SAFETY MANAGEMENT

Does OSHA Need a New York PARADIGN

Despite dramatic changes in management styles, worker perceptions and organizational culture, OSHA strategies have remained essentially the same for nearly 30 years. Perhaps safety professionals need to begin thinking about OSHA in a different way.

By EARL H. BLAIR and E. SCOTT GELLER

he effectiveness of OSHA has been questioned by many within the safety field. For example, Petersen has called OSHA's efforts "misdirected" (77) and Pierce (117) calls the rulemaking process an "outdated regulatory system. . . . At best, it is

terribly ineffective." Obviously, many variables influence injury and fatality statistics, but the record across the U.S. has been mixed since the OSH Act took effect in 1971. The good news? The number of workplace fatalities per year has been cut by more than half. The bad news? Recordable injuries have remained essentially unchanged over the past 30 years, even though OSHA regulation and compliance have received substantial attention. Clearly, something is not working.

Perhaps safety professionals need to begin thinking about OSHA in a different way. Perhaps the current paradigm has impeded needed advancements. Despite dramatic changes in management styles, worker perceptions and organizational culture, OSHA strategies have remained essentially the same for nearly 30 years.

This viewpoint is not held only by those outside OSHA. At ASSE's 1999 Best Practices in Safety Management Symposium, Gregory Watchman, a former deputy assistant secretary of OSHA said: When Congress created the OSH Act in 1970, it focused the federal government's first broad-scale foray into worker safety and health primarily on the development and enforcement of protective standards. Congress anticipated that the standards-setting process it designed for OSHA would enable the newly created agency to target the most dangerous hazards, develop standards that would effectively reduce or eliminate those hazards, and issue them on a timely and frequent basis.

Unfortunately, none of its expectations have come to pass. Twenty-nine years later, despite blinding progress in information technology, the agency still lacks a comprehensive, reliable injury and illness data system. . . . While OSHA standards have saved lives and prevented injuries and illnesses, the agency has issued relatively few standards. . . . In addition, those standards OSHA has issued have been criticized as overly complex and only marginally related to worker safety and health. Finally, standards have usually taken between five and 15 years to develop. Many thousands of workers have been injured or made ill on the job while OSHA worked on standards to protect them (12).

Although OSHA has had some positive effects on workplace safety, important questions remain. Is current OSHA protocol as effective as it could be? Is the agency's framework and strategy optimal for improving safety performance?

Business Perspectives on OSHA

"The present system doesn't work. It's combative and gets in the way of progress."

"Industry is not the "bad guy" of worker safety and health as it has often been characterized."

"Labor uses OSHA to beat up on industry and management (just a phone call away)."

"OSHA doesn't [even] know its own regulations."

"Writing citations is merely a game for OSHA. There is a conflict of interest similar to the traffic cop who has to write so many tickets per week to justify his existence."

"OSHA is inefficient and wastes money. If OSHA were measured by industrial productivity and quality standards, OSHA would be out of business."

The Japanese word "kaizen" means continuous improvement (Blair 26). Imai defines "kaizen" as a gradual, unending improvement. Both terms are now common in management language. Continuous improvement is a worthy mission and improvement is certainly needed in occupational safety and health, be it by quantum leap or, more realistically, by slowly moving forward and consistently making minor advancements.

THE GOOD NEWS Education & Consulting

Through its education and consulting divisions, OSHA has taught much-needed technical knowledge and helped many companies analyze compliance issues and develop comprehensive safety and health programs. The focus has been to establish a cooperative win-win process in which government and industry work together as partners rather than view each other as adversaries.

Improved Working Environments

Through its standards, OSHA has also improved working conditions and reduced workplace hazards. As Petersen says, even if OSHA accomplishes nothing else, it has motivated executives to focus on safety issues more than ever before. "As misdirected as OSHA seems to be when we consider the true causes of accidents, perhaps its real value is an attention getter to safety in general. Safety managers would be remiss not to capitalize on this executive attention" (Petersen 77).

Voluntary Protection Programs

The Voluntary Protection Programs (VPP) are another positive development. Although enforcement may still be necessary, cooperation (not conflict) and voluntary participation (not policing) should be the focus. The VPP initiative provides a challenging, yet realistic target for companies that want to achieve superior safety performance. Participants are not simply seeking to avoid violations and related costs; they are attempting to exceed basic requirements and take the lead in continuous safety improvement. Although the degree of improvement caused by VPP efforts cannot be quantified, one cannot deny that lives have been saved and countless injuries prevented.

