

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

PRESIDENT'S COLUMN

Best Value Is Good Value

We've long believed that improved safety and health in construction begins when an agency or property owner hires only contractors that have good safety records. A trend in the industry, known as best value contracting, is moving in that direction.

Best value, also known as negotiated or "request for proposal" contracting, is increasingly being used by government agencies. Hiring is no longer based solely on the lowest bid. Instead, project owners consider cost *and* qualifications. Qualifications may include such factors as past performance, expertise, safety, and training.

In the realm of safety, a request for contractor bids might take into account these issues: any state or federal OSHA citations, the company's experience modification rating (for worker's compensation), any serious (recordable) injuries or work-related death in the preceding 3 to 5 years, and any safety

program the contractor has in place, which could include written site-specific safety planning, safety training, regular tailgate meetings, and the assigning of a safety manager and/or trained competent person to each worksite full time.

Best-value contracting levels the playing field for conscientious contractors and union workers, many of whom have already completed an OSHA 10-hour course, such as our Smart Mark program, and other safety training. Improved safety may require investments of time and money up front, but we believe it pays in higher productivity.

Some enlightened owners and general contractors in the private sector, of course, have long understood the value of hiring companies that value safety. As for the public

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President Sullivan

Ironworker, Installer Death Rates Down

The bad news is, the work-related death rate from injuries for all construction held steady in the decade 1992-2001. The good news is, death rates for the two highest-risk trades are much lower. Rates are down also for electricians and painters.

Xiuwen Dong and James Platner of the Center to Protect Workers' Rights compared federal government data over 10 years to spot the trends.

For ironworkers, in 2001, the death rate from injuries was 76 per 100,000 full-time equivalents, compared with 145 in 1992, a drop of 48%. For power installers, the rate was 49, compared with 151 ten years earlier, a drop of 68%.

Electricians' death rate from injuries dropped from 16 to 12; painters saw a decline from 11 to 9. For other construction occupations, the death rates remained unchanged—except welders, who saw nearly a doubling, from 22 to 40.

To compare construction to other industries, death and injury rates are measured in full-time equivalents. That is because job completions and weather mean that not all construction workers work full time in the industry. A full-time equivalent is 2,000 hours worked per year.

Frank Migliaccio, director of safety for the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers, said the improvement in his trade's statistics can be credited to intensive labor-management efforts to improve safety training and onsite safety consciousness, particularly in fall protection. "The effort continues," he added. "I just hope it keeps going." *(continued on page 4)*

CPWR Helps Government Speed Claims Processing

The Center to Protect Workers' Rights, CPWR, is helping the U.S. Department of Labor verify employment histories for building trades workers seeking benefits related to past work at nuclear weapons plants. The goal is to speed up payment of claims for illnesses that might be tied to work done as long ago as World War II.

"We want to smooth the process, so our members will receive the medical and financial help they deserve," said Edward C. Sullivan, president of the Building and Construction Trades Department (BCTD), AFL-CIO. "Building trades workers served our country; it's time to serve them."

CPWR is the BCTD's research and training arm for safety and health.

Under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA), which took effect July 31, 2001, former workers who have certain illnesses are eligible for medical care, and they or their survivors are eligible for \$150,000. The illnesses are chronic beryllium disease, radiation-related cancers, and chronic silicosis.

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Building Trades Partnerships Honored



Designers. Michelle Webb of SAIF Corporation makes a point as Mike Cosman (at left) of the Health & Safety Executive (Great Britain) and Tim Moxley of IBEW Local 48 listen during a session at the Designing for Safety and Health in Construction symposium.

The meeting, cosponsored by the University of Oregon, Oregon State University, Industrial Design and Construction, CPWR, and NIOSH, drew 85 architects, engineers, contractors, workers, insurance industry representatives, and others to Portland, Oregon, in September 2003.

For follow-up information:
<http://darkwing.uoregon.edu/~lerc/>

Contracting for Safety

(continued from page 1)

sector, by 2001, nearly 70% of federal construction was based on best value, a 5-fold increase since 1997.

