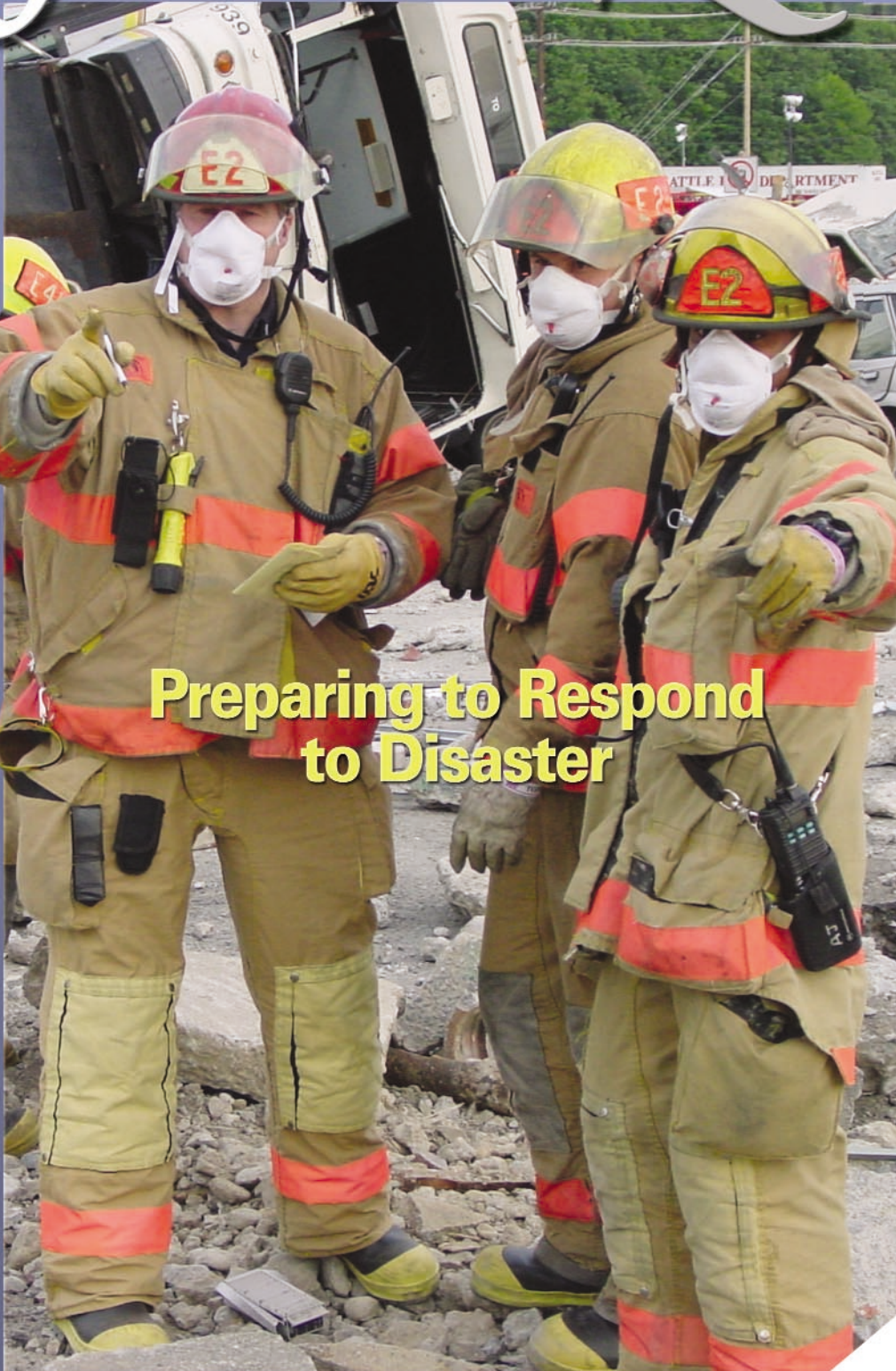


JSHQ

JOB SAFETY
& HEALTH
QUARTERLY

Volume 14 • Number 4
SUMMER/FALL 2003



**Preparing to Respond
to Disaster**

Also Inside

**The Power of
Partnership:**

•
**at Yellowstone
National Park**

•
**at The U.S.
Postal Service**

•
**in Meat
Processing**

•
**for Electrical
Workers**

Concluding Edition of JSHQ

U.S. Department of Labor

Elaine L. Chao, Secretary

Occupational Safety and Health Administration

John L. Henshaw, Assistant Secretary

JOB SAFETY & HEALTH QUARTERLY is the official magazine of the Occupational Safety and Health Administration, U.S. Department of Labor.

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Dear Reader:

We are changing with the times. This issue of Job Safety and Health Quarterly is the last edition of OSHA's general interest magazine on occupational safety and health. We have enjoyed producing JSHQ for more than 14 years, and we hope you have enjoyed reading it. The pages of this magazine tell the story not only of OSHA but also of the OSHA family – members of the agency, state plan partners, consultation programs and others – who are dedicated to reducing injuries, illnesses and fatalities in America's workplaces.

OSHA stakeholders are now asking for safety and health information related to specific industries and businesses. To answer that need, OSHA will begin publishing information on specific industries that experience high injury and fatality rates. Please watch for future magazines that offer industry-specific insights into success stories, hazards and solutions, safety check lists, training courses available, fact sheets, effective safety and health management systems and specific OSHA health and safety resources.

OSHA's new magazine series will focus on Landscaping and Horticulture Services; Oil and Gas Field Services; Canned, Frozen and Preserved Fruits, Vegetables, and Food Specialties; Concrete, and Concrete Products; Steel Works, Blast Furnaces and Rolling and Finishing Mills; Ship and Boat Building and Repair; and Public Warehousing and Storage – the industries identified in our Strategic Management Plan.

If you have a current paid subscription to JSHQ, the Government Printing Office assures us they will be in contact with you to refund any monies owed. If you would like to contact GPO directly regarding your subscription, you can call: 202-512-1806.

No concluding message would be complete without special thanks to Donna Miles, who served as the energetic editor of JSHQ for the past year. Donna is now working at the Department of Defense, but her final work at OSHA is reflected on these pages.

We hope you will be readers of our new magazine series. And we wish you all the best.

The staff of the OSHA Office of Communications

JSHQ

JOB SAFETY & HEALTH QUARTERLY

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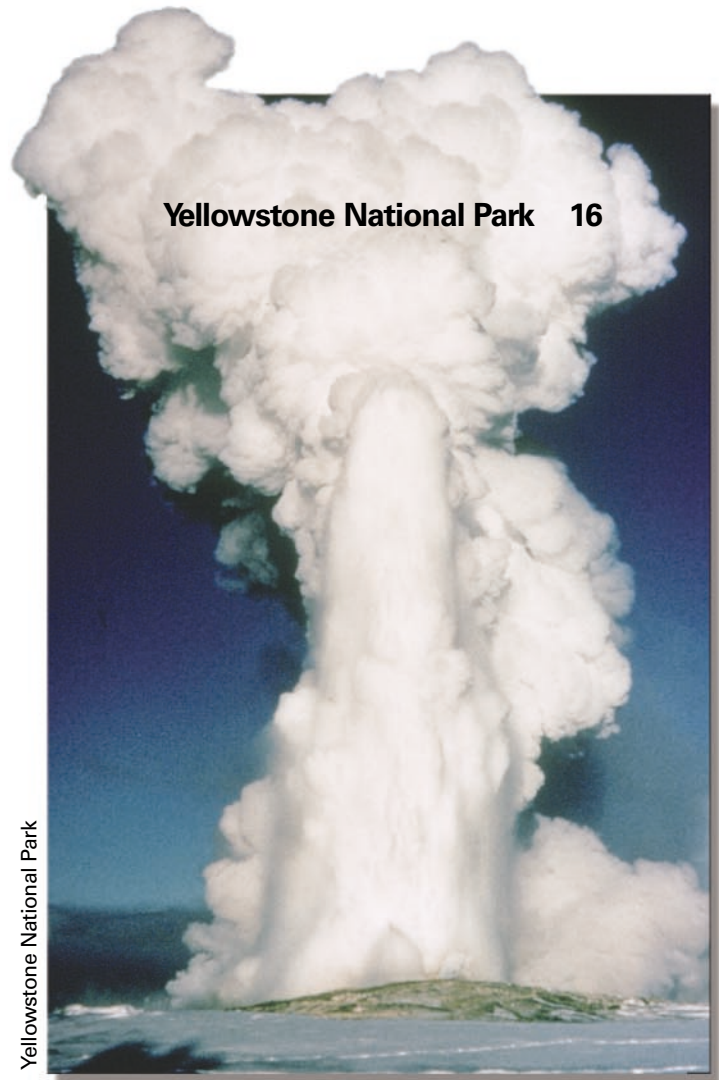
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Cover photo by Dale Cavanaugh



Through the agency's leadership, we have established that worker safety and health is an essential element of our nation's domestic preparedness and emergency response efforts.

John L. Henshaw
Assistant Secretary of Labor
for Occupational Safety and Health

OSHA stands ready to assist America's employers and employees in safely responding to a national emergency should the need arise. Our agency is prepared to play a critical role under the Department of Homeland Security's currently evolving National Response Plan by safeguarding those who respond to catastrophic incidents. These workers and the nation deserve the very best—our very best—and we will be there for them.

More than 1,000 OSHA staffers helped preserve the safety and health of emergency responders and clean-up workers in New York City following September 11, 2001. A preview of OSHA's tribute to that effort appears in this issue, as well as information on the reopening of the Manhattan Area Office, which was destroyed by the terrorist attack.

OSHA has been developing its capabilities for handling emergency situations since the late 1980s, beginning with its work on hazardous waste and emergency response. We've further strengthened our abilities and resources with emergency preparedness expert John Ferris joining our team. We've also continued our efforts to build networks with other federal, state, and local agencies, including FEMA and the National Response Team. In addition, OSHA has increased its outreach to employers and employees

through the emergency response page on our website and by providing information on anthrax and the new evacuation planning matrix profiled in this magazine.

In addition, we played an important part in the TOPOFF 2 exercise this past May, assuring worker safety and health. Our role in the two simulated emergencies, based on our experience at the World Trade Center, included contributing to the development of site health and safety plans, providing personal protective equipment, performing respirator fit tests, and conducting onsite monitoring of worksites to assure that workers were being protected.

Through the agency's leadership, we have established that worker safety and health is an essential element of our nation's domestic preparedness and emergency response efforts. And we have the unique expertise to take on a leading role in coordinating worker safety and health issues of response and recovery following terrorist incidents and other national emergencies.

In an emergency, our focus is protecting lives through risk management. We have technical experts who know and understand workplace operations and hazards. They also know what hazard controls work. Our staff can bring to bear real world, onsite interpretations of standards and best practices,

enabling OSHA to offer unique assistance to incident commanders, employers, and workers trying to balance rescue with rescuer safety. We also have a world-class chemical and analytical laboratory to support our monitoring efforts. Our stakeholders have confidence in our expertise—and our commitment to protecting their lives and health.

OSHA is also currently creating its own internal National Emergency Response Plan. Incorporating lessons learned from our WTC response, this plan sets out the requirements for regional response plans to ensure that the response at the regional level is fully supported by the resources of the entire agency. These plans will also ensure that OSHA's response to emergencies from the regional and national level will support the Incident Command Structure set up by the Department of Homeland Security.

We are the top federal agency responsible for worker safety and health. We have the infrastructure, we have the skill, and we have the commitment to work through any emergency to help protect our nation's workers. Although we hope we will never need to respond to a national disaster again, if one occurs, we will be prepared and we will respond promptly to meet the needs of workers, employers, and the nation.

GENERAL INFORMATION

■ The OSHA Training Institute was recently recognized for its innovative online course on workplace violence awareness. OTI received a 2003 AXIEM Award for its course that covers risk factors for workplace violence and prevention programs.

ENFORCEMENT

■ OSHA will target about 3,200 high-hazard worksites for inspection under the agency's Site Specific Targeting Program for 2003. This year's program began June 16 and will initially target sites that reported a lost workday injury and illness (LWDII) rate of 14 or higher. Also targeted will be sites with days away from work injury and illness (DAFWII) rates of nine or higher.

STANDARDS AND GUIDANCE

■ OSHA published draft ergonomic guidelines for the poultry processing industry on June 3, making the industry the third to receive guidelines that address musculoskeletal disorders in the workplace. The agency is reviewing public comments on these guidelines as well as those for **retail grocery stores**. Those draft guidelines were published May 9.



Shawn Moore

OSHA is reviewing public comments to its draft ergonomic guidelines to protect workers in retail grocery stores.

■ The National Advisory Committee on Ergonomics (NACE) presented its first set of work plans to OSHA following its early May meeting in Washington, D.C. The plans focus on guidelines, outreach and assistance, and research. OSHA will host a symposium on research on musculoskeletal disorders in conjunction with the committee's meeting on January 27, 2004.

■ OSHA unveiled its regulatory priorities for the next year as part of the Department of Labor's unified agenda. OSHA's semiannual regulatory agenda outlines work on new standards, including hexavalent chromium, crystalline silica, noise in construction, and assigned protection factors for respirators. The agenda also signals OSHA's intent to make changes in other areas, including the withdrawal of the proposed tuberculosis rule.

■ OSHA is reviewing public comments on the walking and working surfaces standard and the fall protection provisions of the personal protective equipment standard. The agency reopened the rulemaking records for the two standards to gather data and information on technological and industry practice advances since they were published in 1990.

■ The agency is also reviewing comments offered during an informal public hearing July 8 and 9 to discuss OSHA's proposed rule on the second phase of the Standards Improvement Project. The project addresses 40 revisions in 23 health standards for general industry, maritime, and construction.

■ OSHA is reviewing public comments on an interim final rule that establishes procedures for handling whistleblower complaints under the Corporate and Criminal Fraud Accountability Act of 2002, or the Sarbanes-Oxley Act. The public comment period ended July 28.

■ OSHA established a negotiated rulemaking committee to help develop a new construction safety standard for cranes and derricks. The 23-member committee will develop a proposed revision that addresses changes in technology and work practices.

PARTNERSHIPS AND ALLIANCES

OSHA's Alliance program—the agency's newest cooperative program—expanded dramatically. The Alliance program enables organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses in the workplace.

Recent national, regional, and local Alliances address key safety and health issues including small business, workplace violence, ergonomics, long-term care facilities, emergency management, Spanish-speaking workers, and workplace safety education for high school and college-age workers.

OSHA's newest Alliance members are:

General Industry

- Abbott Laboratories
- ABC Workers Compensation Trust
- **Air Conditioning Contractors of America**
- American Association of Occupational Health Nurses, Inc.
- American Council of Independent Laboratories
- Association of Diving Contractors International
- Board of Certified Safety Professionals
- Club Managers Association of America
- Electric Power Associations of Mississippi
- Federal Correctional Institution at Three Rivers, Tex., and Local 4044 of the American Federation of Government Employees



Air Conditioning Contractors of America

Contractors in the heating, ventilating, air conditioning, and refrigeration industry are benefiting from a new alliance focused on improving workplace safety and health.

