

A Research, Development, and Training Arm of the Building and Construction Trades Department, AFL-CIO

## PRESIDENT'S COLUMN

### Training for Emergency Chain of Command

**T**he Firefighters are working with us at the Building and Construction Trades Department to develop training for disaster response. Together we're taking the lead in preparing construction workers to work with firefighters and police officers on a need we hope we'll never have to meet. We're the only ones who can do this for the construction industry.

The International Association of Fire Fighters (IAFF), whose members worked alongside our affiliates at the World Trade Center after 9/11, has been helping us develop a one-hour interactive training module on Incident Command Structure. An advance blueprint for emergency coordination can ensure smooth and safe operations, whether it's after a toxic chemical spill or a terrorist strike.

The module will be part of our DVD, *Disaster Response Training for Construction Workers*, which is being completed. The DVD is based on training we helped develop for some 1,500 construction workers and others who served at the World Trade Center recovery and cleanup. The Center to Protect Workers' Rights, our research, development, and training arm, has already produced three one-hour modules covering hazard recognition, personal protective equipment (PPE), and decontamination.

The incident command module, the fourth one, tells construction workers exactly how they fit into the chain of command for any type of emergency response. Many building trades workers are already partly prepared, having had extensive hazardous materials training and an OSHA 10-hour safety course.

We are grateful to the IAFF for providing input; the union held focus groups among World Trade Center veterans who detailed



President Sullivan

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## Screenings Expanding To Kentucky, Ohio Sites

**A** medical screening program for former Department of Energy workers is being expanded to Paducah, Kentucky, and Portsmouth, Ohio. The program provides free medical exams for former construction and maintenance workers in the federal government's nuclear programs. The goal is to identify illnesses—lung problems and some cancers—that might be the result of exposures to toxic substances on the job. In some cases, the program helps workers with filing of workers' compensation claims.

Since 1998, more than 30,000 workers have been notified about the free, confidential medical exams and about 4,500 have participated. The screenings have covered former workers at Hanford, Washington; Savannah River, South Carolina; and Oak Ridge, Tennessee. The Center to Protect Workers' Rights (CPWR), a research arm of the Building and Construction Trades Department, works with local building trades councils to arrange the screenings at Hanford and Savannah River; screenings at Oak Ridge are coordinated by the University of Cincinnati Medical School, working with the local building trades and CPWR.

The University of Cincinnati will take the lead on screenings at the new sites, gaseous diffusion plants. For the first year, set to begin in summer 2003, the university, the building trades, and CPWR will focus on deciding what is needed—finding out workers' concerns and what is known about past hazardous exposures.

The two diffusion plants were built between 1951 and 1956. The unions estimate more than 8,000 workers at Paducah and 9,000 at Portsmouth may be eligible for screenings. Former Paducah and Portsmouth Gaseous Diffusion Plant construction workers who want to know more about the program should call 513-558-1843 (*see screenings story below*).

## Screenings Find Some Nuclear Workers Exposed to Beryllium

**M**edical screenings of building trades workers who did construction or maintenance on Department of Energy (DOE) nuclear sites since World War II have found that about 2% have a mild form of beryllium-related disease. The DOE used beryllium for nuclear weapons and reactors, because it's lightweight, strong, and easy to mold, but exposure to it can cause serious illness.

With DOE funding under a program required by Congress, the Center to Protect Workers' Rights, local building trades councils, Duke University, the University of Cincinnati, and Zenith Administrators have conducted free medical exams since 1998 for former workers at Hanford, Washington;

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# BAC Local's Respirator Program Benefits Workers and Contractors

**T**uckpointers local 52 in Chicago has taken labor-management cooperation to a new level to protect the health of its members. A respirator program run by the union but funded by employers helps meet OSHA requirements for worker protections, thus reducing exposures to silica. The program helps control costs by avoiding unnecessary repeat fit-tests and medical evaluations.

And, because workers are consistently wearing full-face masks, it's also reducing eye injuries from flying

masonry grit. An eye injury reportedly can cost up to \$1,000 for medical care and time off.

"In the beginning, there was some resistance," said Bill Meyers, business representative for the local union. "But [now] there's a very positive reaction from workers. The employers are pleased they can get to work right away without taking a day off for fit testing and evaluation."

Many of the local union's 1,600 members work in masonry restoration, removing old mortar for repointing. They use electric saws, grinders (chop saws), and electric wrecking hammers to dry-cut, chip, or remove mortar or concrete. In the process, silica dust fills the air.

Silica can damage the lungs, causing shortness of breath. In time, silicosis can kill. Silica exposures increase the chances of getting tuberculosis and lung cancer.

In 2000, after OSHA inspectors found five worksites in the Chicago area not complying with the requirements for a silica-protection program, the Tuckpointing Contractors Association in northeastern Illinois and the union set up the Tuckpointing Industry Promotional Fund to provide a program with OSHA input.