THE BAD NEWS Chapter & Verse Inspections

In other ways, however, OSHA's efforts to improve safety performance have been less effective—and some would argue counterproductive. In *Safety Management: A Human Approach*, Petersen explains that the "OSHA era" focused on inspections and government controls and de-emphasized human approaches.

In this historical overview of safety management, several things seem certain: OSHA delayed the psychology of safety management era for some period of time and OSHA seemed, at least temporarily, to have placed safety management back into an earlier era where physical conditions received the primary [or only] emphasis.... OSHA became the era of the 1970s and required the safety professional to concentrate on two primary things: 1) removing those physical conditions that are mentioned in the standards and 2) documenting everything done. The more-competent safety professionals and the more-successful safety departments found they had two separate and distinct duties, complying with the law [standards] and controlling losses, instead of only the one of controlling losses. In some cases, the two are related and in some cases they are not. There was no question, however, as to the priorities: complying came first (Petersen 6).

In Pierce's view, "OSHA was originally created to be a 'club' against industry" (102). The agency took a chapter-andverse approach, which told employers, "You have no option but to comply." Howard relates an incident that occurred at Glen-Gery factory. An OSHA inspector noted that a worker wearing a dust mask had a beard, a violation of the rule requiring a close fit between face and mask. The dust was not heavy, nor was it hazardous. The mask likely filtered out most of the dust even with the beard. "But, the rule was clear, and, like most rules, [it] did not distinguish among different situations. Nor did it matter that the worker was Amish and faced the choice of abrogating his religious convictions by shaving his beard or quitting. He quit" (Howard 13).

Lengthy, Complex Standards

Beyond inspection and control issues, many OSHA standards are lengthy and written in legalease. Consider, for example, that in 1999, the *Federal Register*, a daily report of new and proposed government regulations, totaled more than 70,000 pages. Critical regulations are imbedded within these "user-unfriendly" pages.

In The Death of Common Sense: How Law is Suffocating America, Howard asserts:

For 25 years OSHA has been hard at work. The agency has over 4,000 detailed regulations, dictating everything from the height of railings . . . to how much a plank can stick out from a temporary scaffold . . . several hundred billion dollars have been spent by industry to comply with OSHA's rules. Intuitively, all this expense must have done some good. It hasn't. Safety in the American workplace is about the same as it was in 1970 (Howard 12).

Another concern is that these standards are often drafted by long-term government employees who have limited practical work experience. One must wonder whether the regulations would be more realistic if they were developed by individuals with actual work experience related to the regulation; such individuals would also likely better understand the implications and complications of full compliance. Pierce provides a telling illustration of this problem.

... at a national professional association conference, the [former] head of OSHA, Joe Dear, was answering questions from the floor. Lamenting the considerable efforts required for compliance with the Bloodborne Pathogens standard, one attendee questioned [whether] OSHA had any idea of the problems in protecting janitors to comply with the standards. [Dear] confessed that before the question, he was unaware the stan-

Highly prescriptive standards emphasize defining rules and looking for infractions rather than creating workable solutions to improve.

dard had any application to janitors. Professional regulators just write language for industry to follow. They have lost touch with what the regulations they write involve, apply to or cost to individual companies (Pierce 114).

Diminishing Internal Motivation to Improve

Beyond the difficult application and high costs, the use of external disincentives to drive the process merely suppresses internal motivation to improve (Geller The Psychology of Safety). The more control exerted from the outside, the less control and ownership develops from the inside. Many companies engage in safety activities only because the government requires it. Ownership, commitment and proactive behavior are less likely to develop when people are working to meet goals or deadlines set by someone else than when striving to achieve goals set by their own team (Geller Beyond Safety Accountability; Building Successful Safety Teams).

Attempting to Establish Rules for Everything

According to Howard, people like the feeling of certainty and believe "precise rules" eliminate loopholes. However, as he shows, it is actually the opposite. "Loopholes only exist because of precise rules. The tax law, all 36,000 pages of it, is practically nothing but loopholes. The more precise we try to make law, the more loopholes are created" (Howard 43). In safety, not every possible situation or circumstance can be foreseen. Therefore, trying to establish rules that cover every aspect of occupational safety is impossible and counterproductive.

Highly prescriptive standards emphasize defining rules and looking for infractions rather than creating workable solutions to improve. Such a black-orwhite approach suggests that people need not make independent or interdependent decisions. It also causes employees to think, "Just know and follow the rules, and I'll be safe." This cultivates a dependent, mindless perspective about injury control and can be detrimental to an individual's safety and health.