- Georgetown University's Center for Business and Public Policy
- Healthcare Association of New Jersey
- **Houston Independent School District and Texas Engineering Extension Service**
- International Safety Equipment Association
- Kansas City Power and Light Company
- Lamar Outdoor Advertising--Bridgeport, Conn.
- Mason Contractors' Association of St. Louis and the Eastern Missouri Laborers' District
- National Association of Directors

- of Nursing Administration in Long-Term Care
- National Hearing Conservation Association
- National Safety Management Society
- National Safety Council
- North Dakota Grain Dealers
- North Dakota Energy Coalition
- Rochester (NY) Business Alliance

Construction

- American Concrete Pipe Association
- Cullen/Smith LLC in Madison, Wisc.
- Energy Coalition for Contractor Safety in Bismarck, ND
- Florida Atlantic University's Institute for Safety and Construction
- Lehigh Construction Group, Inc., Buffalo, NY
- Market & Johnson, Inc., Barron, Wisc.
- National Electrical Contractors Association
- **National Association of Home Builders**
- National Lumber and Building Material Dealers Association
- International Brotherhood of Electrical Workers (5th and 10th districts), the Southeastern Line Constructors Chapter of the National Electrical Contractors

- Association, and the Southeastern Line Constructors Apprenticeship and Training Council
- Network of Employers for Traffic Safety (NETS)
- Washington Group International
- Wisconsin Safety and Health Consultation Services and Vogel Brothers Construction, Deerfield, Wisc.

Maritime

- American Shipbuilding Association
- National Shipbuilding Research Program

OUTREACH

Training

- OSHA awarded more than \$11 million in safety and health training grants to nonprofit organizations under the agency's Susan Harwood Training Grants program.
- Working with the Mexican and Salvadoran Consulates in Dallas and other organizations, the Department of Labor launched the Justice and Equality in the Workplace Program in Dallas in mid-June. The program will help educate workers on their rights and responsibilities and provide avenues for non-English-speaking workers to report violations of Labor Department laws, including OSHA's.



Diane Hurms

Participating in a new program to educate Houston teenagers about workplace safety are, from left, OSHA Houston South Area Director Raymond L. Skinner; Compliance Assistance Specialist Mark Briggs from the Houston South Area Office; Compliance Assistance Specialist Kelly Knighton from the Houston North Area Office; OSHA Deputy Regional Administrator for Dallas Joe Reina; and OSHA Houston North Area Director John Lawson.



A new alliance between OSHA and the National Association of Home Builders focuses on the Spanish-speaking workforce in residential construction.

■ A newly revised version of "All About OSHA" provides detailed information about the agency, its history, the Occupational Safety and Health Act, state programs, and standards and guidance. The publication also covers OSHA programs and services including enforcement; outreach, education, and compliance assistance; and partnerships and other cooperative programs.

■ Seven new web-based eTools on occupational safety and health topics were published, including a Spanish language training eTool for preventing construction hazards and two youth worker eTools that describe common hazards and potential safety solutions for teens and employers in the restaurant and agriculture industries.

Recently published eTools include:
 Baggage Handling
 Computer Workstations
 Ergonomics: Solutions for Electrical Contractors
 La Prevención De Fatalidades (Construcción)
 Machine Guarding
 Teen Workers in Restaurants
 Youth in Agriculture

■ A new page on OSHA's website provides information for workers and employers regarding Severe Acute Respiratory Syndrome. In addition, a new slide presentation discusses both the risks of SARS in the workplace and precautions. The page provides links to the Centers for Disease Control and Prevention for additional guidance.

■ OSHA and the Environmental Protection Agency developed a template for use by safety and health professionals to create a site-specific health and safety plan to clean up facilities recently contaminated with anthrax spores through bioterrorism. The template meets requirements of OSHA's hazardous waste operations and emergency response (HAZWOPER) standard.

For more detailed information, visit OSHA's website at www.osha.gov



■ A new page on the OSHA website features information about OSHA standards as well as safety and health concerns in the plastics industry. The page is a product of OSHA's alliance with the Society of the Plastics Industry, Inc.

■ OSHA and the Environmental Protection Agency jointly developed an online health and safety plan for hazardous waste site operations. The plan includes 10 chapters on medical surveillance, spill containment, emergency response, confined spaces, decontamination, site control, and other issues.

■ A newly revised publication, "Guidelines for Preventing Workplace Violence in Health-Care and Social Service Workers," offers information to help employers establish effective workplace violence prevention programs.

■ OSHA's Safety and Health Topics web page has two new technical subjects, on hantaviruses and pneumonic plague. In addition to information about the topics, the pages include links to resources about preventing their spread.

■ Thirteen OSHA offices in the Atlanta region are offering a free "Electric Outreach" compact disc to help employers prevent injuries and fatalities associated with electrical work. For more information or to get a copy, call (404) 562-2300.

■ A new fact sheet, "Whistleblowers and Airlines," describes worker protections offered through the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century. The law establishes procedures for handling airline employee complaints.

Safety and Health in America's workplaces

e-news memo

from OSHA

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informative

bi-weekly

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Preparing to Respond to **TERRORISM**

**A major exercise demonstrates the importance
of OSHA's role in an emergency response.**

By Gus Georgiades



Dale Cavanaugh

**Above and right,
emergency workers
respond to the
mock detonation
of a dirty bomb
in Seattle.**



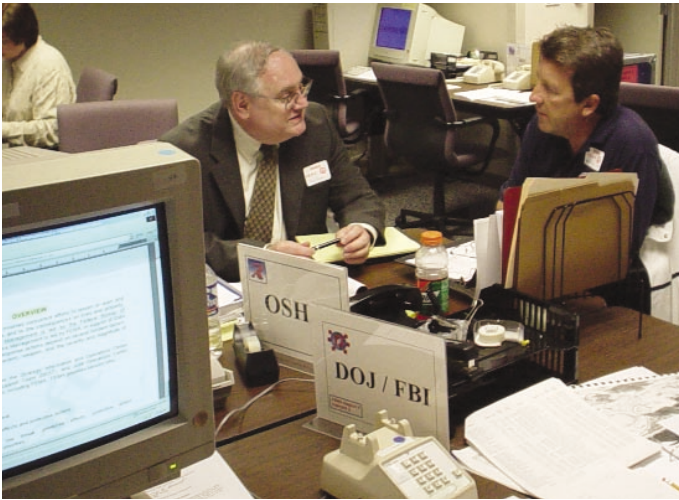
Dale Cavanaugh

Once, the nightmare scenario would have sounded plausible only in a Hollywood screenplay. Two major U.S. cities experienced simultaneous terrorist attacks involving weapons of mass destruction. A fictitious terrorist group released the germ that causes pneumonic plague at three locations in Chicago, including O'Hare International Airport. Two days later, when the Chicago victims began experiencing symptoms and flocked to area emergency rooms, the terrorists detonated a radiological dispersal device, or "dirty bomb," in Seattle.

This course of events set the stage for the largest domestic security exercise ever carried out by the federal government. The Department of Homeland Security and Department of State sponsored the five-day exercise, "TOPOFF 2," (short for "top officials") in mid-May to test the readiness of 18 federal agencies and state and local emergency forces to respond to these attacks—no longer as unthinkable as they once might have seemed.

TOPOFF 2 was a follow-on to the first exercise, conducted in May 2000. That scenario simulated a terrorist campaign that included a bioterrorism attack in Colorado, a chemical weapons attack in New Hampshire, and simultaneously, the detonation of a radiological dispersal device in downtown Washington, D.C. Participating agencies had no advance notice of the exercise—meaning, no time to prepare. They also lacked the crisis management experience and inter-agency coordination skills developed following the real-life attacks on the World Trade Center and Pentagon in September 2001.

In contrast, the stage was well prepared for TOPOFF 2, with the cast of players all in place or on alert. A cycle of national, state, and local seminars and tabletop exercises had been conducted to ensure that no



OSHA Chicago Regional Administrator Mike Connors, left, coordinates with other federal staff at the Chicago Regional Emergency Operation Center.



OSHA worked to protect emergency responders subjected to hazards during the "crisis."

Dale Cavanaugh

participant was inadvertently left out of the full-scale exercise, and that all players understood each other's roles in the coordinated response.

So when the "attacks" occurred, nearly 10,000 first responders, law enforcement officials, health professionals, role players, federal, state, and local agency representatives, the Red Cross, and the Canadian government sprung into action, playing the roles they would fill in a real emergency.

As in New York City following the World Trade Center attack, OSHA's role in TOPOFF 2 was to protect the safety and health of workers who responded to the crisis and to support the state, local, and federal agencies deployed.

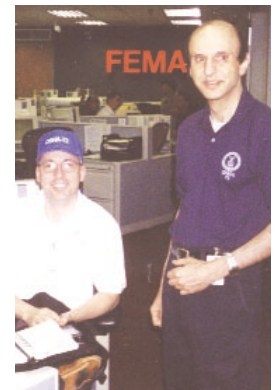
It proved to be another opportunity for OSHA to demonstrate that the agency has a great deal to offer and is uniquely qualified to contribute its technical skills and expertise to worker protection during a crisis.

The two exercise scenarios presented different safety and health challenges. The virtual releases in Chicago "exposed" thousands of people spread across a large area of the city to the potentially lethal and highly contagious pneumonic plague. Ultimately, almost 6,200 people reported symptoms of fever, chills, and violent coughing, and 1,337, "died." OSHA's biggest challenge was to protect the first responders and health-care workers at about 66 participating hospitals statewide. All risked exposure themselves as they received and cared for victims and rushed to distribute antibiotics from the National Pharmaceutical Stockpile.

In Seattle, the blast area near the downtown district involved overturned vehicles, twisted metal and other debris, partially collapsed buildings, and other physical hazards. In fact, the scene was so realistic—and many of the hazards so genuine—that staff from the Seattle Regional Office and WISHA, the Washington State Department of Labor and Industries, were on hand to provide real-life protection to the exercise role players. OSHA conducted an initial walkthrough of the site before the exercise to identify hazards that put players at unacceptable levels of risk.

In the Seattle scenario, some 150 people were "injured" in the explosion and 92 were taken to area hospitals. First responders searched for 20 people believed "trapped" in the explosion, and two people "died." As the radiation spread, the mayor ordered a broad swath of downtown inhabitants and businesses in the area where radiation was the most intense to "shelter in place." They were directed to lock their doors, shut their windows, and remain where they were.

During the exercise, OSHA staff worked around the clock at the National Emergency Operations Center in Washington, D.C., and the Seattle and Chicago Regional Emergency Operations Centers. They also staffed the Department of Labor's Emergency Operations Center, working alongside the DOL Emergency Management staff. Additional OSHA and Department of Labor staff operated from the National Master Control Cell and the Seattle and Chicago Venue Control Cells, which controlled the exercise pace and play.



OSHA Special Assistant for Emergency Preparedness John Ferris, left, and Gus Georgiades from the Directorate of Science, Technology, and Medicine staff the FEMA National Emergency Operations Center in Washington, D.C.

OSHA became part of the problem-solving team that provided specific safety and health information for the exposed responders. The OSHA team provided technical information and consultation on potential exposures, the types of protective equipment that could be used, and the development of a site safety and health plan. They developed fact sheets about radiation dispersal devices and pneumonic plague, with recommendations on types of personal protective equipment that could be used, and released virtual news releases with information for employers and workers. OSHA Administrator John L. Henshaw helped educate the public and explain the issues through an interview with Frank Sesno of CNN fame on Virtual News Network, a television news network created for the exercise.

In Seattle, OSHA's Health Response Team lent its expertise in critical incident responses to support the Department of Energy and Federal Emergency Management Agency Regional Operations Center. In Chicago, OSHA worked with staff from the Department of Health and Human Services to provide technical support and consultation to health-care workers and Red Cross volunteers. Throughout the exercise, teams in both cities maintained constant contact with occupational physicians and nurses in Washington, D.C., who provided additional medical expertise and experience.

David Ippolito, director of OSHA's Office of Science and Technology Assessment, who participated in the exercise, said TOPOFF 2 helped educate staff from other

agencies about OSHA's capabilities and the role it would play in a crisis. "The people who worked with our representatives at the regional and national level were impressed with our professionalism and our ability to get things done," he said.

Richard Terrill, regional administrator for the Seattle Regional Office, agreed that the exercise proved the value of "getting to know people from the various state, local, and federal response agencies before an emergency occurs, and letting them know the type of expertise OSHA can bring to the table regarding worker protection.

"This saves so much time when a real event requires a response," he said.

Mike Connors, regional administrator for the Chicago Regional Office, said TOPOFF 2 tested the decision-making and inter-governmental communication skills used in routine disasters as well as terrorist attacks. "And each time we 'practice,' we find new areas that we need to address or to address better," he said. "We are far from perfect at our responses, but we're getting better with each exercise and review we participate in."

"TOPOFF 2 tested everyone," summarized Ruth McCully, director of OSHA's Directorate of Science, Technology, and Medicine. "And it provided some valuable lessons to ensure that the federal response community is prepared for whatever it may face—and that the players all understand OSHA's critical role in that response."

Georgiades is an occupational safety and health specialist in OSHA's Directorate of Science, Technology, and Medicine.

An OSHA compliance officer checks for hazards at the Seattle "blast site."



Dale Cavanaugh

Lessons Learned

- The federal emergency response community's emergency plans must continue to focus on worker and responder safety and health needs.
- Terrorist events, like natural disasters, bring unique challenges to the federal emergency response community.
- OSHA can work collaboratively within the Unified Command Structure to ensure the safety and health of workers and responders.
- Consistent and frequent communication remains the key component to a successful OSHA response.
- OSHA's national and regional emergency management plans currently under development will support the agency's full participation in an emergency response, should the need arise.

Rising Above Adversity & THRIVING

OSHA's Manhattan Area Office was destroyed during 9/11, but the staff's commitment to protect the workers of New York City never faltered.

By Patricia Jones

With its freshly painted walls, frosted-glass panels, and newly equipped industrial hygiene lab with its cobalt-blue cabinets and black slate countertops, the new OSHA Manhattan Area Office gives little indication of the tragedy its staff endured, or their triumph over extreme adversity.

The only hint may come in the form of two unassuming tropical plants, tucked in the corner of the office's new reception area. Peeking from the bases of their pots is a placard, bearing the proclamation, "We Also Survived 9/11." The sign tells the story of how an OSHA staff member retrieved the plants from the rubble of the World Trade Center site, how the staff together nurtured them to health, and how they "remind us all that we can rebound out of the ashes regardless of the circumstances."

OSHA's Manhattan Area Office, too, has rebounded from the ashes.

SEPTEMBER 11, 2001

Until the Sept. 11, 2001, terrorist attack, the office was located on the top floor of what was called the U.S. Customs House, at the World Trade Center's Building 6. This eight-story building was among eight in a complex dominated by two 110-story skyscrapers.

On Sept. 11, a typical workday at the Manhattan Area Office, the staff heard what sounded like a sonic boom, followed by distant yells that something had hit the North Tower—the first of the two towers to be attacked. The staff followed its emergency action plan, immediately evacuating the building and rallying at a park about a mile and a half north, near the New York Regional Office. The entire staff was accounted for and thankfully, none was physically hurt.