In Philadelphia and elsewhere, for instance, the Navy is now asking potential contractors about injury rates and any OSHA citations. And laws supporting the best-value contracting approach have been adopted for some types of public works in at least 10 states: Alaska, Colorado, Delaware, Georgia, Kentucky, New Jersey, New Mexico, Pennsylvania, Texas, and Utah.

For more information about what you can do to help, go to www.bctd.org.

We hope it's an idea that will continue to spread.

Three Building Trades safety and health partnerships were among 10 nominees for the 2003 NORA Partnering Award conferred by NIOSH, the National Institute for Occupational Safety and Health. The award, presented every 2 years, honors research partnerships that develop new ways to protect workers from work-related injury, illness, or death.

Nominated were partnerships involving Build it Smart, the Columbia Pacific Building Trades Council, and the Laborers' Union.

Build it Smart, the Building Trades Labor-Management Organization of Washington State, has been developing a hearing conservation program for construction workers who claim 25% of the hearing loss claims in the state, even though construction workers are about 6% of the labor force. The program includes efforts to reduce workplace noise, training, regular hearing testing, and centralized recordkeeping. Partners include building trades unions, contractors, insurers, the University of Washington, and the Center to Protect Workers' Rights (CPWR).

In the second project, researchers at Oregon State University and the University of Oregon worked with the owner, contractor, and designer of a new factory to include design features that, during construction, would protect worker safety and health. Unions of the Columbia Pacific Building Trades Council participated. The project depended on an exchange of ideas throughout planning and construction. Features included more built-in anchorage points for fall protection, added space in some areas where workers had to route wiring and other utilities, and some off-site fabrication of steel trusses to reduce work at heights.

The New Jersey Laborers' project is designed to reduce worker exposures to silica during highway construction. The effort is focusing on engineering controls, such as wet

methods to reduce dusts, and respirators, when other controls don't do enough. Silica, which is in concrete, asphalt, and other masonry products, can cause silicosis and increase the chances of getting lung cancer and tuberculosis. Partners include state agencies, contractor associations, OSHA, and NIOSH.

All three projects receive funding from NIOSH. The 2003 award was given in June to a program reducing employee back injuries in nursing homes. For more detail, go to www.elcosh.org or www2a.cdc.gov/nora/symp03award.html.

116 Projects In One Place

If you want to know what's being done to reduce musculoskeletal problems for sheet metal workers or improve tractor cab designs, NIOSH has just the book for you. NIOSH, the National Institute for Occupational Safety and Health, part of the CDC, describes 116 construction-related research projects—49 of them being done in-house—in *A Compendium of NIOSH Construction Research 2002*.

The book is divided into 13 topic areas. Each one-page summary identifies the main researcher, the project purpose, and a sketch of the work being done. The topic areas range from musculoskeletal disorders to hearing loss prevention to engineering controls to training.

Find the compendium at www.elcosh.org or at www.cdc.gov/niosh, where it is NIOSH publication 2003-103.

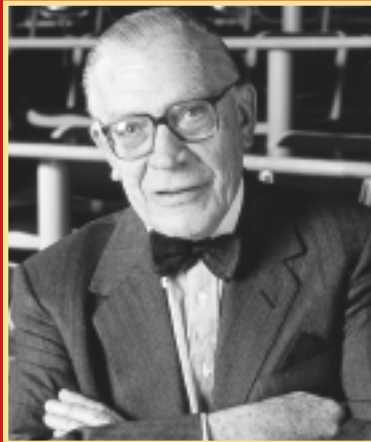
Professor John Dunlop Dies; A Friend to CPWR, Workers

John T. Dunlop of Harvard University, an internationally recognized expert on industrial relations who served as President Ford's first secretary of labor, died October 2 in Boston, Mass., at age 89. Professor Dunlop, as he preferred to be known, began teaching at Harvard in 1938. He focused on the textile and construction industries, while serving every president from Franklin D. Roosevelt through Bill Clinton, often as a consensus builder.