Ned Carter, Ph.D., is conducting safety research at Virginia Tech, sponsored by the Swedish Council for Work Life Research. When asked about the approach to safety in Sweden, he notes that Swedish work environment law is more of an umbrella regulation; it requires employers to take responsibility for safety, but does not attempt to regulate every detail. And, although Sweden has many labor unions, he says the safety culture is more collaborative and cooperative than that in the U.S.

Have these approaches produced different results? Sweden has a population near 9 million, with many people working in heavy industry (e.g., automotive) and mining; yet, less than 100 occupational fatalities occurred in all of Sweden last year (Swedish Occupational Safety and Health Administration). In Virginia, which has a population of about 6.5 million, 176 occupational fatalities were reported in 1998 (Bureau of Labor Statistics). Although this clearly is not an "apples to apples" comparison, it suggests that one approach is more effective.

Ignoring the Human Equation

As noted, OSHA has done much to make work environments safer. Often, however, the focus has been one-sided as if only employers should be accountable for safety, while employees seem to have minimal responsibility for their own safety. This approach suggests that engineering enhancements and better working conditions are all that is needed to achieve optimal safety performance.

Let's take a closer look at this strategy. Suppose efforts to improve highway safety focused only on the engineering of vehicles and roads. States might repair roads or legislators might require improved bumper protection, air bags, automatic shoulder belts, anti-lock brakes and collision panels.

But what about the vehicle driver? In this scenario, if people were truly concerned about the safety of vehicle occupants, greater efforts would be made to establish safe driving speeds, require use of child safety seats and pass regulations to encourage drivers to stop at red lights and use turn signals, and to discourage driving under the influence of alcohol or drugs. As Pierce says, "Congress focused on industry 'things' like the automobile ... and forgot to hold workers responsible for 'acts' that compromised their safety" (97). Safety efforts are not whole or systematic until efforts address both human factors and the work environment.

Recordkeeping: Putting Second Things First

Because OSHA often emphasizes recordkeeping, the numbers have taken on more importance than immediate safetyrelated conditions and behaviors. As a result, in their attempts to keep safety records accurate in order to avoid citations and fines, employers may overlook the process of improving safety outcomes. In other words, reactivity to outcome is promoted over proactive attention to process.

In addition, statistics may be manipulated. If a facility can lower its lost workday case rates below industry average through a few "borderline" decisions regarding its OSHA log, then it may seem logical to "cook the books." Furthermore, when safety records affect the amount of financial bonus to certain employees, firms should expect some injuries to be hidden—it is only human nature.

As a result of this focus on outcomes, root causes are either ignored or overlooked. The systematic search for factors that contribute to "near hits" and minor injuries is displaced by a reactive focus on recordkeeping. As a result, upstream causes of serious injuries are not adequately analyzed and corrected. Figure 1 highlights business and labor perspectives on OSHA. Note the common disappointment with OSHA's ineffectiveness.

Labor Perspectives on OSHA

"Mostly frustration—OSHA hasn't been nearly as effective at helping safety and health as originally hoped."

"The regulation promulgation is too slow."

"Congress has placed too many obstacles in OSHA's path including cost-benefit analysis and OMB review."

"OSHA targets easy and minor problems."

"There aren't enough inspectors, not enough inspections, and citations don't go deep enough."

"The current situation and direction of OSHA doesn't have a chance of working."

Adapted from: F.D. Pierce, *Shifting Safety and Health Paradigms*, pp. 112 and 113.

OSHA should continue the trend toward performance-based standards and should offer examples, models and additional support.

While it is easy to criticize an organization such as OSHA, it is not so easy to recommend viable solutions. The following discussion reviews four general suggestions for redirecting OSHA's efforts. In the authors' opinion, the result could be a more effective safety and health agency.

THE VISION Benchmark

Some current problems could be overcome by observing innovative practices established by other countries and benchmarking. According to George Pearson, CSP, ARM, an international safety consultant and former administrator of ASSE's International Practice Specialty, Canada takes a different approach to safety. Its standards are more performance-driven (and, therefore, involve less specification) and its authorities focus their efforts on interaction between labor and management safety committees.

For example, under the Canadian Occupational Health and Safety Act (Ontario), the government attempts to assist and consult before it enforces; enforcement and citations are used only when all else fails. In most cases, Pearson explains, Canadian authorities seek out root causes of existing hazards rather than emphasize surface violations.

Benchmarking against such practices can work only if all involved in the process are open to new perspectives and approaches. Certainly, caution is warranted when evaluating a new strategy; however, if data indicate that a certain intervention works, it should not be disregarded. The next step is to determine how the approach can be customized for a particular setting and circumstances.