Federal Emergency Management Agency

The building that once housed OSHA's Manhattan Area Office was destroyed in the terrorist attack on September 11, 2001. Right, a patch designed by an office staffer depicts the former office, standing in the shadows of the twin towers.

MOVING FORWARD

Despite the enormity of what had happened, the Manhattan Area Office staff had little time to dwell on their circumstances. There was serious work to do: helping to protect the workers involved in the recovery and cleanup effort that would continue, 24 hours a day, seven days a week, for the next nine months. The staff played an active role in the mission, alongside more than 1,000 other safety and health professionals from OSHA, its state partners, and consultation programs across the country. They helped distribute and fit workers for respirators, collect samples of hazardous substances, and most importantly, ensure that no more lives were lost during the rescue and recovery effort.

Working out of a single room at OSHA's New York Regional Office at 201 Varick St., the Manhattan Area Office staff also continued its normal day-to-day activities—protecting workers of America's most populated city.

The months that followed continued to test the staff's resolve in meeting that challenge. In October 2001, a scaffold collapsed along Manhattan's Park Avenue South, leaving five workers dead and 10 injured. The office's enforcement staff investigated the incident, issuing willful OSHA citations as well as criminal charges and \$159,350 in penalties against the three contractors involved. The following month, the staff investigated OSHA's first case related to bioterrorism: the cleanup of anthrax at the Morgan Postal Facility in Manhattan. This investigation also resulted in OSHA citations being issued against the employer. Before the staff could begin to settle into some degree of normalcy, yet another major incident occurred; a chemical explosion shook an area of lower Manhattan in April 2002, injuring 31 people and hospitalizing 11 workers. OSHA's investigation resulted in more than 36 serious violations cited and \$151,100 in proposed penalties against the three employers.

The staff also pursued their safety and health mission through cooperative arrangements with local employers. They formed partnerships with four of the major contractors that participated in cleanup operations at the World Trade Center site and at the Staten Island recovery operation: Bovis Lend Lease, AMEC Contracting, Turner Construction, and Yonkers/Tully/Pegno Tri Venture. The World Trade Center Emergency Project Partnership Agreement

proved more successful than anyone might have imagined. After 3.7 million work hours in extraordinarily hazardous conditions, only 57 workers at the site suffered injuries that resulted in lost workdays, and not a single worker was killed.

The Manhattan Area Office built on relationships forged through these partnerships, extending them to address other long-term construction projects that involved more than 1,200 employees and 75 subcontractors.

For example, OSHA partnered with Bovis Lend Lease to protect workers constructing a 54-story, 1.4 million-square-foot, mixed-use facility, with work expected to continue through March 2005. OSHA and AMEC formed a partnership to address safety and health issues during the renovation of the Museum of Modern Art and the construction of two new steel-frame buildings for office and gallery use. This project is scheduled for completion in November 2004. OSHA and Turner Construction are partnering to protect workers involved in the construction of two buildings at the Sloan Kettering Cancer Center, projected to be completed in December 2005. An OSHA-Yonkers/Tully/Pegno partnership involves the reconstruction of the World Trade Center PATH line between Exchange Place in New Jersey and New York City, destroyed during the Sept. 11 attacks.

A NEW HOME

On May 6, almost a year and a half after its office was destroyed in the World Trade Center attack, OSHA's Manhattan Area Office officially reopened in its new permanent location at 201 Varick St. Participants in the opening ceremony included OSHA Administrator John L. Henshaw, New York Regional Administrator Patricia Clark, and Manhattan Area Office Director Richard Mendelson. Joining them were representatives of the community that OSHA serves—worker rights groups, unions, safety and health educational faculty, fellow governmental and municipal agencies, and safety and health partners from the construction industry.

Mendelson proudly introduced his staff and thanked them for their dedication and ongoing commitment to the agency. He thanked Clark for ensuring that his staff was well accommodated in their new office, and presented Henshaw a framed logo patch of the Manhattan Area Office,



AMEC Contracting

Partnerships formed during the World Trade Center cleanup laid the groundwork for many other partnerships to protect construction workers, including one with AMEC at the Museum of Modern Art.

Cutting the ribbon to the new Manhattan Area Office are, from left, New York Regional Administrator Patricia Clark, OSHA Administrator John L. Henshaw, and Manhattan Area Office Director Richard Mendelson.

designed by Amy Wilson, an industrial hygienist at the office. The patch depicts the former Manhattan office, standing in the shadows of the twin towers.

“Although OSHA’s Manhattan Area Office was destroyed on September 11, 2001, its employees stepped up to the challenge and continued their work undaunted,” said Henshaw. “With the opening of this new facility, OSHA’s Manhattan Area Office has a permanent home from which to continue its important work of protecting the workers it serves so well.”

“The staff of the Manhattan Area Office took one of the most devastating experiences an office staff could possibly face and rose above it to show what they’re made of, and how totally committed they are to protecting the workers of New York City,” agreed Clark.

After the ribbon cutting, Mendelson led the group on a tour of the new office, including its new laboratory, library, and state-of-the-art conference room. Amidst all that was shiny and new, however, he pointed out small reminders of what the office had been through and hoped never to go through again—including signs posted at both exits to the office show a disability logo and the question, “Is Everyone Accounted For?” “This provides a regular reminder of how critical complete emergency evacuation plans and drills really are,” Mendelson told the group. “It’s something the Manhattan Area Office staff knows firsthand and will never forget.”

And, although their slightly tattered leaves appear somewhat out of place in the office’s fresh new décor, the two tropical plants in the office’s reception area, with their placard, “We Survived 9/11,” serve as a daily reminder of the power to survive adversity. The plants survived, and Manhattan Area Office staff survived, and the staff’s commitment to ensuring a safety and healthful workplace for every working man and woman survived—and continues to thrive.

Jones is a compliance assistance specialist in OSHA’s Manhattan Area Office.



New Publication Describes OSHA’s Response

A new OSHA publication, “Inside the Green Line: OSHA Responds to Disaster,” tells the story of the agency’s commitment to the recovery operation at the World Trade Center. Working 24/7 alongside other federal, state, and local agencies, OSHA staff from throughout the United States ensured the safety and health of workers at the site. During more than 15,000 work shifts over a nine-month period, they collected and analyzed more than 6,500 air and bulk samples. They also distributed more than 131,000 respirators, 11,000 hard hats, 13,000 safety glasses and goggles, and more than 21,000 pairs of protective gloves. In addition, they identified more than 9,000 hazards and encouraged employers to correct them.

As a result, not a single life was lost during the rescue and recovery, and only 57 serious injuries were recorded during 3.7 million work hours at the site. The Lost Workday Injury Rate (LWDI) was 3.1—compared to a rate of 4.3 for the construction industry, which includes demolition.

“Inside the Green Line” describes the foundation of this impressive achievement: two sweeping partnerships committed to protecting workers at the World Trade Center and Staten Island sites. Today, the lessons learned through these partnerships serve as a model for future public-private collaboration. Perhaps more importantly, they demonstrate that OSHA’s voluntary, cooperative programs give participants the tools to perform at their very best—even under the very worst of circumstances.

“Inside the Green Line” is posted on the OSHA website at www.osha.gov.

Planning for **EMERGENCIES**

OSHA's new evacuation planning matrix helps employers assess their risk and plan for emergency evacuations.

OSHA's new evacuation planning matrix is designed to help employers plan for emergency workplace evacuations. The new tool, on OSHA's website, provides employers with ideas, assistance, and online resources to help them reduce their vulnerability to and plan for workplace emergencies.

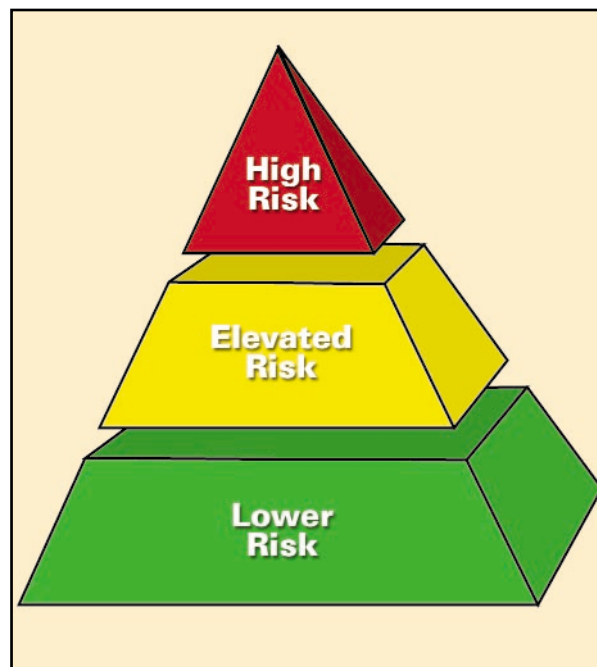
In addition to more traditional incidents, the new matrix also considers terrorist acts such as the intentional release of a chemical, biological, radiological, or nuclear material or another hazardous substance.

"Recent events in the United States have underscored the critical importance of workplace evacuation planning," said OSHA Administrator John L. Henshaw. "An effective evacuation plan will increase the likelihood that employees will reach shelter safely if an emergency that requires evacuation does occur."

The evacuation planning matrix includes a checklist to help employers evaluate their existing plans or construct new ones. Its worksite risk assessment list helps employers assess risk based on a variety of terrorism risk factors. These include involvement with hazardous materials; a role in providing essential infrastructure services such as sewer treatment, electricity, fuels, telephone, and transportation; and a work location that is considered high profile or has a limited means of egress or a high volume of pedestrian traffic.

It also includes a zone pyramid system to evaluate a workplace's risk of terrorist incident. The risk level is based on a combination of workplace vulnerabilities, a recognized threat, and the anticipated consequences of an event.

Workplaces in the "green zone" are the least likely to be targeted for a terrorist release. Those in the "yellow zone" are at an elevated risk, and those in the "red zone" are the most likely to be targets. OSHA



recommends that employers in "red zone" workplaces consider sheltering employees in place as well as evacuation and think about assigning some terrorist incident response roles to their own employees.

Henshaw said OSHA is committed to strengthening workplace planning and preparedness so employers and workers can better protect themselves and reduce the likelihood that they may be harmed during an emergency evacuation. The agency continues to work with other federal response agencies including

the Federal Emergency Management Agency, the Environmental Protection Agency, the U.S. Soldier Biological and Chemical Command, the Centers for Disease Control and Prevention, and the National Institute for Occupational Safety and Health to provide accurate, current information in this rapidly developing area of occupational safety and health.

"Terrorist incidents are not emergencies that OSHA expects an employer to reasonably anticipate," said Henshaw. "However, if a terrorist release does occur in or near your workplace, an effective evacuation plan increases the likelihood that your employees will reach shelter safely."

Exit Route Card Available

A new pocket card that includes valuable information to aid workers and employers in safely evacuating workplaces during emergencies is now available on OSHA's website at www.osha.gov. The card includes brief descriptions of both design and construction requirements and necessary safety features.

WORKPLACE INJURIES: The Real Financial Impact

A new safety survey reveals that the direct costs of disabling injuries and illnesses are just the tip of the iceberg.

By Karl Jacobson

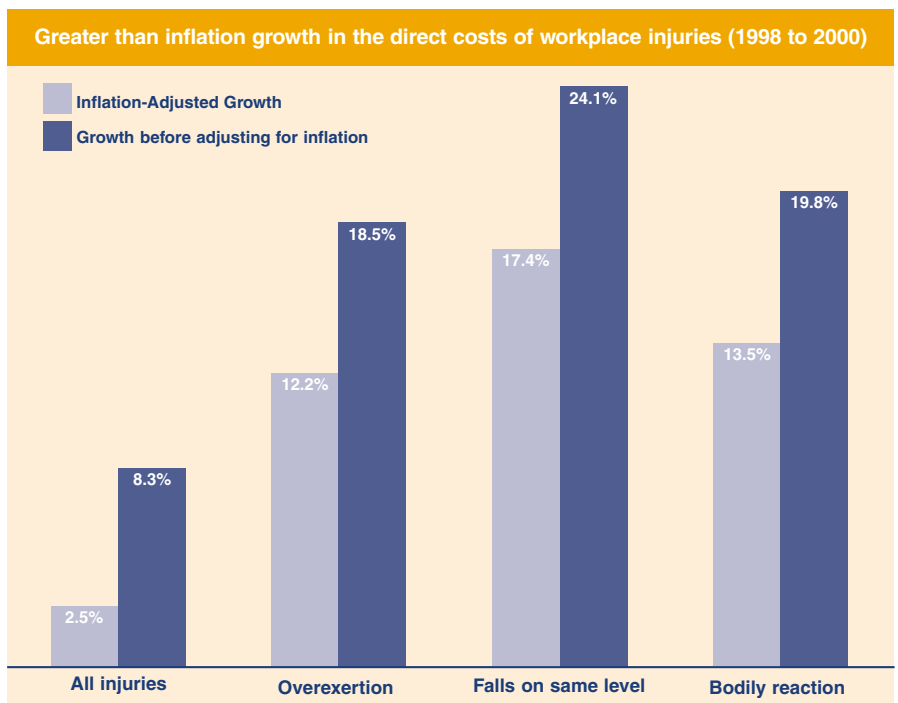
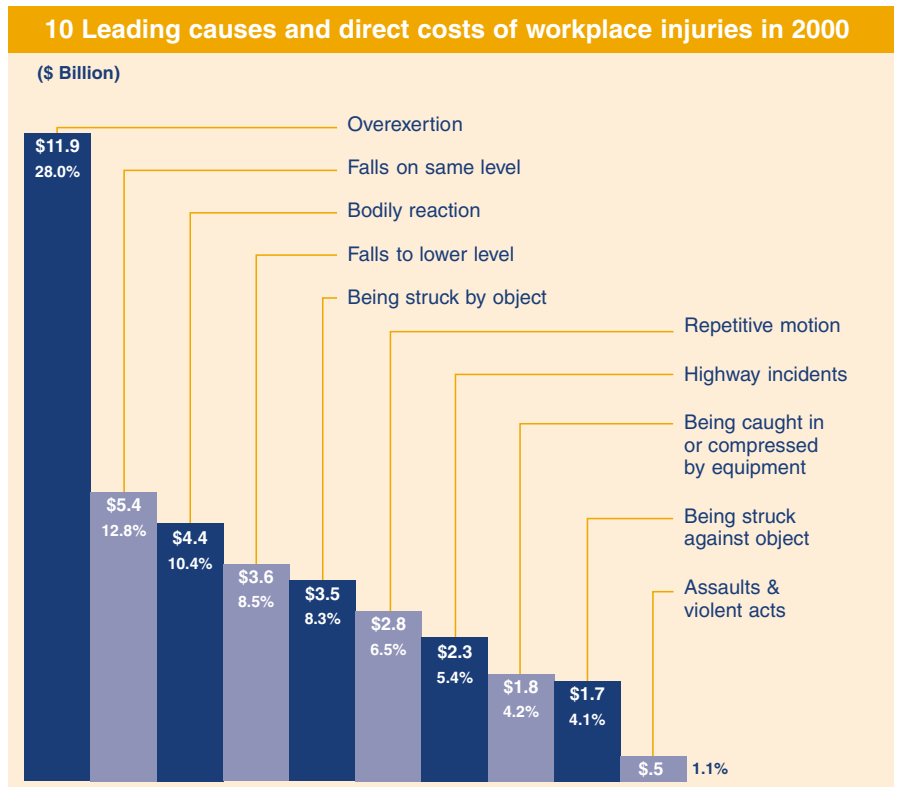
What's the real financial impact of disabling workplace injuries and illnesses? The Boston-based Liberty Mutual Group's annual Workplace Safety Index reveals that the costs run far deeper than initially meets the eye—and that they're increasing faster than the rate of inflation.