OSHA holds employers responsible for a respiratory-protection program to protect against silica exposures and each contractor must have a

written site plan. Before masonry restoration begins, there must be a written safety-and-health program, medical evaluation of new workers, a breathing test (in some cases), and proper fitting of a full-face double-cartridge respirator.

But, with contractor encouragement, the local union got OSHA approval to coordinate the program. A union member serves as part-time program coordinator, with help from an outside contractor. The program cost, about \$180 per worker per year, is built into the negotiated wage.

During winter layoff, silica awareness, scaffold, and OSHA 10-hour training are given at the local union hall. In March each worker gets an annual respirator-fit test at the union hall. Every third year, a worker is given a medical evaluation of fitness to use a respirator. (New workers may get an evaluation and fit testing some evenings during the work season.)

Each worker is given a card to show employers when the last fit test and medical evaluation were done. The worker is paid for the two hours that program participation requires. Respirator parts and filters are provided free.

Any worker who is found grinding masonry without wearing a respirator is disciplined with, first, a warning, then a day off without pay, then termination.



## Fire Fighters Helped

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exactly what construction workers need to know. Scott Solomon, the union's director of hazmat training, has collaborated with us throughout development of the module. The final module will show excerpts of interviews with firefighters who worked at the New York City site.

The National Institute for Environmental Health Sciences, part of the National Institutes of Health, has provided financial support for development of the DVD. We will provide it to 3,500 OSHA-outreach trainers for BCTD affiliates around the U.S.

The complete DVD should be available in July. To learn more about the training, log onto [www.bctd.org](http://www.bctd.org) or call Don Ellenberger at CPWR, 301-578-8500.



**"Live" in Springfield.** Palmer Hickman leads the first class on working "live" safely for 13 electrical supervisors, project managers, and foremen in Springfield, Illinois, May 29-30. Participants were from

Egizii Electric, VPP Power Maintenance and Constructors, IBEW local 193, and CPWR. The 8-hour course, which covers safe work practices and lockout/tagout was developed by the IBEW and NECA National Joint Apprenticeship & Training Committee, working with CPWR. The course, "Safety Requirements and Procedures for Working on Energized Equipment," is being taught in central Florida in summer 2003. Electrocutions are the third-ranking cause of death in construction, causing 11% of deaths in 1999.

## Scientists Check Paver Fumes

**N**ext time you go past an asphalt paving job, if you see someone walking around taking notes while holding a small piece of equipment or drilling holes in the pipe that extends up from the asphalt paver, you could be looking at a CPWR research project.

Scientists from the Heritage Research Group, in Indiana, are visiting paving sites around the United States during the summer of 2003 to see if new equipment designed to protect workers from fumes is effective.

Local-exhaust ventilation units were developed in the late 1990s by the National Asphalt Paving Association (contractors), the Asphalt Institute (paver manufacturers), the Laborers and



Members of a milling crew from Laborers local 22 and Operators local 4 work in Cambridge, Mass., in 2000. (Courtesy Harvard School of Public Health)

Operating Engineers, and the National Institute for Occupational Safety and Health (NIOSH). NIOSH provided guidelines for development and testing of paving equipment designs.

Asphalt is known to irritate the eyes and lungs and may cause more serious problems. NIOSH has set a recommended exposure limit of  $5 \text{ mg/m}^3$ , for 15 minutes for fume particles.

When there is no rain or wind, the researchers will take measurements at 12 sites that are using new equipment.

That is, 2 sites using equipment produced by each of 6 companies, for 2 days each.

NIOSH, which is part of the CDC, will analyze the results. A report is expected by December 2003.

## CPWR Physician Testifies against Proposed Asbestos Payments Plan

**S**aying a proposed national trust fund would deny fair and timely compensation to workers exposed to asbestos, Dr. Laura Welch, medical director for the Center to Protect Workers' Rights, testified before a U.S. Senate committee June 4 in Washington, D.C. As drafted, the Fairness in Asbestos Injury Resolution Act, or FAIR Act of 2003, would lower compensation and exclude many workers exposed to the mineral that was widely used as insulation.

Asbestos-related diseases "are real and are affecting thousands of Americans every year," said Welch, a former faculty member at George Washington and Yale University medical schools. Welch, who has screened hundreds of construction workers for asbestos symptoms, called on the senators to use a system based on "accepted medical criteria." A proposal is needed, she said, that increases compensation as disability increases.

Sen. Orrin Hatch (R-Utah) has proposed FAIR, a \$108 billion fund, partly to stop the dozens of corporate bankruptcies that have resulted from asbestos claims and tied up the courts. The AFL-CIO says that amount wouldn't

be enough to compensate victims likely to be diagnosed in the next 30 years.