Enhanced Performance Standards

OSHA should continue the trend toward performance-based standards and should offer examples, models and additional support. When OSHA established specification standards, industry contended that they were too rigid and had no room for interpretation. Yet, when the agency moved toward performance-based standards, employers complained about not knowing how to comply with or fulfill the intent of the standard. Therefore, in the authors' opinion, the best approach is a performance-based standard that offers specific examples, relevant models and state-of-the-art assistance to help an employer interpret the standard for its site.

Job Safety Analysis

In addition, OSHA should emphasize the development and appropriate use of relatively simple procedures, such as job safety analysis (JSA), to identify, assess and eliminate or minimize existing and potential risks. All personnel should be trained in such procedures and be expected to contribute and build personal expertise in safety.

The impact of these tools rests with their relevance to each work location and specific situation. Workers can use JSA to customize safety standards for specific work areas, thus creating ownership of the procedures that will keep them safe. For example, rather than follow a standard that requires atmospheric testing devices in all confined spaces without exception, a work team could develop an area-specific JSA to cover site-specific circumstances. Imagine how much progress might have been made had such customizing procedures been practiced more widely for the past 30 years. Imagine how much progress could be made over the next decade if OSHA were to endorse and focus on the widespread use of a teamcustomized JSA.

The Psychology of Safety

Finally, OSHA needs to attain more expertise in the person-based and behavior-based aspects of safety (e.g., Geller; Krause, et al; McSween; Sulzer-Azaroff). The goal is not to establish more regulations, but rather to help employers address the individual and social dynamics of safety. The emphasis for the past 29 years has been on improving the working environment. It is now time to take a more-balanced approach that also considers the human dimensions of safety improvement. ■

REFERENCES

Blair, E.H. "Achieving a Total Safety Paradigm Through Authentic Caring and Quality." *Professional Safety.* May 1996: 24-27.

Bureau of Labor Statistics. "Census of Fatal Occupational Injuries Summary: 1998." Table 5. Washington, DC: U.S. Dept. of Labor, BLS, 1999.

Geller, E.S. *The Psychology of Safety: How to Improve Behaviors and Attitudes on the Job.* Boca Raton, FL: CRC Press, 1996.

Geller, E.S. Beyond Safety Accountability: How to Increase Personal Responsibility. Neenah, WI: J.J. Keller & Associates Inc., 1998.

Geller, E.S. Building Successful Safety Teams:

Together Everyone Achieves More. Neenah, WI: J.J. Keller & Associates Inc., 1998.

Geller, E.S. Understanding Behavior-Based Safety: Step-By-Step Methods to Improve Your Workplace. 2nd ed. Neenah, WI: J.J. Keller & Associates Inc., 1998.

Howard, P.K. *The Death of Common Sense: How Law Is Suffocating America*. New York: Random House, 1994.

Imai, M. Kaizen: The Key to Japan's Competitive Success. New York: McGraw-Hill, 1986.

Krause, T.R., et al. *The Behavior-Based Safety Process.* 2nd ed. New York: Van Nostrand Reinhold, 1996.

McSween, T.E. *The Values-Based Safety Process: Improving Your Safety Culture with a Behavioral Approach.* New York: Van Nostrand Reinhold, 1995.

Petersen, D. Safety Management: A Human Approach. Goshen, NY: Aloray Inc., 1988.

Pierce, F.D. Shifting Safety and Health Paradigms. Rockville, MD: Government Institutes Inc., 1996.

Swedish Occupational Safety and Health Administration. "Fatalities in Occupational Accidents: Sweden 1995-1999." http://www.arbsky.se.dodtrend.eng.gif.

Watchman, G.R. "OSHA's Safety and Health Programs Rule: From the Inside and Out." Proceedings of Best Practices in Safety Management Symposium. Des Plaines, IL: ASSE, 1999. 11-21.

Earl H. Blair, Ed.D., CSP, is an associate professor of safety education at Indiana University in Bloomington. Prior to joining the university, he was affiliated with Safety Performance Solutions in Blacksburg, VA. Blair has more than 20 years experience in industry and academia. He is a professional member of ASSE's Colonial Virginia Chapter.

E. Scott Geller, Ph.D., is a professor of psychology at Virginia Tech and a senior partner of Safety Performance Solutions, both located in Blacksburg, VA. Geller is a professional member of ASSE's Colonial Virginia Chapter. He is a Fellow of the American Psychological Assn. and a member of the American Psychological Society.

READER FEEDBACK

Did you find this article interesting and useful? Circle the corresponding number on the reader service card.

YES	28
SOMEWHAT	29
NO	30