The 2003 safety index, released in April, shows that the direct cost of disabling workplace injuries and illnesses grew faster than inflation between 1998 and 2000 (the most recent injury cost information available), and is concentrated in a relatively small number of injury causes. For this study, a disabling injury results in an employee losing six or more days from work and direct costs include wage and medical payments to injured workers and their health-care providers.

The 2003 safety index shows that the direct cost of claims from disabling work-related injuries grew 8.3 percent—2.5 percent after adjusting for inflation—between 1998 and 2000, to \$42.5 billion. During the same period, the Bureau of Labor Statistics reported that the frequency for disabling workplace injuries fell just over 1 percent.

According to the safety index, the top three injury causes were responsible for 51 percent of the direct costs in 2000, up from 46 percent in 1998. The direct costs of the three leading costs of work-related injuries grew at rates substantially greater than inflation. The direct costs of injuries due to:

- Overexertion, caused from excessive lifting, pushing, pulling, holding, carrying, or throwing an object, grew 12 percent after adjusting for inflation;
- Falls to the same level rose 17 percent after adjusting for inflation; and



By identifying the leading causes of disabling workplace injuries and illnesses, the safety index gives employers a view of those areas in their operation that are the most costly in both human and economic terms.

- Bodily reaction, caused from bending, climbing, slipping, or tripping without falling, grew 13 percent after adjusting for inflation.

In addition, the top 10 injuries accounted for 89 percent of the total direct costs in 2000, up from 86 percent in 1998.

The 2003 safety index also found that a small percentage of workers' compensation claims continue to be responsible for the bulk of direct costs. In 2000, for example, disabling workplace incidents represented 18 percent of workers' compensation claims, but 93 percent of direct costs.

This year's safety index is the third consecutive study developed by the Liberty Mutual Research Institute for Safety. The safety index is based on data from the Bureau of Labor Statistics, the National Academy of Social Insurance, and Liberty Mutual. Researchers calculated the inflation-adjusted growth in direct costs by using the Consumer Price Index to measure wage payments to injured workers and to track work-related medical care expenses.

The findings underscore the total financial impact of workplace injuries. While \$42.5 billion in direct cost is significant, it is only a portion of the total costs of work-related injuries. Employers feel the magnitude of workplace injuries twice: the injury to an employee, then the costs stemming from that event.

An earlier Liberty Mutual survey found that 93 percent of executives saw a relationship between the direct and indirect costs of a workplace incident. Indirect costs include the overtime, training, and lost productivity related to an injured employee not being able to perform his or her normal work. Fully 40 percent of managers reported that each dollar they spent on direct costs generated indirect costs of three to five dollars.

Using this formula, the direct costs of disabling workplace injuries in 2000 produced an additional \$127 billion to \$212 billion in indirect costs. This brought the total financial impact of disabling workplace incidents to between \$170 billion and \$255 billion.

As a statistical study, the safety index shows what is happening, rather than why it is happening. However, Liberty Mutual's experience as a workers' compensation insurer provides insight and perspective. There are probably three key factors behind the faster-than-inflation growth in the direct cost of disabling workplace injuries. These include the wider use of expensive medical treatments and prescription drugs; more visits to a medical provider for each individual claim; and regulatory changes that require the workers' compensation system to cover more medical conditions.

Whatever the reasons, by documenting this growth, the safety index provides employers with a powerful tool for improving workplace safety. By identifying the leading causes of disabling workplace injuries and illnesses, the safety index gives employers a view of those areas in their operation that are the most costly in both human and economic terms. Risk managers and safety professionals can focus on major causes of work-related injury and disability and direct their interventions to where they will have the greatest impact.

More information on the findings of the latest safety index can be found at www.libertymutual.com.

Jacobson is senior vice president of loss prevention with the Liberty Mutual Group in Boston.

Workers Survive Scaffold Failure

By strictly enforcing OSHA's fall protection standard, a Texas company saves two worker's lives and demonstrates the value of workplace safety and health.

By Mark Briggs



Basil Singh

A water tower in Galveston, Texas, provided the platform for a lesson in the value of fall protection.

The day began like any other for Marcos Kasvicis, part owner of DMS Painting, Inc. for the past 12 years. Little did he know that before the day was over, his company's commitment to workplace safety would be put to the ultimate test.

Two of Kasvicis' long-term employees, David Torres and Dennis Avilias, who had worked for the company six and three-and-a-half years, respectively, had been working all day on the side of a City of Galveston, Texas, water tower. Suddenly, one of the motors holding the suspension scaffolding they were standing on failed, and the left side dropped several feet. In an instant, both men might easily have plunged 40 to 45 feet to their deaths.

Fortunately, the management at DMS had embraced OSHA's message that "Safety and health adds value. To your business. To your workplace. To your life." In doing so, DMS required that all employees use safety harnesses while working above ground level. "We've always required the use of fall protection," said Kasvicis. "We have even fired employees when we caught them not wearing it."

Basil Singh, a compliance safety and health officer for the Houston South Area Office, happened to be driving down the road as the events unfolded on the water tower. "I was out doing other inspection work and saw the scaffold start falling," he said. Fully expecting to have to conduct a multiple-fatality investigation when he reached the scene, Singh said he was "happy to find that DMS had required those guys to tie off." Although visibly shaken by the incident, both workers were rescued and reached the ground without injury.



Basil Singh

A suspension scaffold hangs alongside the water tower. Fall protection prevented the workers from falling 40 to 45 feet to their deaths.

All agree that DMS' strict enforcement of OSHA's fall protection standard saved the two workers' lives. OSHA points to the incident as a prime example of why fall protection requirements are in place. The OSHA standard requires that all employees on a two-point adjustable suspension scaffold be protected by both a personal fall arrest system and guardrail system.

"We need to commend this company for its actions today," said Joe Reina, assistant administrator for the Dallas Regional Office, who was in Houston the day the incident occurred. "They did it right. They realized the value of safety and they deserve our thanks."

Briggs is a compliance assistance specialist in OSHA's Houston Area Office

Another Success Story

A Des Plaines, Ill., contractor has added his company's name to the many who attest to the life-saving value of fall protection for workers. Reliable Brothers, home improvement specialists in roofing, siding, windows, and carpentry in the Chicago suburb, was cited in March 2002 for not having adequate fall protection on its worksites. The employer did not contest the citation. In fact, he purchased necessary fall protection equipment, including harnesses, on the day of the inspection.

That equipment came in handy two months later, when the employer reported that one of his workers fell off a 27-foot-high roof—but was saved from almost certain death by the safety harness he was wearing. The employee suffered only minor injuries and was back to work in six days.

The Power of Partnership

OSHA's Strategic Partnership Program has made exciting strides since its establishment in November 1998. In just five years, OSHA has entered into 270 partnerships with groups of employers, employees, and employee representatives committed to improving workplace safety and health. Of these partnerships, 197 remain active today, and the agency continues to build extended, voluntary, cooperative relationships with new partners. Since fiscal year 2000, the agency has averaged 51 new partners per year.

Paula White, director of OSHA's Directorate of Cooperative and State Programs, said partnerships enable the agency to encourage, assist, and recognize efforts being made in the workplace to eliminate serious hazards and achieve a high level of worker safety and health. OSHA and its partners identify a common goal, develop plans for achieving that goal, cooperate in working toward it, and measure success.

Many partnerships address issues raised in OSHA's Strategic Management Plan. The largest number—133—focus on construction. Thirteen involve ergonomics, and 11, nursing homes. Other partnerships cover food preparation, lead, logging, shipyards, and silica.

The following pages tell the stories of several OSHA partnerships in various stages: one in Montana that proved so successful that it was allowed to expire; another at Yellowstone National Park that, after successfully meeting its goals, led to a second partnership with a new focus; an ongoing partnership that is protecting electrical workers in Ohio; and a sweeping new national partnership designed to reduce injuries among 740,000 U.S. Postal Service employees.

For more information about OSHA's Strategic Partnership Program, visit www.osha.gov. Click on "Strategic Partnerships" under "Cooperative Programs."

An ambitious partnership with OSHA helped Yellowstone National Park usher in sweeping safety and health improvements.

Putting Safety First at **YELLOWSTONE**

By Donna Miles

Photos courtesy of Yellowstone National Park



Yellowstone National Park's pristine environment didn't always extend to the park employees, who experienced high workplace injury and illness rates.



It's the world's oldest national park: 2.2 million acres of steaming geysers, thundering waterfalls, crystalline lakes, and panoramic vistas that straddle the states of Wyoming, Idaho, and Montana. Each year, Yellowstone National Park attracts thousands of visitors from around the world, drawn by its natural beauty.

But through the eyes of the park's 300 full-time and 500 part-time employees, Yellowstone was not always such a pristine environment. Five years ago, the park had a workplace injury and illness rate four times the average for all industries. Between January 1994 and August 1997, five park employees died on the job. A park ranger was killed when his snowmobile tumbled off a road during a blizzard. Another park ranger drowned when his kayak capsized. A park geologist and volunteer assistant were killed in an avalanche. Then, in August 1997, a heavy-equipment mechanic died when he lost control of a jury-rigged snowmobile he was testing and crashed into a maintenance building.

OSHA cited Yellowstone for safety violations in four of the five deaths. But it was the latest fatality that triggered a comprehensive, five-month OSHA investigation into Yellowstone's workplace safety conditions. The result was a record 130 citations for 600 serious violations and 150 minor infractions. "Clearly, this was the most extensive investigation with the largest number of violations we've ever issued from our office," said David DiTommaso, OSHA's Billings Area Office director.

The violations included 180 electrical violations, 97 fire extinguisher violations, 95 exit violations, 84 machine guarding violations, 61 guardrail and handrail violations, 41 emergency light violations, and 26 flammable liquid storage violations.

The OSHA investigators concluded that although Yellowstone had a written employee safety and health plan, it hadn't been put into practice and most employees didn't even know about it.

Even before OSHA completed its investigation, the Yellowstone management, stunned by the string of fatalities and injuries, had committed to correcting the problems. The Park Service set aside \$220,000, about 1 percent of Yellowstone's annual budget, and vowed to make safety and health improvements.

OSHA's Billings Area Office proposed going a step further, initiating the first partnership between OSHA and a national park. DiTommaso explained that the partnership, launched in May 1998, went beyond simply correcting problems. Its goals were to reduce the park's injury and illness rate by 10 percent per year and to correct all hazards for the long term. "It involved remaking the culture of the park so employees think about safety first," he said.

Thanks to a new workplace safety and health program, Yellowstone National Park now offers a pristine environment for its workers as well as other visitors.



Working in severe weather conditions puts Yellowstone National Park's workers at increased risk of on-the-job injuries.



A successful partnership between OSHA and Yellowstone National Park helped dramatically reduce workplace injuries among the park's 300 full-time and 500 part-time employees.

The park promised to create a written health and safety policy, educate employees about its safety record, provide safety training, and commit funds to safety and health concerns. OSHA agreed to provide technical assistance, program development assistance, and training resources.

"The Park Service is committed to an aggressive program to substantially reduce the hazards identified by the OSHA review," said Park Superintendent Mike Finney, in announcing the partnership. "Our goal is for every employee to develop an attitude of 'zero tolerance-no excuse' when it comes to safety."

In a memo to all Yellowstone employees, Finney emphasized the need for the staff to work together to instill a new safety culture at the park. "Our safety system is not created to solely comply with laws, guidelines, or standards," he said, "but is developed *by* our employees and *for* our employees who we do not want to see either hurt, sick, or killed by job-associated circumstances."

Finney acknowledged that the change would not happen overnight. "Safety is not a system which, once installed like a diskette inserted into a computer, magically results in safe performance or zero accidents," he said. "Safety is a behavior, embraced by each employee, that becomes a routine part of every task we do which keeps us in good health and productive on the job and which enables us to enjoy our personal lives."

Just one year into the partnership, DiTommaso said the park was already making significant progress toward reaching its goals. Of 600 serious violations identified in OSHA's comprehensive inspection, all were corrected "and corrected aggressively," he said. The park management hired a full-time safety and health professional, produced a comprehensive written safety policy, and distributed it to all employees. After four

days of intensive safety and health training, top-level park management formed an executive safety council that met monthly to address safety and health issues. Each section within the park put together a "quality circle team" to deal with safety and health concerns within that area. Monthly safety advisory council meetings, with employee representatives from throughout the park who served as safety advisors, helped increase communication about safety issues among park employees.

Yellowstone continued making steady progress. Over the course of the partnership, the park committed \$500,000 to safety and health improvements ranging from installing better snowmobile garage ventilation to purchasing fall protection equipment to providing employee training.

"It became obvious that the managers as well as the employees were committed to making genuine changes at Yellowstone," said DiTommaso. "By this point, they had basically done what they needed to do to fix the problems identified in OSHA's investigation. Now they were working to instill a workplace culture that really valued worker protections. It was exciting to be a part of the transformation."

When OSHA Compliance Safety and Health Officer Gary Wild and Compliance Assistance Specialist Brandon Gauthier conducted their final evaluation under the partnership in August 2002, they found that Yellowstone's safety and health environment had changed dramatically. Park employees agreed that conditions had improved considerably. All park areas and divisions had initiated safety meetings and training and encouraged employees to take part in the safety and health program.

The Yellowstone management was beginning to address ergonomic hazards, the most frequent cause of injury in the park. OSHA had tapped into the expertise of ergonomists from the National Institute for



Occupational Safety and Health (NIOSH) to evaluate snowmobile use among park workers and recommend changes to reduce musculoskeletal disorders caused by vibration, repetitive motion, and lifting. Managers were putting NIOSH's suggestions into practice, trying to reduce the time employees had to ride their snowmobiles and increasing trail grooming to take out some of the bumps or moguls that routinely develop from heavy snowmobile use.

During the final evaluation, Wild identified nine serious hazards, but the park staff corrected them immediately. "This was a far cry from the 600 serious violations found before the partnership," DiTommaso said, "and considering the enormous area and multitude of facilities in the park, was a testament to the changes bought about by a park committed to improvement and an agency committed to helping them do so."

As a result of changes implemented during the partnership, Yellowstone's lost-time rate dropped 10 percent to its lowest level in five years, and the incident rate declined 40 percent. Most importantly, no workers died on the job during the term of the partnership—compared to five deaths within a three-and-a-half year period immediately before the partnership.

