Insurance Times: WANTED: NEW IDEAS: Against the backdrop of rising insurance prices, a panel of construction experts ponders new ways to address the construction industry's lingering safety problems
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Not long ago, Thomas A. Broderick read a summary of a meeting of contractors held in New York City in 1950 on the subject of safety. As president of the Chicago-based Construction Safety Council and a member of Engineering News-Record's (ENR) safety panel, Broderick found the history lesson disturbing.

"The issues that we are discussing today and trying to find solutions for, such as authority to stop a job and why workers won't wear personal protective equipment, are frighteningly similar to the issues being waded through back then," he said.

The sense that construction's lingering safety problems have been around for too long and that new solutions are needed permeated the safety panel's discussion. To break through and dramatically cut injuries and deaths, a number of new ideas were proposed:

• Make a legal standard of the popular 10-hour minimum safety training favored by the Occupational Safety and Health Administration and expand it to include longer sections for supervisors and managers on communication and creating a safety culture.

• Augment traditional methods of training with simplified, nonverbal symbols and methods of communication.

• Direct the safety "message" to the fast-growing population of Hispanic workers and construction owners and managers.

• Require and motivate architects and engineers to become involved in safety considerations so that safety can be "designed in" to a project.

Rising Insurance Prices

The proposals were made against a backdrop of rapidly rising insurance prices that have added new financial motivation to the existing humanitarian reasons to operate safely. Loss-rates had been deteriorating in the last year as younger project managers ran into trouble on their projects. Then the stock market dropped and Sept. 11th hit, driving up insurance costs even for companies with good safety records.

"We were seeing before Sept. 11th good customers that had good loss ratios getting price increases of up to 30 and 40%," said Keith Johnson, risk engineering manager for Zurich Services Corp., Minnetonka, Minn. :For smaller companies the increase was 50 to 80%." But normalcy still prevailed in reinsurance markets and major insurers such as Zurich and St. Paul and American International Group could obtain reinsurance without negotiation at a flat rate in amounts of $100 million or $150 million.

After Sept. 11, the reinsurers "called up and said your prices are going up 30 to 40%, and by the way, you only have $30 million of coverage," said Johnson. "So the capacity drastically dropped overnight and prices went up." Now, to reinsure the risk for a customer with $100 million worth of coverage, carriers must shop around.

Contractors shouldn't just throw up their hands over the rising prices because safety records still matter a lot. When the market for insurance went hard last year, the insurer for EMCOR Group Inc., Norwalk, Conn., "was unable to hit us with a rate increase for one reason," said Joe Spirito, loss control director. The big specialty contractor's loss history included no "shock losses."

"In other words," said Spirito, "the deaths or major losses that incur several hundreds of thousands of dollars had not occurred." Safety and loss control are even more important now. "Every time you have an incident," he said, "whether it's from the health and safety side or the liability side, it's going to have a material effect on your renewal going forward."

Down the road, companies will pay much more for insurance if they don't have a top-notch health and safety program and accountability for results, he said.

"There are still a lot of large contractors that don't pay attention to what I call the housekeeping side of it," Spirito said.

This pessimistic note was echoed by others.

"Far be it from me to present the harbinger of doom position, and I won't," says Broderick. "But I think I get very discouraged sometimes at the slow progress we're making."

The heart of any safety program is training. But just what kind of training should be done is less clear. To Scott P. Schneider, occupational safety and health director of the Laborers' Health and Safety Fund of North America, the standard 10-hour safety training program that is approved by OSHA has become an industry standard. The 10-hour

program should become a legal standard with additional features that include training for supervisors, said Schneider.

Safety Training

Supervisor training shouldn't focus on safety basics but on “how important safety is on the jobsite, how they can communicate that message to the workers and how upper-level managers should create a culture of safety," added Schneider.

Superintendents at contractor Batson-Cook Co., West Point, Ga., receive 40 hours of safety training, said the company's safety director, David Adsit. The rest of the employees get 10 hours of training. The program for both includes topics such as fall protection, excavation safety, crisis management, first aid and CPR.

“I think if all construction workers had the 10-hour safety training, that would go a long way to reducing injuries," said Adsit.

Quantifying the level of training needed is very difficult for federal regulators, said H. Berrien Zettler, deputy director of OSHA's construction directorate.

“In construction, most of the industry is covered by a general training requirement" and OSHA encourages employers to provide the 10-hour training as a minimal step, said Zettler. But it doesn't say how often, how much or anything else about it.

Contractors complain to OSHA that they are dealing with transient people and that training is too expensive, especially for smaller employers. But OSHA keeps it as a priority.

“My gut feeling is that we issue a training citation for almost every egregious case, every significant case with a high penalty that we run into," said Zettler.

To enforce its safety citations in court, OSHA must be able to prove that a worker was not trained. “Most of the time what we are dealing with is the employer's word that they've given adequate training," said Zettler. “A toolbox talk might be all somebody has, but that might be all that the employer needs to be able to establish that he's trained his employees."