Although asbestos is no longer used in new construction in the U.S., workers continue to die from past exposures. Workers still risk asbestosis and cancers from ongoing renovation and demolition of older structures.

Compared with the existing Manville Trust Fund, which FAIR would replace, it would be much harder to have a claim approved. For instance, Welch testified, doctors would have to independently verify that their patients had been exposed to asbestos; doing so would be almost impossible for exposures that took place 20 or more years ago.

Workers who do get compensation would receive tens of thousands of dollars less per case under the new system. So, the burden of paying for asbestos diseases would shift partly to private insurers, including union health funds.

The AFL-CIO is opposed to this bill. For more information about the proposed law and what you can do, call the Safety and Health Department at 202-637-5366.

# Inspect, Follow Up to Reduce Risks

The use of regular safety inspections with thorough follow-up appears to substantially reduce workplace hazards, CPWR has found. The Center to Protect Workers' Rights has been studying the use of this management tool on a 12-story office building under construction in Washington, D.C.

From November 2000 through February 2003, the building owner had a contractor, Safety Environmental Engineering Inc., conduct monthly, then weekly, safety inspections and produce written reports detailing safety problems.

When hazards were found, subcontractor foremen were required to sign a

form telling when the hazards were fixed; the site superintendent verified the reports. CPWR staff analyzed the results of 65 inspections listing 1,782 hazards.

Fall hazards made up about 41% of the violations, followed by these types of hazards: electrical (17%), personal protective equipment (11%), house-keeping (9%), fire (8%), and other (16%). Other hazards included impalement from rebar, rigging, overhead, access/exit, and lack of lighting. (One "overhead" hazard was a scaffold without a toeboard, so objects could have fallen on workers below.)

No published reports could be found about this use of regular safety inspec-

tions. But the inspections' effectiveness was suggested by the short time taken to fix the hazards. On average, one-fourth of the hazards were corrected the day of the inspection. Half were corrected in one day, two-thirds in two days, and four-fifths in 3 days.

Managers need to pay attention to follow-up, however. On this worksite, 6% of the problems were not corrected.

When fixes were delayed, one reason reportedly was difficulty locating a subcontractor to make the change.

About one-fourth (27%) of the problems found were repeats, suggesting a need for training or special attention in toolbox talks.

# Installation of Modular Homes Needs Safety Planning and Training

Installers of modular homes face hazards different from those in other residential construction and may need special protections, a study for CPWR has found. Researchers at West Virginia University's Safety and Health Extension watched crews from four companies each install a modular home; the researchers videotaped the work and interviewed workers and their supervisors about workplace safety.

Modular homes are built in a factory and moved to the site, but, unlike mobile homes, are installed on a foundation. The researchers, Paul Becker, Mark Fullen, and Brandon Takacs, noted that the modular home industry is growing, partly because of new technologies, such as a tilt-up roof. To enable the house to be moved on highways, the roof is raised after the house arrives at its site. The result is a house that looks as if it was built from scratch.

The installers had tasks not normally found in other residential work.

These include flagging traffic while positioning sections of a home for hoisting, working under a heavy load that is being hoisted into place, and riding a tilt-up roof into place. Most of the unique hazards involve "struck by," "caught between," and falls. Workers

some OSHA standards for residential construction do not seem to cover the unique requirements of modular home work.

In addition to better government oversight, the researchers' recommendations include installation of anchor

points or fall protection systems for work on roofs, foundation walls, and attics, a lock-step system to prevent a tilt-up roof from collapsing while being raised, and safety training.

The researchers sketched a ladder design for work when ladders cannot extend above the top of a foundation as a module is being lowered into place; OSHA requires added precautions when a

ladder does not extend above the top contact point. The sketch is part of the report, *Safety Hazards to Workers in Modular Home Construction*.

The report and an accompanying video will be posted at [www.elcosh.org](http://www.elcosh.org) Or contact Fullen at 1-800-626-4748.



Raising the roof

usually did not have fall protection and had not been given safety training.

Becker, Fullen, and Takacs found that federal statistics do not separate out modular home installation, so it's impossible to document the industry's size or the numbers of injuries or deaths nationwide. At the same time,

## Ironworkers Help Train OSHA Staff On New Fall Protection Standard

**I**ronworkers have been training compliance officers nationwide in the OSHA subpart R steel erection standard that took effect in March 2002. Representatives of the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers and other organizations are providing a 3-day course to state and federal compliance officers and consultants.

The union effort is paying off. "With ironworkers as instructors, OSHA compliance officers have a better understanding of what we do and the problems we have to solve when we're out there," said Frank Migliaccio, executive director, safety and health, for the union.