Although the partnership ended Dec. 31, both OSHA and the National Park Service are committed to continuing their relationship at Yellowstone. In April, they entered into a new partnership that focuses on reducing musculoskeletal disorders among park employees.

Gauthier, now the park's safety and health manager, said he looks forward to continuing Yellowstone's relationship with OSHA. "The return on the investment for OSHA and the Park Service was excellent after five years and we want to keep building on that," he said. "The proof will be in the pudding when we have zero injuries. But we've seen definite improvements."

"OSHA's partnership with the National Park Service at Yellowstone is a real success story because it demonstrates the benefits of working together, hand in hand, toward a common goal," summarized DiTommaso. "Today, workers at Yellowstone are far safer than they were before we launched the partnership. And the best part is that both OSHA and the Park Service are committed to keeping it that way."

Citation Saves a Life

Nobody likes receiving an OSHA citation. But at Yellowstone National Park, a citation during a 1997 investigation is attributed with saving a worker's life. Inspectors found a bent and damaged safety cage in a heavy-equipment maintenance shop. The cage, which separates employees from direct contact with oversized tires during tire changes, was also too small for all tires needing repair. OSHA advised the park to purchase a new, larger cage. Under the park's enhanced safety program, initiated under the partnership with OSHA, Yellowstone employees began using the cage whenever they inflated a tire.

Just over a year later, a park employee was inflating a heavy truck tire when it exploded. Although the safety cage restrained the tire, the explosive force was so strong that it bent many of the cage's steel bars, and the concussion knocked snow from the roof.

Although he was directly next to the tire when it exploded, the worker was unhurt, protected by the cage. OSHA officials agree that without the cage, it is unlikely that he would have survived the blast.



Replacing a damaged safety cage protected a worker when a tire he was inflating exploded.

Transforming a Culture: **The Power of Partnership**



High-speed sorting equipment, left, helps speed up operations and reduce repetitive manual operations by mail processors, below.

**OSHA and the
U.S. Postal Service
are working together
on three fronts to
protect the Postal
Service's 700,000
employees.**

By Greg Colburn



Photos courtesy of U.S. Postal Service

Connecting a country of 291 million people through letters, packages, and other communications is a big job, but one that the U.S. Postal Service does six times a week, 300 times a year. Last year, USPS employees delivered more than 200 billion pieces of mail to 140 million homes and businesses across a country that spans 3.6 million square miles.

Such a labor-intensive effort requires a strong focus on employee safety and accident prevention. That's why USPS and OSHA have embarked on three fronts to help protect the Postal Service's 700,000 employees: a new Ergonomic Strategic Partnership, the Ergonomic Risk Reduction Process, and the Voluntary Protection Programs.

Collecting, transporting, processing, and delivering 40 percent of the world's mail requires immense energy and stamina. It can also expose employees to animal bites, slips and falls, strains and sprains, and wear and tear on the body's musculoskeletal system.

To help reduce these injuries, USPS and OSHA recently entered into a strategic partnership focused on reducing musculoskeletal disorders and ergonomic risk factors. During an early April ceremony at Postal Service headquarters in Washington, D.C., Postmaster General Jack Potter, OSHA Administrator John Henshaw, American Postal Workers Union (APWU) President William Burrus, and National Postal Mail Handlers Union (NPMHU) President John Hegarty formally launched the partnership.

The partners agreed to work together to identify common goals, develop plans to achieve them, and cooperate in putting effective strategies in place to reduce musculoskeletal disorders (MSDs). Each partner is represented in the ergonomic work group that will manage the partnership, focusing first on USPS' mail processing system, and later expanding to include letter carriers and their unions.

The new partnership agreement builds on the pilot Ergonomic Risk Reduction Process (ERRP) developed by the USPS at the Albany, N.Y., Processing and Distribution Center (P&DC). This fast-paced mail processing facility employs about 1,200 workers. John Tomich, director of OSHA's Albany Area Office, helped the facility's Joint Labor and Management Safety and Health Committee establish ground



Thanks to improvements at the U.S. Postal Service, workers are experiencing fewer accidents and lower injury and illness rates.

rules that ensured that nothing got in the way of forward progress in establishing a safety culture at the facility. Just as importantly, he convinced the committee to change the group's makeup to include more labor than management members, increasing its acceptance and influence throughout the workforce.

USPS initiated the ERRP pilot in March 2001 to develop an ergonomics process and test the feasibility of integrating it into the culture of a mail processing facility. To promote the cultural change, USPS funded two certified ergonomists to help develop the process, aided by staff from OSHA's Albany Area Office.

Examples of the changes made as a result of the pilot include: adjusting the height of pallets with portable pallet lifts; adjusting shelf heights; and using mechanical equipment to stack hampers. Other changes include making it easier to open trailer doors on mail transport vehicles; using a more ergonomic method to remove truck decals; and supporting good ergonomic work practices.

The pilot encouraged employees to participate fully in making the facility more ergonomically sound. Two unions, the



By elevating trays of letter mail for mail handler Steve Micare, right, the Albany Processing and Distribution Center eliminated the need for him to bend down and risk back strain, above.



Postal clerk Christien Gallup at the Albany P&DC no longer has to overreach for tubs of mail, above, because the racks are now at a lower, more convenient height, left.



APWU and the Mailhandlers, and management employees participated in identifying ergonomic risk factors and ways to eliminate them. Workers got directly involved in job hazard analyses conducted for their jobs. "It took a real group effort to make this pilot work," said Larry Elyea, the Postal Service's ERRP executive program director. "Everybody was committed to reducing injuries and their efforts paid off big time."

After one year, both management and labor declared the pilot a success. Ergonomic injuries were down, and morale and productivity were up. The facility's Joint Labor Management Safety and Health Committee and the ERRP core group both continue the process of integrating ergonomics into jobs. "Good ergonomic practices prevent accidents and injuries, while boosting productivity," said Harvey Martel, president of NPMHU's Albany Branch 309.

USPS began looking at other facilities that could benefit from the process. "The Albany P&DC was where the process was developed, but that was just the beginning," said Elyea. "You want to be sure you've developed the right process before you replicate it."

The Postal Service documented the training materials, process charts, and forms that had had been developed in Albany, and replicated them for use at other facilities. A certified professional ergonomist dedicates about three months at each new site. "It is critical that we build a good, solid foundation for the process," Elyea said.

The rollout is well under way. USPS added 10 ERRP facilities in February, then another 10 in May. Elyea said USPS hopes to roll another 50 facilities into ERRP during Fiscal Year 2004, 60 facilities the following year, and another 45 sites in Fiscal Year 2006—a total of 175 USPS facilities.

The level of teamwork demonstrated by USPS and OSHA in helping make ERRP so successful began back in 1998, with the passage of the Postal Employee Safety Enhancement Act that strengthened USPS safety policies and procedures. The Postal Service instituted comprehensive self-inspections, re-evaluated safety and health programs, and worked with OSHA to implement a universal safety and health process roadmap. The results have been impressive: fewer accidents, lower injury and illness rates, and greater regulatory compliance throughout the Postal Service.

But the job isn't yet finished. That's why USPS is working with OSHA on other accident prevention efforts. USPS is furthering its workplace safety and health program through OSHA's Voluntary Protection Program (VPP). So far, five USPS sites have entered VPP—four of them as Star status, and one as Merit status.

The Pittsburgh Air Mail Center was the first to be accepted into VPP, in June 2001. Later that summer, the Albany Vehicle Maintenance Facility in New York followed suit. In May 2002, the Scranton, Pa., Processing and Distribution Facility joined VPP.

The Glens Falls, N.Y., Post Office earned Merit status in August 2002. On June 1, the Baton Rouge, La., P&DC celebrated its acceptance as USPS' newest VPP Star site.

Scranton Plant Manager Gerry McNamara cited employee commitment and cooperation as key to the program's success. "Achieving VPP certification was a complete team effort," he said. "If any component failed, the entire program would have failed."

Bob Glycener, NPMHU president for Scranton Local 308, called achieving VPP status "a wonderful achievement for both labor and management." He said the process built trust within the staff, and that "by increasing trust, barriers fall and new ideas are introduced without fear."

Bob Brant, USPS manager for OSHA coordination, said 10 additional USPS sites are expected to submit applications to VPP this year. Each of these sites appointed a VPP coordinator, and more than 80 of their employees recently attended training in Washington, D.C., to learn about VPP.



The staff at the Baton Rouge P&DC celebrate their acceptance as a VPP Star site in June.

Sometime in the future, Brant said, he expects to see all 38,000 USPS sites in the VPP program. "That's the ultimate goal because it's an all-encompassing, comprehensive approach to workplace safety and health," he said.

Sam Pulcrano, USPS manager for safety performance management, said participation in VPP fits well with USPS' goal to reduce injuries and illnesses among its workers. "Our aim is to create an improved safety and health culture through management commitment and meaningful employee participation," he said.

Pulcrano credits OSHA with providing expert advice, support, and consultation to help USPS implement VPP, ERRP, and the new strategic partnership throughout its vast retail and processing network. "By working with OSHA, we're looking at our processes to see where we can work smarter and safer, and in doing so, we're improving our workplace environment and reducing employee accidents and injuries."

Cathy Oliver, director of OSHA's Office of Partnership and Recognition, said OSHA benefits from the relationship, too. "The cooperative approach works and 700,000 employees will benefit if all members of the partnership remain focused on our common goal: worker safety and health," she said.

Pulcrano has called USPS' working relationship with its postal unions and OSHA "a win-win situation" for everyone involved.

"It's helping the Postal Service reduce accidents and injuries, and that's good for our employees, good for our customers, and good for the Postal Service," he said.

Colburn is a writer for the U.S. Postal Service in Washington, D.C.

USPS' Safety Initiatives

- Ergonomic Strategic Partnership
- Ergonomic Risk Reduction Process
- Voluntary Protection Programs

Common Goals of USPS' Safety Programs

- Management commitment and employee participation
- Worksite analysis
- Hazard recognition and control
- Safety and health training

Reducing MSDs in the Meat-Processing Industry

One of OSHA's first partnerships to focus on reducing ergonomic injuries sets a strong example for meat processors and other industries.

By Donna Miles

Amidst frequent announcements of new OSHA partnerships comes news of one partnership that was allowed to expire—*not* because it wasn't working, but because it worked *so well* in reaching its goal of reducing injuries at a North Dakota meat processing plant.

The Cloverdale Foods Company and its employee association, Mandan, North Dakota, entered into the partnership with OSHA's Bismarck Area Office in June 2000. The partnership was OSHA's first to focus primarily on musculoskeletal disorders (MSDs).

At the time, Cloverdale's employees were experiencing a disturbingly high number of MSDs, particularly involving the upper extremities. Three of the facility's departments had up to 100 percent of the workers sustaining injuries. The company's overall MSD injury rate was 17 percent.

The facility, which prepares pork products for packaging and sale, has more than 280 employees, with many jobs associated with particularly high lost workday injuries and illnesses (LWDII). These include stuffing and hanging hams, hanging bacon slabs, operating a brine injector, deboning meat, and boxing packages for shipment.

Throughout the meat processing industry, ergonomic hazards account for a large percentage of lost workdays. Among U.S. industries with 100,000 or more nonfatal injury and illness cases, meat processing ranks the highest—with an LWDII rate of 26.5 injuries and illnesses per 100 fulltime workers.

Following a safety and health inspection of Cloverdale Foods in 1999, OSHA's Bismarck Area Office proposed a partnership to help reduce lost workdays. "We saw this as an opportunity to help bring together our resources to make a significant impact by identifying ergonomic hazards and helping the company to correct them," said Bruce Beelman, OSHA's Bismarck Area Office director.

Cloverdale's management quickly agreed. In announcing the partnership, Cloverdale safety coordinator Craig Engelhard said, "The purpose of the safety partnership is to work smarter. We want to diminish the number of repetitive motion injuries because the safety and health of employees is our highest priority."

Working with the company, OSHA helped establish and implement an



Cloverdale Foods Company

Industrial hygienist and partnership coordinator Sarah Allmaras from OSHA's Bismarck Area Office measures table and conveyor heights along the bacon line at the Cloverdale Foods Company. Looking on and jotting down notes are Craig Englehard, Cloverdale safety coordinator, left, and Bismarck Area Office Director Bruce Beelman.

ergonomics program that incorporated management commitment, employee involvement, worksite analysis, hazard prevention and control, medical management, and training and education.

One of the most innovative aspects of the program, Beelman said, was that it tapped into the expertise of the National Institute for Occupational Safety and Health (NIOSH). Three NIOSH ergonomics experts helped the Bismarck Area Office staff conduct a health hazard evaluation for ergonomic problems at Cloverdale. Based on the evaluation, OSHA began training union members and company management on how to conduct an effective job hazard analysis of jobs with ergonomic stressors and how to alleviate stressors identified. NIOSH trained the staff on proper lifting, stacking, and positioning techniques, as well as how to set up a medical management program. OSHA trainers also explained how to keep accurate records of injuries and illnesses.

“By working with NIOSH, we were able to move forward much faster and with a broader pool of expertise than if we had worked alone,” Beelman said. “By better leveraging our resources, we were much more effective in reaching the goals of the partnership.”

Meanwhile, the Cloverdale management introduced new measures to reduce workplace MSDs. They raised existing conveyors in the packing department 12 to 15 inches and added a new conveyor line to reduce stooping and bending. They began mandatory rotations that require employees to move to a different position every two hours to reduce repetitive motions. They restricted workers from hanging more than three hams at a time, and required them to work with a partner when hanging meats. They installed adjustable stands along the boning line to minimize bending and reaching.

Throughout the facility, new hires began their employment with a “work hardening program.” For the first week, they worked at a slower pace before being permitted to work a full eight-hour shift. All workers began attending monthly safety meetings, and the company offered braces for employees to wear at work as well as at home to help prevent MSDs. Employees were encouraged to report any ergonomic injuries as soon as they occurred, and the company even sent employees to a massage therapist to receive pain treatments.



Bruce Beelman

Throughout the term of the partnership, OSHA conducted focused, limited-scope ergonomic monitoring inspections of the Cloverdale facility. These inspections revealed steady progress—not only meeting, but exceeding the partnership’s goal of reducing MSDs by 10 percent per year.

By 2002, Cloverdale’s workers’ compensation rates had dropped by about 40 percent. More importantly, the company’s plantwide MSD injury rate dropped from 17 to just 4.8—a 72 percent reduction during the term of the partnership.

Now that the partnership is over, Engelhard said Cloverdale continues to work at improving its safety and health program and to continue its progress in reducing MSDs among its workers. “Working with OSHA was a great experience that really got the ball rolling for us, faster than we could have done it on our own,” he said. “The new OSHA is really easy to work with. The compliance officers are there to help you, and you can tell.”

Beelman called the Cloverdale partnership “a perfect example of how OSHA, employers, and employees working together to establish an effective ergonomics program can reduce injuries and illnesses—even in a high-hazard industry such as meat processing.

“It’s very rewarding,” he concluded, “to know that our efforts made a difference and that Cloverdale’s workers now have a safer work environment.”

A successful partnership between OSHA and the Cloverdale Foods Company resulted in a 72 percent reduction in ergonomic injuries among workers.