Measuring the amount of training may be a self-defeating exercise anyway, said Tara Jean Hart, president of the Compliance Alliance, a Houston-based safety consultant. The work force is random and transient and “yet, as Tom Broderick says, we're still trying to solve the same problems we had since the 1950s with the same solutions," said Hart.

Standardization of safety rules and practices would go a long way to solving the problem. “Just like we agree we don't want to go past 70 mph in a 55 mph zone, and that you don't want to pass four-way stop signs and run into people. You agree fundamentally on those rules," said Hart.

“If we had as lax a traffic safety system of expression as we have in construction safety, everyone would be on a constant learning curve the minute they passed every county line because the signs would look different, the stop lights would be different, and all the training in the world would not make the process easier because they'd be constantly crossing over into a random environment."

Hart's system has three main components: a sticker and color-based system for visually identifying the competence level of the workers on every job; showing who had been trained for particular tasks and environments; a simplified method for tracking and monitoring safety performance; and universal safety standards that are used at all of a company's jobsites. So far, these principals have succeeded where they have been applied, said Hart.

If there is one group of workers out there that standardization would benefit, it is the immigrant and Hispanic construction workers, said Felipe Devora, a safety director and project manager for Fretz Construction Co., Houston. Reaching Hispanic immigrants is one of the biggest challenges facing the industry.

“Given their median age is 24 to 26, let me tell you those are some construction working folks there. So I think it's incumbent on us not to set our goals too loftily as to start talking about visions so that we lose track of the immigrant workers coming into this country.

“How do we get through to them?" asked Devora. “We include them in the process, we engage them and we quit thinking of them as day laborers."

While successful safety programs are much more likely to take hold at big companies such as Bovis and Bechtel, an entirely different kind of challenge exists among smaller companies.

“At the Rodriguez Roofing and the Chavez Concrete Finishers, mom and pop operations that are just bootstrapping themselves up as immigrants, they may have a six-person operation," said Devora. “Those companies may bid a job so tightly that if they shut down or lose that day or two of production because of a safety consideration, that lost production is going to quite frankly put them out of business."

Design Involvement

Another kind of breakthrough would be possible if designers became involved in safety planning, agreed several panelists. The relationship between the owner, designer and contractor is critical to attacking the obstacles to safety,

said Broderick.

The current legal atmosphere doesn't encourage it, however. Said Broderick: “I think that right now, the legal system and the insurance system has caused architects to be uninterested up to the point of being afraid of getting involved in safety."

But transcending the legal obstacles sometimes can be as simple as tweaking an American Institute of Architects standard contract document. One attorney who represents architects told Broderick that only a few adjustments are needed to the basic contract agreement. Once made, the changes would allow the lawyer to recommend that his clients get involved in pre-job planning, constructibility reviews and the logistics of the means and methods. “I see this as a giant step," said Broderick.

Design also can help overcome some of the ergonomic hazards associated with a task. According to Schneider, one study showed that it was “crazy for a mason to bend down to his ankles to pick up a 4-lb brick. So someone invented a two-level scaffold to ease the task," said Schneider. A modern miracle? The scaffold patent was obtained in 1891, said Schneider. Again, safety history repeating itself.

All the panelists agreed that commitment from management made the biggest difference between a safe and unsafe company and between one that sought only to be OSHA compliant and one that strove for zero losses. The chief executive of New York City-based Bovis Lend Lease, Charles A. Bacon III, said his company is changing to a culture of safety and that the process began shortly after a very safety-minded prospective client awarded a project to a competitor. At that point Bovis Lend Lease was interested mainly in OSHA compliance, said Bacon. Now, he added, the company is making a cultural “step-change" so safety comes first.

The change is timely because “clients are demanding it," said Bacon. To other clients who aren't as committed to safety, Bacon said he and his company have become leaders in the cause. Bacon asks those companies if they really want to risk a potential fatality. “Take the step-change with us and go forward," he tells them.

Out in the field is where the real test occurs. Bacon said he has recently called a project executive to find out why he overruled a safety manager who wanted to stop work. Adsit said his safety managers have authority to stop work but planning to avoid hazards is better and saves money.

Devora said that he was struck by the number of masks rather than respirators that he saw being used at the World Trade Center site, and noted that the difficulties of using proper equipment is nothing like the cost of not using it.

“Wearing life-support equipment during advanced silicosis or asbestos is a whole heck of a lot more inconvenient," he says.

Hart said she worries that many times a lack of accountability leads to hazards and injuries. On one fatality she learned about, a city official gave a contractor digging a trench a right of way to work close to power lines. The permission saved money but cost the life of a worker who was electrocuted.

That's the kind of incident that drives Broderick crazy. Inadvertent power line electrocutions are among the most preventable types of accidents with well-known methods to prevent them, he said.

“It isn't rocket science," he concluded. “It's just basic management principles."