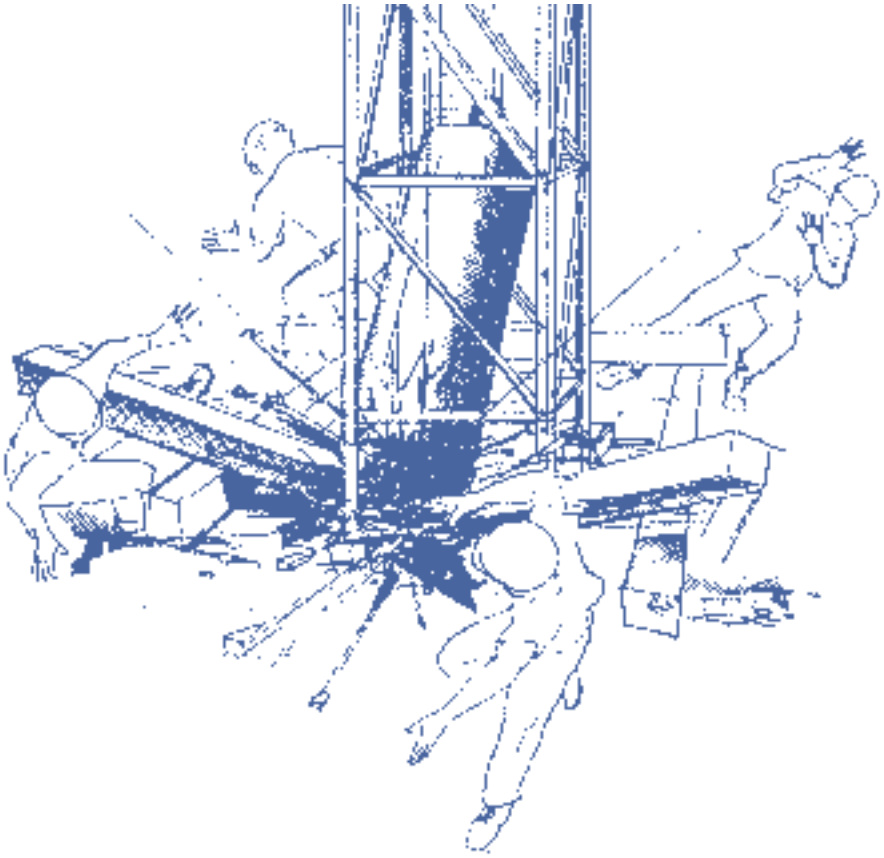


Brief Description of Accident

Four employees were working near pile-driving equipment preparing to drive the first piling. The two clips on the eye of the hammer hoisting rope slipped, permitting the hammer—which was still inside the lead—to fall nearly 45 feet. The hammer struck a large timber on the ground, breaking it. One end of the timber struck the employees, fatally injuring one man.

Accident Prevention Recommendations

1. Use a minimum of four wire rope clips to form eyes in the ends or use the size wire rope in accordance with *Title 29 Code of Federal Regulations (CFR)* Part1926.251(c)(5), Table H-20.

2. The employer should instruct each employee to recognize and avoid unsafe conditions and to know the regulations applicable to his work environment to correct or eliminate any hazards or other exposure to illness or injury in accordance with *29 CFR 1926.21*(b)(2).

Sources of Help

- OSHA-funded free consultation services. Consult your telephone directory for the number of your local OSHA area or regional office for further assistance and advice listed under U.S. Labor Department or under the state government section where states administer their own OSHA programs.
- Visit OSHA's website at www.osha.gov. JSHQ

Accident Report

From the U.S. Department of Labor
Occupational Safety and Health Administration
FatalFacts *No. 51*

Accident Summary

Accident Type	Struck by
Weather	Clear/cool/windy
Type of Operation	Construction maintenance
Crew Size	3
Collective Bargaining?	Yes
Competent Safety Monitor Onsite?	No
Safety and Health Program in Effect?	No
Was the Worksite Inspected Regularly by the Employer?	Inadequate*
Training and Education Provided?	No
Employee Job Title	Laborer
Age/Sex	33/M
Experience at This Type of Work	18 weeks
Time on Project	1 day

*Employer provided but did not require use of hard hats.

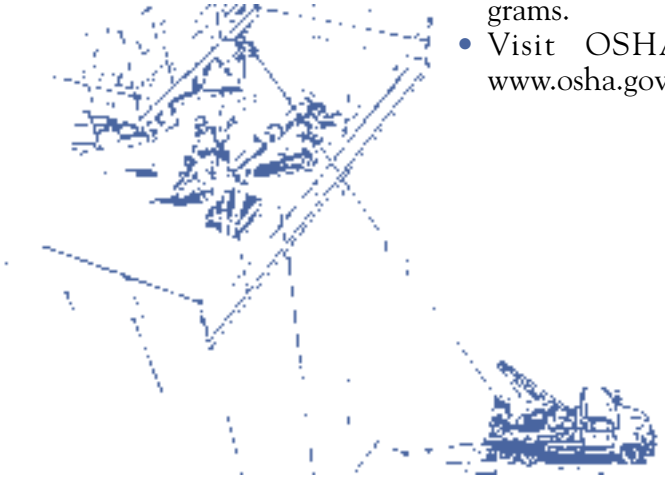
Brief Description of Accident

Employees were dismantling grain spouts at a grain elevator. Collars connected sections of the spouts. A 5-ton winch pulled a 10-foot section of a spout weighing 600 pounds through a vent hole. As the spout was being pulled through the opening to the outside, the spout became wedged at the point where the collar was to pass through.