Said Edward C. Sullivan, president of the Building and Construction Trades Department: "Secretary Dunlop's passing is a great loss to our nation and to the working families he served with such dedication for so long. He understood the construction industry better than most of us who grew up in it. We owe him a debt of gratitude and will miss him deeply, but our nation will miss him even more."

Professor Dunlop resigned as labor secretary when President Ford vetoed a common-site picketing bill that would have made it easier for unions to picket construction sites, something that had been promised in exchange for moderated union wage demands.

Among his other activities, Professor Dunlop served



John T. Dunlop

for years as jurisdictional umpire for the Building and Construction Trades Department, chaired the Construction Industry Stabilization Committee under Presidents Nixon and Ford, helped found the Harvard Joint Center for Housing Studies, and arbitrated major Building Trades project labor agreements.

His interest in construction led him to chair the new CPWR Economics Research Network, a group of labor and health economists from universities and government. He visited CPWR for the twice-yearly meetings, critiquing the ideas being discussed and pressing participants to make their research apply to

day-to-day construction.

He was dedicated and tireless. Four days before he entered the hospital for the last time, he insisted on attending a meeting on residential construction, because he wanted to hear about the research to be discussed.

His support, intellect, energy, and good humor will be missed.

Contributions in his honor may be made to the John T. Dunlop Memorial Fund, Labor and Worklife Program, Harvard Law School, 1350 Massachusetts Ave., Suite 731, Cambridge, MA 02138.

CPWR Offers Student Fellowships

The Center to Protect Workers' Rights is offering one-year research fellowships to graduate students at U.S. universities of up to \$2,500 each. The funding, provided through a cooperative agreement between CPWR and the National Institute for Occupational Safety and Health, is to support research relevant to improving safety and health in construction.

Such research might include a detailed case study refining knowledge of the industry's structure or might cover contractual and bidding practices, worker training and education, exposure assessments of construction tasks, high-risk work practices or populations, or incentives or barriers to adopting practices or equipment that could reduce occupational injuries or illnesses.

The fellowships are open to students in disciplines ranging from engineering to law to public policy to sociology.

An application requires a letter of proposal along with a letter of support from a faculty sponsor who agrees to oversee and sign off on the research. A final report is required within 12 months of the award date.

Applications will be judged, among other things, on innovativeness, feasibility, and importance to the industry. Proposals are due for review by October 1 and April 1 of each year. Decisions will be provided by December 1 and June 1. Funding has begun and will support up to 8 awards per year.

For more information, see detailed announcement at www.cpwr.com or e-mail cpwr@cpwr.com.

Foremen, Supervisors Tell All

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problems, foremen and supervisors say.

And, as pressures build to maintain spotless records, safety representatives sometimes feel pressure both to take disciplinary actions for minor infractions and to avoid reporting more-serious injuries. These pressures,

of course, can divert attention from problems that need immediate attention.

CPWR will continue the interviews around the United States in 2004. Insights are expected to help with future policy, training, and other approaches to workplace safety and health.

Death Rates Show Safety Push Still Needed

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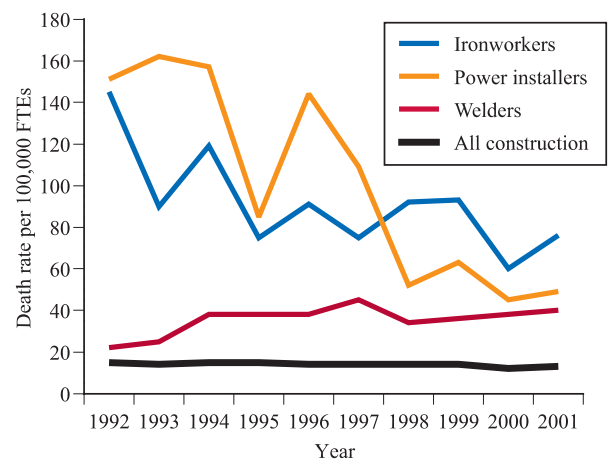
The numbers continue to be poor, however, for construction compared with other industries. As of 2001, construction had just over 6% of the workforce, but 21% of work-related deaths from injuries.