Getting Charged Up Over **Electrical Safety**

A new partnership is helping protect Ohio electrical workers from shocks and other electrical injuries.

By Donna Miles

Unionized electricians and contractors have forged a landmark partnership with OSHA to protect 2,500 Columbus, Ohio, area electrical workers through tougher safety rules and enhanced training.

The partnership, formed last summer between OSHA's Columbus Area Office, the Central Ohio Chapter, National Electrical Contractors Association, Inc. (NECA), and Locals 683 and 1105 of the International Brotherhood of Electrical Workers (IBEW), is unique in that it covers electricians whether they are working on a construction site or in a manufacturing plant.

Its goal is to reduce injuries by 3 percent. According to the U.S. Bureau of Labor Statistics, 285 workers died on the job from electrical injuries in 2001. In addition, another

3,442 workers lost time from work due to electrocutions and electrical shocks and burns.

Central to the partnership is the adoption of an industry standard checklist based on the most recent National Fire Protection Association (NFPA) standard on electrical safety requirements for employee workplaces, NFPA 70E. This consensus standard, developed in 1976 at OSHA's request and updated every three to five years since, identifies the hazards and details the measures needed to prevent electrical injuries. More than 200 major companies nationwide use the standard as the foundation of their electrical safety program.

A significant requirement of NFPA 70E—one written into the partnership agreement—is that all electricians work "de-energized" unless they have explicit permission from their supervisor. IBEW data shows that 80 percent of on-the-job accidents occur when electricians work "energized," when they could have completed the same job safely working "de-energized."

In addition, the agreement established a training program, developed by The National Joint Apprenticeship and Training Committee, the training arm of the IBEW and NECA, with funding from an OSHA Susan Harwood grant. The training, provided in a train-the-trainer format, covers concepts of NFPA 70E, as well as OSHA requirements related to electrical safe work practices.

S.M. Lipster, training director of Local 683 and director of the Electrical Trades Center, praised the training program created under the partnership. Unlike the overly broad training delivered to apprentices and journeymen before the new program was created, Lipster said the new program "provides a strong foundation on which we can build specific, continuous, and meaningful programs, assuring that at the end of the day, electrical workers are able to return



Palmer Hickman, director of safety training and curriculum development for the National Joint Apprenticeship and Training Committee, discusses the importance of warning signs.



OSHA Compliance Assistance Specialist Chris Matthewson, left, and Greg Schreiber, superintendent and safety director of Dynalectric, look at an arc shield for use when working energized.



Electrical apprentices learn safe work practices through a training program developed through the partnership.

to their families in the same condition they left them at the beginning of the day.”

In addition to helping with the training as needed and providing compliance assistance, the Columbus Area Office verifies the effectiveness of the partnership through unannounced inspections.

Putting together the charter agreement was no small task. It took a year of work—and 16 drafts—to devise an agreement that delineated the role of each of the three partners and met the needs of all.

Deborah Zubaty, director of OSHA’s Columbus Area Office, said she didn’t rush things. “We had to give both the union and management the time to get their members together and to get buy-in. That was the most important part of it,” she said. “We want to make sure that with any partnerships signed in the Columbus OSHA office, and obviously in other OSHA offices, that both union and management are going to fulfill their agreement. We don’t want things done in name only.”

Compliance Assistance Specialist Chris Matthewson, who first recommended that OSHA initiate the partnership, spent many hours helping ease the unions’ and management’s concerns about OSHA. Beth Butler from Roberts Electrical recalls that “everyone kind of raised an eyebrow” when Matthewson was invited to speak at her chapter’s meeting. “But we quickly felt comfortable speaking with Chris,” she said. “One thing I remember specifically is that Chris was very excited about making the

atmosphere between employers and OSHA an amicable relationship. He really wanted to change the environment.”

The result, said Michael Hren, NECA’s assistant manager for the Central Ohio Chapter, “is a commitment from both management and labor to raise the standards in our electrical industry for our current and future generation of workers.” The goal is for electrical workers to experience fewer injuries, for their employers to have lower workers’ compensation costs, and for OSHA’s Columbus Area Office to report a lower recordable-accident rate.

“This agreement’s potential impact reaches far beyond Columbus, Ohio,” said Kenneth G. Mastrullo, NFFA’s senior electrical specialist. “It shows what can be accomplished when people with common safety interests join together to prevent injury and save lives. It could become a prototype for how employers, workers, and government agencies can work in harmony for the public good.”

Zubaty said the partnership is helping OSHA be more effective in other areas, too. “Partnerships are there because they allow you to leverage your resources,” she said. “In the Columbus office, we have 28 counties and 15 compliance officers. That’s an enormous amount of work.

“So when you have employers who are doing a good job, as part of the partnership, we are going to take a look at their worksite—and if they’re good, we’re going to move on.”



Electrical workers in Ohio are benefiting from a partnership between OSHA, electrical contractors, and electrical workers that aims to reduce electrocutions and electrical shocks and burns.



Kandahar International Airport

Extreme VPP: Kandahar, Afghanistan

By David Baker

An OSHA compliance officer proves that the principles of VPP can work anywhere—even in a combat zone.

Photos by David Baker and the U.S. Army

What do OSHA's Voluntary Protection Programs, the U.S. Army, and the global war on terrorism have to do with each other? Well, it's an interesting story...

When I heard about a new position in the Army Reserve called a "combat safety officer," I wondered, who would have to tell people in combat to be safe? It seemed pretty self-evident, especially to this OSHA compliance officer who's built a career around safety and health. I quickly signed on for the job.

As in most cases, reality turned out to be quite different from initial perceptions. I learned that the Army historically has more fatalities due to accidents than casualties from enemy action. For instance, in World War II, 56 percent of the deaths were from accidents, versus 43 percent from enemy action. During Operation Desert Shield/Storm, the figures were even worse, with 75 percent of the casualties resulting from accidents.

In response, the Army did two things: it developed a program to change the U.S. Army's culture that accepted accidents as a cost of operations, and established a military unit of trained safety professionals, called the Army Safety Augmentee Detachment.

In December 2001, I was notified that I was being called to active duty as a combat safety officer, to deploy to Afghanistan with the 101st Airborne Division. After the shock of my call-up wore off and my wife got me out from under the bed, I realized that I would be responsible for establishing a safety program from the ground up. Saying I was a little apprehensive was an understatement. As a compliance officer, I had a lot of training and experience in reviewing and evaluating safety programs, but none in developing or implementing one.

I arrived in Kandahar, Afghanistan, in January 2002 and became a member of Task Force Rakkasan, made up of units from the U.S. Army, Air Force, Marine Corps, and a Canadian battle group. I reported to the task force commander, Col. Frank Wiercinski, who greeted me with the warm words of "you're my *what?*" Apparently, my arrival had not been trumpeted in advance. Once I explained who I was and what my job entailed, Wiercinski gave me my first order: "Dave, I plan on

Author Dave Baker from OSHA's Bellevue Area Office, above, applied his extensive safety and health experience to protect troops in Kandahar, Afghanistan.

not losing a single soldier during this deployment. Your job is to help me achieve that goal." I knew at this point I had a commander who would support a strong safety and health program. The only problem was that there *wasn't* a safety and health program. Yet!

During my first week on the ground in Afghanistan, the safety program consisted of pure crisis management. (Apparently, Afghanistan OSHA had not done a scheduled inspection at the airport for over 30 years!)

In the first week of February, Richard Terrill, regional administrator for OSHA's Seattle Regional Office, sent me a VPP flag. It suddenly dawned on me that VPP would be a great model on which to base the task force safety and health program—specifically, the elements that involve management commitment, labor commitment, and employee involvement. As a compliance officer, I had participated in several VPP site evaluations and was always impressed by the results.

In regard to management support, I already knew that I had that from Wiercinski. The next element that I needed was employee involvement. The task force sergeant major, luniasolua Savusa, worked directly for the task force commander and was the highest-ranking enlisted person in Task Force Rakkasan. In a civilian context, he is a combination of chief union steward and company vice president. He's highly respected and sometimes feared, and as every military person knows, no one messes with the command sergeant major!

Luckily, Savusa, like Wiercinski, was a strong supporter of safety and health. He headed the Task Force Safety and Health Committee, which had representatives from all the units on Kandahar Airfield. Savusa used his position to aggressively enforce safety standards, sometimes explaining key safety concepts at high volume and with colorful descriptive language that's probably best not to print. With his help, a safety culture was developing throughout the task force, supported by the professionalism of the enlisted soldiers who made the safety program a success.

Let me describe the site at Kandahar International Airport. Imagine yourself among approximately 6,000 people, squeezed into a one-mile by two-mile area, trying to build a city with all the materials being flown in by airplanes. Add to the equation landmines and unexploded

The Army historically has more fatalities due to accidents than casualties from enemy action. For instance, in World War II, 56 percent of the deaths were from accidents, versus 43 percent from enemy action. During Operation Desert Shield/Storm, the figures were even worse.



As during all previous military operations, more troops were injured or killed from accidents like this than from actual combat.

Col. Frank Wiercinski, far left, and Sgt. Maj. luniasolua Savusa, right, provided the support needed for the task force safety and health program to be successful.

Despite round-the-clock operations in an extremely hazardous environment, the troops of Task Force Rakkasan experienced an extremely low accident rate.



bombs, scattered liberally throughout the site. And to add a little excitement, think of people occasionally shooting at you.

(At this point, I have to answer the question that so often comes up: did I get shot at while I was in Afghanistan? Well, the answer is yes, but for some reason all the shooting came from within the camp and always occurred after I did an inspection. Talk about a coincidence!)

Beyond the hazards of exposure to the high-velocity, heavy-particulate lead commonly found in bullets, I tried to concentrate on safety and health hazards that would be present at any large construction or industrial site. The Kandahar Airport was constructed in the early 1960s. By 2002, the airport had been renovated by the Soviet Army, the Taliban with help of Al-Qaida, and the U.S Air Force. For a safety and health professional, it definitely was a “target-rich environment.” It would be close to impossible to cover all the safety and health hazards identified, but a few examples will help tell the story.

For the most part, the safety hazards were similar to those on a construction site. By focusing on the big four construction hazards—falls, electrical shocks, and struck-by and caught in-between incidents—it was relatively easy to identify and correct specific hazards. One of the biggest problems we had was the movement of material-handling equipment to offload planes, often in close proximity to people. At one point, sleeping tents were constructed on the

edge of the main ramp for the airfield, with 5-ton forklifts operating at night, literally feet away from soldier sleeping tents. We got that corrected as the engineers were able to clear more area of landmines so the tents could be moved farther away from the material-handling area.

The biggest challenge we faced was asbestos. The first problem was determining where it was located. So, I did what any self-respecting safety officer would do: I made a frantic phone call to an industrial hygienist. That wasn’t as easy as it sounds, with the time difference of 11 hours between Kandahar and the East Coast, and the limited telephone service available in the field. As it turned out, the only OSHA office I was able to contact was the Savannah Area Office. When I finally got my call through, I talked to Liz Freeman. After convincing her that this wasn’t a prank call, I got valuable guidance from her about what to look for and where to take samples.

After taking the samples from several locations, I was faced with another problem: where to send them? (The local analytical lab in Kandahar could only test for four elements: fire, earth, wind, and water.) Luckily, the Army has an analytical lab in Germany that could perform the testing. I put the samples on an airplane leaving from the Kandahar Airport, let the military aircrew deliver them to the lab, and had the results emailed back to Afghanistan.

When the test results came in, they showed the presence of chrysotile asbestos

of 5 percent on the piping inside the buildings and 25 percent on the pipe lagging for the boiler. For abatement, our only option was to encapsulate the damaged piping in plastic and wrap it in tape. Then, we washed down the area with water and cleaned it the best we could. We sealed the boiler room with plywood and tape to keep people out. The jury-rigged effort at abatement appeared to work: When we conducted airborne sampling several months later, no detectable levels of asbestos were found in the areas that had been encapsulated.

Putting together written programs was probably the easiest part of the entire process. Once we identified the major hazards, the next step was to develop procedures to reduce or eliminate them. Fortunately, the Army already has a large repository of safety procedures, so it was just a process of culling this information for relevant programs, then incorporating them into a Task Force Safety and Health Program.

What were the results of the safety and health program for Task Force Rakkasan? I am happy to report that for the duration of my deployment, there were no fatal accidents. Using Army historical data, for a force this large deployed for the same period of time, statistically there should have been 21 non-combat-related fatal accidents. Furthermore, not a single accident occurred that resulted in a soldier receiving permanent or disabling injuries. Finally, only 10 accidents occurred that would have been the equivalent to an OSHA recordable injury.

These outstanding results stand as a testimony to the professionalism of the soldiers, marines and airmen of Task Force Rakkasan. They clearly demonstrate that a safety program using the VPP concept of strong management and active labor involvement, which integrates safety into all aspects of the operation, works.

In Afghanistan, we at Task Force Rakkasan adopted a unique sense of humor to deal with the very serious nature of our circumstances. And protecting the safety of our troops is a very serious business—one that the Army leadership emphasized throughout the deployment, and with positive results.

Baker served six months in Afghanistan and returned in August 2002 to his safety position at OSHA's Bellevue Area Office in Washington.

Remembering Those Lost

Unfortunately, I was required to use my training as an accident investigator during my assignment to document two combat-related incidents. On April 15, 2002, four soldiers from our task force who were destroying a weapons cache were killed by a booby-trap set by the Taliban. Three days later, four Canadian soldiers were killed in a friendly fire incident when two U.S. Air Force F-16s mistook a training exercise for enemy fire and dropped a bomb.

Neither of these incidents was classified as an accident, but the results are the same: eight members of our task force did not return home. This article is dedicated to the memory of the soldiers of our task force and all other U.S. servicemembers and coalition forces who died in Afghanistan.

Defense Department Commits to Reducing Accidents

By Gerry J. Gilmore

“World-class organizations do not tolerate preventable accidents,” said Secretary of Defense Donald H. Rumsfeld. “Our accident rates have increased recently, and we need to turn this situation around.”

Rumsfeld recently challenged the Defense Department’s military and civilian leaders and rank and file “to reduce the number of mishaps and accident rates by at least 50 percent in the next two years.” These goals, he said, “are achievable, and will directly increase our operational readiness. We owe no less to the men and women who defend our nation.”

A new DoD Safety Oversight Council is studying ways to reduce accidents and lost time due to injuries. The council is evaluating methods, processes, and strategies—including the implementation of best business practices—to reduce accident rates department-wide. In addition, the department is soliciting ideas on accident prevention from within the ranks, including observations about dangerous types of equipment and gear.

David S.C. Chu, the undersecretary of defense for personnel and readiness who is leading DoD’s accident prevention effort, said he and Rumsfeld share a commitment to changing the department’s attitude and culture regarding accident prevention.

“We don’t need to lose or to get our people hurt,” Chu said. “Our goal is getting preventable accidents to zero.”

Gilmore is a writer for the American Forces Press Service, Washington, D.C.

Making a Big Impact on Small Business

OSHA's Buffalo Area Office is giving small business owners the tools they need to build safe, healthful, and profitable workplaces.