Several employees used pry bars to free the collar, which was under tension. The spout popped out of the vent—striking and killing an employee who was standing beside the spout.

Inspection Results

As a result of its investigation, OSHA issued two citations alleging serious violations. The employee should have been able to recognize that this situation was hazardous. Additionally, the investigation revealed that the fatally injured employee was not wearing personal protective equipment in this hazardous situation. Had he been wearing a hard hat, this death might have been prevented.



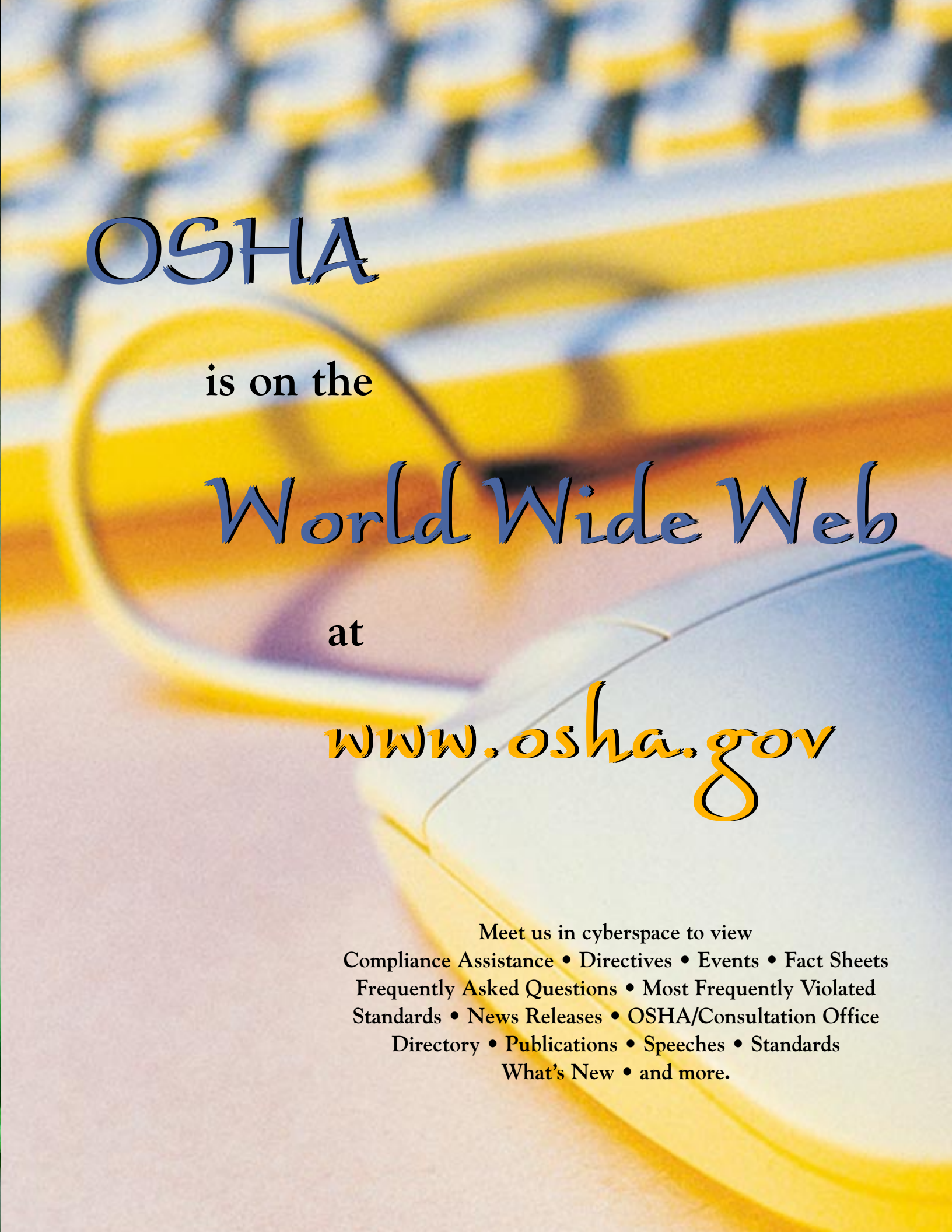
Accident Prevention Recommendations

1. Employers must instruct employees to recognize and avoid unsafe conditions and to know the regulations applicable to the work environment to control or eliminate any hazards or other exposures to illness or injury *Title 29 Code of Federal Regulations (CFR)*, Part 1926.21 (b)(2).
2. Appropriate personal protective equipment must be worn by employees in all operations where there is exposure to hazardous conditions [*29 CFR 1926.100*(a)].

Sources of Help

- OSHA General Industry Standards [*29 CFR* Parts 1900-1910] and OSHA Construction Standards [*29 CFR* Part 1926] which together include all OSHA job safety and health rules and regulations covering construction.
- OSHA-funded free consultation services listed in telephone directories under U.S. Labor Department or under the state government section where states administer their own OSHA programs.
- Visit OSHA's website at www.osha.gov. JSHQ

Detach Here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Frequently Asked Questions • Most Frequently Violated
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U.S. Department of Labor
Occupational Safety and Health Administration