For all construction in 2001, the death rate from injuries was 13 per 100,000 full-time equivalents. For other industries combined in 2001, the rate stood at 4.

No one knows the number or rate of fatal work-related illnesses in construction, because of the long time between exposures to hazards and deaths from such illnesses as cancers and silicosis.

Data reported in *The Construction Chart Book, Third Edition, 2002* and elsewhere show smaller construction companies have the highest death rates. And more than 90% of construction companies have fewer than 20 employees. So, it is important to focus on small contractors.

Rates of work-related deaths from injuries, 1992-2001



Source: CPWR, using BLS and Census data.

Former Nuclear Workers Can Strike Claims

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worker or worker's survivor for health problems, however, the Department of Labor must verify employment at one of the nuclear weapons plants. Delays in getting proof of employment have stalled payments. The Department of Labor has processed more than 47,800 claims in just over two years, but only 9,143 were paid as of October 23, 2003. A big problem is, records kept by the Department of Energy (DOE), which oversaw the weapons plants, are incomplete—when there are records. DOE kept few records on subcontractors, who employed most of the workers.

If DOE records don't prove a worker's employment at a weapons plant, the Department of Labor can use Social Security or union records or statements from coworkers or other contacts. For help with union records, CPWR has contracted with the Department of Labor, along with the University of Cincinnati Medical School, Zenith Administrators (of Seattle, Washington), and affiliated building trades unions.

CPWR and its partners are searching local-union dispatch, health and welfare, and pension records. Some local unions have records from the mid-1950s. The program runs through June 2004.

In a separate program, CPWR, the University of Cincinnati Medical Center, Duke University Medical Center, Zenith, and local building trades councils since 1998 have conducted free screenings of more than 4,500 former construction and maintenance workers at some DOE nuclear facilities. The goal has been to find possible health hazards related to past work. The screenings are continuing for workers at Savannah River, Oak Ridge, and Hanford, and have recently been expanded to Paducah, Kentucky, and Portsmouth, Ohio. Information from the screenings can help a worker decide whether to file a claim with the Department of Labor.

Time is limited for the screenings and the compensation program. To learn more about the screenings, call 1-800-866-9663. To learn about the compensation program, call 1-866-888-3322.

Motorized Screeds Can Cut Pain

Motorized screeds can help reduce sprains and strains to construction workers, Build it Smart has found. As part of a study for the Center to Protect Workers' Rights, Build it Smart, the Building Trades Labor-Management Organization of Washington State, tested three motorized screeds. Screeding is smoothing out and leveling concrete after it is poured. Masons and other workers usually must bend over and apply repeated force to do the work. It is tiring and can lead to injured hands, arms, shoulders, and backs.

Three screeds were evaluated. One is powered by two motors that vibrate the blade and requires two operators. The second, a roller screed, is a seamless pipe that spins



in the opposite direction it is pulled; it is operated by two workers. The third screed tried is self-propelled and laser-guided on two wheels.

The designs all allowed the worker to spend much more time upright, instead of bent over. All three reduced hand-arm repetitive

motion, as well. The first, the least expensive at about \$4,000, is described as much less physically demanding; but it still requires carrying and some lifting. The second, priced at about \$8,000, can be used on inclines; it requires some lifting and use of pulling force, but is much faster than manual work. The third, costing about \$36,000, is fast, can be operated by one worker, and requires less lifting and push/pull force.

The study was funded by grants from CPWR and the National Institute for Occupational Safety and Health, NIOSH. For details, go to www.elcosh.org and search screed or contact Build it Smart at www.builditsmart.org or 360-596-9200.