By Gordon DeLeys

In Buffalo, N.Y., anything worth doing is worth doing in a big way. Maybe it comes from having the second-largest waterfalls on the globe right down the road, on the Niagara River. Or regularly getting record snowfalls that would bring most other cities to a standstill for days. Or having played host to Jim Kelly, the only quarterback in history to lead his team to four consecutive Super Bowls.

Whatever the reason, it was of no surprise when OSHA's Buffalo Area Office decided to reach out in a big way to the small business community in western New York. The staff could have done it the easy way—providing three or four outreach sessions for small business owners, calling it a success, then going on to the next new initiative. But that's not the way things are done in Buffalo. The staff developed an outreach schedule that encompassed 66 outreach seminars for small businesses, conducted over a one-year period.

The initiative offers seminars to help small business owners develop an overall, effective safety and health program, no matter what industry they're in—service, construction, or manufacturing. Topics include OSHA recordkeeping, exit routes, emergency action plans and fire prevention plans, fall hazards and ladder safety, personal protective equipment, hazard communication, electrical safety and portable hand tools, machine guarding, lockout/tagout, ergonomics and office safety, and health hazards. The last seminar will pull together information from all the other seminars to help employers develop a safety and health management system.

To deliver this ambitious outreach initiative, the Buffalo Area Office teamed up with other partners who provided free classroom space and helped market the program. These partners included the Small Business Development Centers, the Niagara Community College OSHA Education Center, various chambers of commerce, local chapters of the National Safety Council, manufacturing associations, and several local community colleges. To add variety to the programs, OSHA enlisted the help of the New York State Consultation Program, the Upstate Safety Council, the Buffalo Safety Council, the Rochester Business Alliance, and the Niagara Community College OSHA Education Center to provide presenters for some of the seminars.



Gordon DeLeys from OSHA's Buffalo Area Office teaches small business owners how to develop an effective safety and health program.

Irene Dobies

The result has been nothing less than fantastic. Attendance at the seminars continues to grow. Each attendee receives a packet of relevant information to take home for future reference. Unsolicited feedback has been extremely positive, with comments like, "I really appreciate the wealth of information and services available through OSHA," and, "The presenter had a lot of experience and information to share."

By far, the biggest challenge to the Buffalo Area Office has been in marketing the program. The office issues press releases announcing the seminars and works through various professional organizations to promote the seminars. However, the biggest promoters seem to be those who have attended previous sessions, who, through their word of mouth, spread the word about the quality of the programs.

"It's rewarding work to help small business owners who are struggling to survive in a competitive marketplace," said Arthur Dube, director of the Buffalo Area Office. "The safety and healthfulness of their workplace is just one of many issues they must deal with on a daily basis—but a very significant one in its impact on their bottom line."

DeLeys is a compliance assistance specialist in OSHA's Buffalo Area Office.

Making Waves in Boatyard Safety

A local emphasis program is helping reduce hazards in the boat building and repair industry.

By Shelley Bishop

On a scenic drive up the Massachusetts coast, you will pass boat building and repairing businesses of all sizes, from mom-and-pop operations to large industrial outlets. Each of these businesses contributes to the state's large pleasure and commercial boating industry.

No matter the size of the operation, building and repairing boats can be a risky business. The hazards include the risk of being exposed to dangerous chemicals from spray finishing operations, getting a cut or amputation from sharp-bladed equipment, being crushed under a shifting boat, or falling from a scaffold.

To address this concern, OSHA's South Boston (Braintree) Area Office established a local emphasis program (LEP) in 2000 for the local boat building and repairing industry. Now in its third year, the LEP has been a "phenomenal success," said Office Director Brenda Gordon, who is considering extending the program beyond its planned expiration date this September. "As a result of our work, we've managed to reach a large segment of the industry in the state, but we would like to reach even more boatyards," she explained.

From a list of all boatyards within the office's jurisdiction, Gordon's inspectors randomly select 10 to 15 boatyards for a full inspection each year. Most of the work is done in the spring and summer, to coincide with the industry's busiest months. Although Gordon admits that the industry was somewhat apprehensive at first, the cooperative efforts of OSHA and the



Photo by Lance Berry

Above, local emphasis program is helping increase worker safety at boat building and repair facilities along the Massachusetts coastline. (above)

Below, OSHA compliance officers investigate a fatal accident at a Massachusetts boatyard.



Massachusetts state consultation service have won over many boatyard operators.

"Initially, there was a fear that OSHA would send out strike teams to put the small companies out of business," explained Gordon. "But the combination of outreach, compliance assistance, and consultation services we offered has made the LEP a success."

Greg Glavin, a boatyard owner and officer of the Massachusetts Marine Trade Association, agrees. "The fear of having an

OSHA inspection was taken away a bit by the outreach programs between the state and OSHA. They let us know that we weren't going to be fined or shut down unless they found something that was grossly wrong, which would be appropriate," he said.

The LEP began with an information campaign. OSHA and the Massachusetts State Consultation Service hosted outreach sessions on Cape Cod and explained what they would be looking for during the inspections.

Gordon said the outreach program proved to be vital to the LEP's success. "The inspections began in the summer of 2000, and we didn't find as many serious and high hazards as we expected," she said. "We attribute that to the success of the outreach program and the industry's use of the state consultation services."

Bishop is a writer-editor in OSHA's Office of Communications, Washington, D.C.

DENARK Named "Best of the Best"



A steel worker at a Denark Construction jobsite secures himself to a beam. Denark requires fall protection for all workers operating more than six feet above ground.



Kaye Love

Celebrating Denark Construction's receipt of the top safety award at the AGC of America Convention in Hawaii are, from left, Denark President Frank Rothermel; Former Pittsburgh Steelers running back Rocky Bleier, keynote speaker; Sharon Campbell, Denark executive assistant; and Kaye Love, Denark safety manager and education coordinator.

A Tennessee construction company wins top honors in the Associated General Contractors of America's annual safety awards program.

By Donna Miles

A concentrated personal effort by the company management. Close cooperation between employees and subcontractors. These two key components of the Denark Construction, Inc. safety program are helping the Knoxville, Tenn.-based company keep workplace injuries down and garnering some impressive accolades.

Last year, Denark received an award from the City of Knoxville for completing 1 million work hours without a single lost-time accident—a record that Denark says could bring the city \$800,000 in insurance savings. This spring, Denark topped that achievement with its selection as the "best of the best" in construction safety excellence by the Associated General Contractors of America (AGC).

The award is the highest of 37 presented this year through the annual AGC Construction Safety Excellence Awards

Program, which recognizes contractors' proven success in creating safe workplaces. Special attention goes to the candidates' safety training programs, active employee involvement, evidence of management commitment, and safety innovation. The goal, according to AGC President Larry C. Gaskins, is "to use these accomplishments as a springboard to find innovative ways to improve safety in our industry." The Willis Construction Practice Group funds the program.

AGC chapters nationwide received more than 100 entries, then designated 30 companies as finalists in the building, heavy, highway, specialty contractor, municipal utilities, and construction management divisions. The finalists were invited to make a five-minute presentation to an independent panel of five safety experts, who determined first, second, and third place awards in their categories.

The judges, consisting of owner representatives, OSHA staff, and insurance brokers, reviewed the 13 first-place winners' safety programs to select a winner for the grand award.

What made Denark Construction—the top-placing building contractor with 100,000 to 500,000 work hours—stand head and

shoulders above the rest was its outstanding safety processes, management involvement, and company safety culture. “Denark’s safety program is not just a written program that gathers dust on the shelf,” said Edward Pachico, AGC’s associate director for safety and health services. “It demonstrates company-wide commitment from the owner to the newest employee in the field in their words and actions.”

“It was evident that Denark is a company with a top-to-bottom commitment to safety and health,” agreed Bruce Swanson, director of OSHA’s Directorate of Construction and one of the judges on the panel. “They’ve established a company culture that puts safety first, and they foster this through a strong employee education and training program and awards program.”

“For a construction company its size, Denark has a very comprehensive safety and health program in place. Denark has implemented programs some of the other companies are only thinking about,” added Dick Terrill, OSHA’s Seattle Regional Administrator who also served as a judge. “I was also extremely impressed by the level of commitment and enthusiasm of Denark’s safety director and its top management.”

Putting safety first hasn’t been at the cost of productivity and growth for Denark, a general contractor/design-builder/construction company that’s one of the 25 fastest-growing companies in East Tennessee. Since its launch in 1985, Denark has won more than a half-billion dollars in public, institutional, commercial, and industrial contracts. Last year, the company completed one of the most prominent projects in its region, the Knoxville News-Sentinel headquarters.

“We don’t see productivity and safety as conflicting priorities,” said Denark Safety Manager and Education Coordinator Kaye Love. “In fact, our mission statement begins with the premise, ‘Insist on quality and safety in every aspect of our work.’ We believe that a safe work environment is a moral obligation to our employees, but it also creates savings to our clients.”

Love said Denark has built its safety culture through close cooperation that enables the company to reduce or eliminate personal injuries, promote greater efficiency, and lower overall costs in our operation.

Before construction ever begins, the company tailors a safety plan for the specific project, identifying and scheduling guardrails, hole covers, and other site-

specific safety features.

In addition, the company begins selecting subcontractors with strong safety records before the contract award. Denark’s management reviews each potential subcontractor’s safety record and conducts a detailed analysis of the entire safety scope of work. Love explained that in this analysis, the parties agree on safety procedures to be followed throughout the project.

Also before beginning work on the project, every employee receives a project safety orientation that includes hazard communication, stairways and ladders training, safety rules, and a general orientation.

Throughout the project, Love and other key managers conduct regular site inspections to ensure that all workers abide by company procedures and that the site environment is safe.

To help keep employees focused on the safety program, Denark’s safety incentive program distributes about \$60,000 a year in safety bonuses. Love said the program has gone a long way in increasing safety awareness and decreasing safety violations and accidents.

Representatives from each of the company’s projects meet monthly to address specific safety concerns and recommend ways to correct them. Their recommendations go directly to the company president, vice president of operations, and safety manager, who ensure that steps are taken to address safety concerns raised.

Love said Denark’s commitment to its workers’ safety and health pays enormous dividends in increased productivity and employee loyalty. It’s reflected in the company’s bottom line, too—reducing workers’ compensation premiums by 26 percent over the last six years. Denark passes these savings on to its clients through lower insurance costs, making the company more competitive in bidding for jobs and further helping to fuel the company’s growth.

But Love insists that even after winning top honors in the AGC Construction Safety Excellence Awards, Denark’s work isn’t done. “It would be easy now for us to feel a little puffed up after winning this prestigious award,” she acknowledged. “But humility will be one of our greatest assets as we move into the future with the realization that safety is a journey that never ends.”



Kaye Love

Denark Construction posts signs at all work-sites informing workers in both English and Spanish of the company’s requirement to wear hard hats and safety glasses.

FOCUS ON EDUCATION CENTERS

OSHA's Training Institute Education Centers are gearing up to train more students than ever before at 35 locations nationwide.

By Jim Barnes

When the Department of Labor announced the selection of 20 OSHA Training Institute (OTI) Education Centers last December, it represented an exciting step forward for the program that delivers courses on OSHA standards and occupational safety and health issues to thousands of students a year.

By expanding the program from 12 to 20 centers at 35 locations throughout the United States, OSHA nearly doubled its capability to meet increasing demand for OSHA training. "More than 14,500 students were trained at education centers in 2002 alone," said Secretary of Labor Elaine L. Chao. "We expect the number of students trained by these centers to double over the next two years, and to continue to increase substantially each year after that."

The OTI Education Center program has come a long way since its establishment in October 1992. Then, as now, the OSHA Training Institute served as OSHA's primary training provider for federal and state compliance officers and state Consultation Program staff. The institute offered training to non-OSHA students on a space-available basis.

Throughout the 1980s, however, demand for training from private-sector employers and employees and staff of other federal agencies increased substantially, exceeding OTI's capacity.

This gave birth to an innovative solution:



Peter Finger

Dr. Melinda Treadwill teaches an industrial hygiene course at Keene State College in Manchester, N.H.

OSHA began teaming up with other training and educational institutions to conduct OTI courses at their facilities. The arrangement not only increased OTI's capability to provide important occupational safety and health training; it also delivered training closer to many of the students' worksites.

Initially, the program started with four education centers. Soon it expanded to include 12 centers, with at least one in each region.

Now, with 20 centers, OSHA Administrator John L. Henshaw said the program will have a greater impact than ever before. "Training is key to safety and health," he said. "Expanding our education centers allows us to reach more people with information that can protect their safety and save their lives."

From the start, the Education Center Program had strict requirements for its training facilities. OSHA conducts a national competition, evaluating competing institutions on a variety of factors: occupational safety and health experience, non-academic training background, classroom and laboratory availability, and the ability to provide training throughout the region, among them. The nonprofit organizations selected to provide the training receive no funding from OSHA, and support their OSHA training through tuition and fees.

Ron Mouw, deputy director of OSHA's Office of Training and Education, said the



An instructor at the National Safety Education Center brings safety and health training to DeKalb, Ill.

education centers enable OSHA to significantly expand its outreach without requiring additional funds or resources.

The education centers support OSHA's training and education mission through a variety of safety and health programs. In addition to providing basic courses that teach students to recognize, avoid, and prevent unsafe and unhealthful working conditions, the programs enhance the agency's community outreach efforts, including Spanish-language courses and youth initiatives.

Recognizing that not all students are able to attend the full-week courses, OTI and the education center staffs are developing several one-day seminars to address subjects such as the new ergonomic guidelines for nursing homes, homeland security, and machine guarding.

It's not unusual for staff at the education centers to lend their subject-matter expertise to curriculum development. The centers have been leaders in developing distance-learning courses and promoting safety and health training through their presence at conferences and seminars focusing on topics such as homeland security and ergonomics.

In addition, the centers offer something OTI isn't readily able to provide: specialized local instruction tailored to specific regional industry needs. The education centers work closely with OSHA regional and area offices to offer customized corporate training and on-site training courses, on request. For example, the National Safety Education Center (NSEC), an OTI center near Chicago, worked with the Illinois On-Site Consultation Service staff and local OSHA Area Offices to

present "Needlestick Provisions of the Bloodborne Pathogen Rule" to participants at multiple sites via interactive television.

NSEC has been very responsive to students' needs by offering training with unique scheduling options such as presenting courses on consecutive Fridays, to lessen the impact of missed workdays, and designing specialized programs for the warehousing industry and Voluntary Protection Programs (VPP) participants.

These are some of the innovative approaches the OTI education centers are using to promote occupational safety and health initiatives. They add value for businesses and play a vital role in supporting OSHA's training objectives.

From its modest beginning in 1992, to a national network of training organizations offering a broad range of courses and subject matter expertise, the OTI Education Center Program has clearly exceeded initial expectations.

"Since the inception of the program in 1992, the OTI education centers have added great value in providing occupational safety and health training, and supporting our department's mission," said OTE Director Henry Payne. "With the recent expansion of the program, OSHA will continue to raise the bar on the number of students trained by our education centers. This will allow OSHA to reach more people as the agency endeavors to promote safety, reduce injury and illness, and ultimately, save lives."

Barnes is a program manager at the OSHA Training Institute in Arlington Heights, Ill.