For instance, "the beams in class are 3 feet off ground. One problem we showed is when [workers] are putting nuts and bolts in holes with heavy gloves on, there's a falling-object problem," said Migliaccio. "They really appreciate that."

The OSHA officers "say it's the best training they've ever seen," he added.

The course was first taught in May 2002 in northern New Jersey and has since been given in Boston, Denver, Chicago, Oakland, Atlanta, St. Louis, Indianapolis, and Detroit. The course has been taught, as well, in Baltimore and in Arizona, where there are OSHA state plans. There are usually about 30 people in a class.

Each class is taught at a local union by Jimmy Creegan, an OSHA 500 instructor for the ironworkers' Northern New Jersey District Council. Creegan is assisted by four others: an instructor from the OSHA Training Institute, a representative of the National Erectors Association (Wayne Rice), and two construction contractors, one of whom is usually William C. Ligetti, executive director of the Ironworker Employers Association of Western Pennsylvania.

The course is a mix of videos, Power Point presentations, group discussions, and hands-on activities. A local union lends a crane for the class to demonstrate how steel is installed. The teaching includes safety tips. The students see, for instance, how a line is used to release a column that has been set, so an ironworker no longer needs to climb to the top of the column to release it from the crane.

Each organization underwrites its own instructors and the students pay no fee.

Of the students, Migliaccio said, "We call them ironworkers for a day. We hope this partnership will continue."

For more information, contact Migliaccio at 202-383-4800 or [fmigliaccio@iwintl.org](mailto:fmigliaccio@iwintl.org)

## Better Protections Needed for Beryllium

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Savannah River, South Carolina; and Oak Ridge, Tennessee. The goal has been to identify health problems that might have resulted from toxic substances on the job.

After exposures even to very small amounts of beryllium, some workers develop an allergy to the metal. The allergy can lead to chronic beryllium disease, which can involve a cough, shortness of breath, or other symptoms and cannot be cured. Some cases require treatment with steroids and even an oxygen tank. Exposure to beryllium can increase the risk of getting lung cancer.

Laura Welch, MD, of CPWR, studied results for 3,842 workers screened as of September 2002. Of those whose blood tests confirmed beryllium allergy, 33 were examined further, and 5 were diagnosed

with chronic beryllium disease. The workers were referred to doctors who may continue to monitor their cases.

No one knows exactly where the beryllium exposures occurred, but the metal was found at many locations. At Oak Ridge, for instance, in 24 buildings, beryllium was machined, ground, milled, or formed into special shapes; in nuclear weapons that were assembled or disassembled; or on work clothes that were changed (in a locker room) or laundered.

Until the screenings, DOE did not know that the construction workers were exposed to beryllium. As a result of the findings, CPWR says more needs to be done to protect workers from beryllium exposures before work is done where beryllium is or was used—and DOE is taking such steps.

The findings show a need for a nationwide medical screening program for workers at all DOE sites.

To learn about beryllium, go to [www.elcosh.org](http://www.elcosh.org) or, for more about the screenings, call 1-800-866-9663.



## Conference Set for Sept.: Design for Worker Safety

The University of Oregon Labor Education and Research Center will focus on design at a conference it is hosting Sept. 15-16, 2003 in Portland: Designing for Safety and Health in Construction. The goal is to encourage collaboration among architects, engineers, contractors, and workers to build worker safety and health into construction designs before work begins on site. Sessions will focus on processes and tools for implementing safety in design and ways to measure the effectiveness of safety-in-design activities. Architects, engineers, project owners, contractors, construction management and safety researchers, union representatives, and safety professionals are welcome. Co-sponsors are the Center to Protect Workers' Rights and the National Institute for Occupational Safety and Health. For more information, contact Steven Hecker, [shecker@oregon.uoregon.edu](mailto:shecker@oregon.uoregon.edu), 541-346-2788, or click on <http://darkwing.uoregon.edu/~lercl/>.

## Great Gift Idea

A handsome hardhat sticker, free of charge, reminds you and your co-workers where to get easy-to-use information on safety and health in construction. In rolls of 250. Contact CPWR Publications at 301-578-8500.



# Silica Controls: Before and After

**B**arry Cardwell, Bricklayers Local Union 1 (Pennsylvania-Delaware) uses an angle grinder to repair mortar joints. With local-exhaust ventilation—in this case, the Dust Director, manufactured in Pittsburgh, Pa.—the cloud of dust is mostly gone and silica exposure is cut way down. The Bricklayers and the Center to Protect Workers' Rights are looking at ways to control worker exposures to silica, which can kill. In a big step forward for worker health, many IUBAC locals now include engineering controls in collective bargaining agreements. Recommended language – in English and Spanish—is at [www.elcosh.org](http://www.elcosh.org) (click on silica or bricklayer).



Web Site: [www.cpwr.com](http://www.cpwr.com)

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