CPWR Reports on Asthma, Electricity

Asthma may be going undetected among heavy and highway construction workers, a CPWR small study has found. The lung disease, which can kill, may be being inadequately treated, as well, according to the report, *Asthma in Heavy and Highway Construction Workers Exposed to Silica*.

Dr. Christine Oliver and Heidi Miracle-McMahill looked at responses to a questionnaire by more than 300 workers on Boston's Big Dig. The findings showed more than 25% of the workers described symptoms that sounded like asthma but fewer than 7% had had asthma diagnosed by a doctor, compared with just under an estimated 12% of the state's general population. The highest rates of reports of asthma

symptoms were among carpenters, tunnel workers, and operating engineers.

A second new CPWR publication for journeyman electrical workers tells how to protect against shocks and burns. The Technical Information Paper, or TIP, *Protection from Electric Shock and Arc Flash*, details such topics as de-energizing and lockout/tagout, a live-work permit system, approach boundaries to live parts, and protective clothing and equipment.

These publications are on CPWR's website, www.cpwr.com and the Electronic Library of Construction Occupational Safety and Health, www.elcosh.org. Or call CPWR Publications at 301-578-8500 (fax 301-578-8572).

Disaster Response Training Begins

CPWR staff showed 50 Building Trades master trainers Sept. 11-12 how to train construction workers in Disaster Response.

Those trainers, in turn, are expected to pass along the information to more than 2,000 Building Trades trainers around the U.S. in the next year. A DVD developed by CPWR with input from the Fire Fighters union will be used to orient construction workers to safety and health procedures in emergencies ranging from earthquakes to terrorist attacks like that at the World Trade Center on 9/11/01. CPWR is working with international unions and building trades councils to provide the program to trainers. To learn more, contact Chris Trahan, CPWR, at 301-578-8500 or ctrahan@cpwr.com.





Safety in Groups

Sometimes on construction sites, as in other workplaces, communication is poor. But when construction safety professionals and field supervisors establish respect and communicate well, worksite safety can improve. At those times, foremen and supervisors rely on their safety people for technical support and help with planning and problem-solving. CPWR has been learning about this communication and other aspects of safety management from groups of foremen and supervisors.

CPWR researchers since July 2003 have met with labor and management groups at six sites for 1½ hours each time to learn about safety-and-health logistics and concerns. The 65 participants thus far have been on nuclear power, commercial, and residential projects in three states—Minnesota, Tennessee, and Washington.

The discussions are highlighting barriers to safety and health that could be reduced. Among other things, safety-and-health rules are applied inconsistently across trades. Another problem is that workers are not always well briefed on hazards that extend across trades—for instance, bystander exposures to welding fumes for a carpenter standing near welding work.

Another hindrance is the supplying of equipment day to day, instead of for the duration of a job. A worker can be better protected if he/she is familiar with and maintaining one set of equipment over time.

For safety staff, project schedulers, and workers, communication problems emerge most often about changes in design and scheduling. Sometimes, communication efforts are thwarted by a hostile atmosphere that limits safety reps' ability to help prevent

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Seeking Contractors

Construction safety managers: Would you like computer software for safety planning and management? Do we have an offer for you.

The construction schedule is key to project decision making. But most safety managers have not been able to use a project schedule for safety—until now. New software, SalusLink, helps safety managers plan and manage safety around the construction schedule.



SalusLink works with Primavera P3 and SureTrak schedules and allows managers to link safety information—such as, job safety analyses, MSDSs, checklists, and tailgate training guides—to scheduled activities.

CPWR has developed the software, along with Jimmie Hinze, of the University of Florida, and Conceptual Arts, Inc. The Bechtel Group and Bovis Lend Lease have agreed to field-test SalusLink, but we want you too—no matter what your company size—if you want to improve safety. To learn more, contact Jeff Nelson, 352-372-9712, jeff@c-arts.com.

Web Site: www.cpwrr.com

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