For a list of OTI Education Centers and course offerings and dates, visit the OSHA website at www.osha.gov. Click on "Training."

OSHA IH EARNS BLOOMFIELD AWARD

The American Conference of Governmental Industrial Hygienists recognizes Industrial Hygienist Kimberley Nipko.

By Donna Miles

For Kimberley Nipko, an industrial hygienist in OSHA's Madison, Wis., Area Office for the past three years, there's little conflict between her dual roles as enforcer-regulator and consultant-educator.

"I firmly believe that an industrial hygienist working in OSHA can do both and can earn the respect of clients in the field," she said. The key, she said, is to educate employers and their employees about the need for high-quality safety and health programming and the importance of providing a safe and healthful workplace.

Nipko's approach to resolving occupational health hazards was a major factor in her selection for this year's John J. Bloomfield Award. The prestigious award, presented each year by the American Conference of Governmental Industrial Hygienists, recognizes an up-and-coming industrial hygienist who has made significant contributions to the profession by pursuing occupational health hazards, primarily through field work. ACGIH presented Nipko the award at its recent American Industrial Hygiene Conference and Exposition in Dallas.

Charlie Shields, director for OSHA's North Aurora Area Office who nominated Nipko for the award, praised Nipko as "one of OSHA's rising IH stars." He pointed to her strong emphasis on outreach; shortly after joining OSHA in mid-2000, he said she almost immediately "hit the speech circuit and became a frequent name-requested speaker."

Nipko has developed and taught many training programs on silica, hearing protection, confined space, respiratory protection, personal protective equipment, and fall protection, among other safety and health



Lt. Robert E. McCleery from the National Institute for Occupational Safety and Health, last year's Bloomfield Award winner, presents the 2003 award to Kimberley Nipko from OSHA's Madison Area office.

Charlie Shields

issues. Before joining OSHA, when she was project manager for the Chicagoland Construction Safety Council, Nipko wrote a successful application for an OSHA Susan Harwood Training Grant, then developed the council's nationally recognized Silica Hazard Awareness for Construction package.

Nipko said speaking to groups about industrial hygiene topics is a great way to educate the public. "I hope that approaching health and safety issues as a teacher and trainer

helps reinforce OSHA's reputation as a helpful agency that should be respected for its mission and its strategy to protect the jobsite for American workers," she said.

In addition, Nipko has been involved in a variety of interesting health hazard evaluations involving methylene chloride, isocyanates, ergonomics, and cadmium.

"I'm thrilled to be receiving the John J. Bloomfield Award for 2003," she said. "Industrial hygiene is a stimulating and challenging field, and to be recognized by your peers for contributions to the profession is the highest honor anyone could hope to achieve. The award reinforces to me that what I have been doing since joining OSHA is important and should continue."

Nipko is quick to acknowledge the support and encouragement she has received from her colleagues throughout OSHA's Chicago region. "The staff and especially my supervisors have taught me so much about industrial hygiene, as well as health and safety," she said. "Without their willingness to provide mentoring and much-needed advice, I would never have earned this award."

THE INCIDENT

Early one fall morning, a concrete formwork crew was building a machine base in a new industrial plant and was in the process of setting gang forms to encase the mass of concrete to be poured for the base. Huge base anchor bolts to secure the machine had to line up precisely, so the job demanded high placing accuracy. A crane was available to handle heavy loads.

All went well until the crane brought up the last gang form, allowing the crew to button up the last of the formwork. Crane positioning was especially difficult because the form had to slide down between the two existing walls—with very little maneuvering room. It was also a “blind lift,” meaning the operator was totally dependent on his coworkers’ hand signals to place the form.

While the crew carefully guided the huge form into place, a man on top of the form noticed a corner chamfer strip had been damaged during the panel placement. Because congested rebar prevented anyone from going down into the form for repairs, the crew had to lift the form back out. The foreman signaled the operator to hoist the heavy form just high enough for a carpenter to get in to make repairs. The plan was to lower the form afterward. The crane operator hoisted the form, stopping as directed. Knowing that the repair would take some time, he “dogged off” the load by setting the foot brake in the lock position.

Meanwhile, the crane operator heard his new trainee moving around on top of his cab. Worried that a combination of oil on the rookie’s boots and the morning dew might cause him to fall, the operator attempted to signal him to get down. Failing to get the trainee’s attention, the operator stepped out of the cab; and, since it was a cool morning, he closed the door behind him.

When the door shut, the jolt released the foot brake lock, and the load dropped. The heavy form fell on the carpenter performing repairs, seriously injuring him.

PREVENTION

The incident would not have happened if the crew had followed two basic safety rules:

- Never work under a suspended load.
- Never allow the crane operator to leave the controls with a load hanging.

FOR MORE INFORMATION

Title 29 of the Code of Federal Regulations Parts 1926 and 1910 cover various aspects of construction. More information about construction safety is available on the OSHA website at www.osha.gov.

This *SafeWorks* was written by Bruce Slattery, vice president for safety for Baker Concrete Construction, and a member of the American Society of Concrete Contractors’ Safety Committee, in cooperation with OSHA and *Concrete Construction* magazine.

EL INCIDENTE

Un día en el otoño, temprano en la mañana, un equipo de trabajadores de moldes de concreto responsable por construir una base para máquina estaba instalando los moldes que iban a recibir el concreto para la base. Los enormes tornillos de anclado para asegurar la maquina tenían que ser alineados con precisión, así que el trabajo demandaba mucha exactitud. Una grúa estaba disponible para mover cargas pesadas.

Todo iba bien hasta que la grúa estaba poniendo el último molde en su lugar, mientras que miembros del equipo hacían sus últimos ajustes al molde y a la posición en cual lo iban a poner. La colocación del molde durante este proceso era especialmente difícil porque tenían que meter el molde entre dos paredes, dejándoles muy poco espacio para maniobrar. Para hacer el asunto más difícil, el operador tuvo que colocar el molde “a ciegas.” En otras palabras, el operador tuvo que depender completamente en señales manuales dado por sus compañeros para colocar el molde.

Mientras que el equipo cuidadosamente guiaba el molde enorme hacia su lugar, un hombre arriba noto que la esquina de una ranura había sido dañada durante la colocación del panel. Porque las barras de refuerzo (rebar) estaban congestionadas, nadie pudo bajar al espacio para repararlo, y tuvieron que levantar el molde para que esto sea posible. El supervisor señaló al operador de grúa que levantara el molde suficientemente para que un carpintero pueda entrar bajo de el y hacer las reparaciones. La intención era bajar el molde después. El operador de grúa levanto el molde, parando cuando le indicaron. Sabiendo que la reparación se tardaría algún tiempo, el operador metió el freno de pie, y lo bloqueo.

Al mismo tiempo, el operador oyó que su aprendiz estaba moviéndose arriba de la cabina. Pensando que quizás la combinación de aceite en sus botas y el rocío de la mañana causara que se cayera, el operador trato de señalarle que se baje. No teniendo éxito en su esfuerzo, el operador salió de la cabina y, como era una mañana fresca, cerro la puerta.

Cuando la puerta cerro, el impacto soltó el freno de pie, y el molde enorme cayo arriba del carpintero, hiriéndolo seriamente.

PREVENCIÓN

El incidente nunca hubiera pasado sí el equipo había seguido dos reglas básicas de seguridad:

- Nunca trabaje abajo de una carga suspendida.
- Nunca permite que un operador de grúa deje los controles cuando una carga esta colgando.

PARA MAS INFORMACIÓN, VEA

Partes 1926 y 1910 del Título 29 del Código de Regulaciones Federales (Title 29 Code of Federal Regulations, 1926 and 1910), que cubren varios aspectos de la industria de construcción. También puede encontrar mas información sobre seguridad en la industria de construcción en la website de la OSHA (la Administración de Seguridad y Salud Ocupacional), que se puede encontrar en www.osha.gov.

Este “*Safe Works*” fue escrito por Bruce Slattery, vicepresidente de seguridad por Baker Concrete Construction, y miembro del Comité de Seguridad de la Sociedad Americana de Contratistas de Concreto, en cooperación con la OSHA y la revista *Concrete Construction*.

Did You Know...

The federal OSHA "It's The Law" poster, which all employers are required to post, is available on the OSHA website at www.osha.gov. Click on "Publications/Posters." In addition, all images and materials on the OSHA website are in the public domain, and you are welcome to use and reproduce them as needed.

OSHA's website provides **information on trenching** at www.osha.gov. Click on "T" on the alphabetical index, then "Trenching and Excavation." For information about digging near power lines, contact your state or municipal offices for information and guidelines for digging safety.

The OSHA Training Institute and OSHA Education Centers offer two courses related to the **30-hour course**. Course 510, Occupational Safety and Health Standards for the Construction Industry, covers OSHA policies, procedures, and standards, as well as construction safety and health principles. Upon successful completion of the course, students receive an OSHA construction safety and health 30-hour course completion card.

Course 500, Trainer Course in Occupational Safety and Health Standards for the Construction Industry, is designed for private-sector personnel interested in teaching the 10- and 30-hour construction safety and health outreach program to their employees and other interested groups.

For more information about these and other OSHA safety and health courses, visit the agency website at www.osha.gov. Click on "Training."

While OSHA does not have any training requirements specifically related to **bioterrorism**, certain OSHA standards may be applicable for health-care workers. For example, the hazardous waste operations and emergency response and personal protective equipment standards may apply in instances of exposure to chemicals or the decontamination of incoming patients.

The OSHA website at www.osha.gov provides links to these standards and other guidance regarding bioterrorism, specifically anthrax and emergency evacuations.

You Have a Right to a Safe and Healthful Workplace.
IT'S THE LAW!

- You have the right to notify your employer or OSHA about workplace hazards. You may ask OSHA to keep your name confidential.
- You have the right to request an OSHA inspection if you believe that there are unsafe and unhealthful conditions in your workplace. You or your representative may participate in the inspection.
- You can file a complaint with OSHA within 30 days of discrimination by your employer for making safety and health complaints or for exercising your rights under the OSHA Act.
- You have a right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violation.
- Your employer must correct workplace hazards by the date indicated on the citation and must certify that these hazards have been reduced or eliminated.
- You have the right to copies of your medical records or records of your exposure to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.



The Occupational Safety and Health Act of 1970 (OSHA Act), PL 91-596, ensures safe and healthful working conditions for working men and women throughout the Nation. The Occupational Safety and Health Administration, in the U.S. Department of Labor, has the primary responsibility for administering the OSHA Act. The rights listed here may vary depending on the particular circumstances. To file a complaint, report an emergency, or seek OSHA advice, assistance, or products, visit our website at www.osha.gov or call 1-800-321-OSHA or your nearest OSHA office:

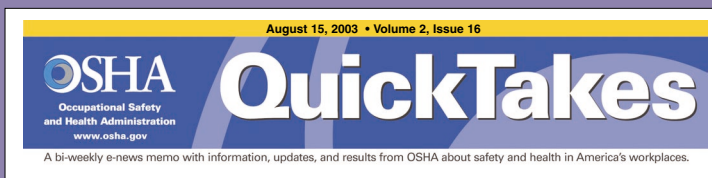
Atlanta (404) 532-2300	Boston (617) 365-8900	Chicago (312) 352-2320	Dallas (214) 763-4722
Denver (303) 844-3600	Kansas City (816) 426-5881	New York (212) 332-2378	Philadelphia (215) 861-4900
San Francisco (415) 975-4278	Seattle (206) 363-5900	Tampa/St. Petersburg (771) 1-877-288-6627	

If you work in a state operating under an OSHA-approved plan, your employer must post the required state equivalent of this poster.

1-800-321-OSHA
OSHA Occupational Safety and Health Administration
www.osha.gov U.S. Department of Labor OSHA 3145

Safety and Health in America's workplaces

e-news memo from OSHA



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The critical role of the 9/11 terrorist perimeter of the contractors, labor unions inside the green line

Electrical Contracting

The National Institute of Electrical Contractors with OSHA to fix electrical contracting terms. OSHA Administrator of NECA and IBEW

Cranes and Derricks

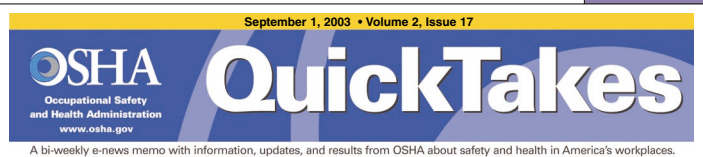
The second national conference in Washington, Sept. 3-5 in Washington industry that will

RIMS Alliance

Two organizations to further work with OSHA Administrator Alliance stands as mentioned OSHA ing eTool, and plan

Web-Based Training

Helping to protect "Baggage Handling" OSHA's November Transport Sector process for airline



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Trinational Occupational Safety and Health Administration

The leaders of to review and discuss the top occupational ing included discussion of Classification an struction industry.

Federal Safety and Health Administration

The 58th annual 9-12. Open to federal time) safety and health recordkeeping requ

Safety and Health Administration

OSHA and the ards associated with compilation is a new coke drums—large includes preventive and procedures.



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OSHA Administrator Addresses National Safety Congress

Assistant Secretary of Labor John Henshaw told a Chicago audience Sept. 9 that OSHA's strategy for the future is focused on reducing injuries, illnesses, and deaths on the job. Henshaw's keynote address at the National Safety Council's 91st Congress and Exposition touched on the agency's accomplishments over the past year, but emphasized that the nation's return on its investment in OSHA must be a continual reduction in workplace fatalities and injuries. Henshaw also used the occasion to sign an Alliance with the National Safety Council to advance workplace safety and health.

Henshaw Announces Expansion of Voluntary Protection Program

A work culture in America where employers and workers alike realize the importance of workplace safety and health is OSHA's vision, agency Administrator John Henshaw said during the 19th annual meeting of the Voluntary Protection Programs Participant's Association (VPPPA) conference in Washington, Sept. 8. And, one means to realize that vision is through the agency's Voluntary Protection Program (VPP). Henshaw revealed his plans for a dramatic expansion to VPP by announcing three new pilot programs—VPP Challenge, Corporate, and Construction—that could add up to 2,000-3,000 VPP sites in a few years.

OSHA Welcomes Newest Alliance Program Participants

The National Safety Congress in Chicago provided the forum for Assistant Secretary of Labor John Henshaw to welcome the newest participants in OSHA's Alliance program. The International Safety Equipment Association joined forces with the agency Sept. 9 to focus on safety and health issues in heavy construction workites, with a particular spotlight on personal protective equipment. Illinois-based Abbott Laboratories also signed on with the agency Sept. 10 to increase safety and health training resources for the health care and pharmaceutical industries.

Ergonomics Committee Schedules Third Meeting

Arlington, VA, will host the third meeting of the National Advisory Committee on Ergonomics (NACE), Sept. 24. The meeting continues discussion on OSHA's ergonomics program, and will include a presentation on the National Academy of Sciences ergonomics study. Working groups on research, guidelines, and outreach and assistance will make reports to the general committee. The meeting is open to the public and will be held at the Quality Hotel & Suites Courthouse Plaza in Arlington, beginning at 8:30 a.m.

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