

IS THERE PROFIT IN SAFETY?

By Hank Sarkis and Dr. Jay S. Mendell

"Small" accidents can set off a chain reaction of very expensive events.

In most companies the safety department is seen as an area that loses money. The facts support this. Last year, despite money spent training and consulting, injury and illness rates in U.S. workplaces had the largest year-to-year increases since 1973. One out of 12 workers is expected to be injured on the job this year, with the average number of lost workdays exceeding 63. Increases in health care costs, coupled

with staggering property-casualty insurances rates, have made relatively small accidents very expensive. Dupont recently estimated that a broken leg sets off a chain reaction -lost time, increased insurance, hiring temporary help, paperwork -and costs employers \$14,000. And, this figure assumes that the employee doesn't retain an attorney!

The results of an accident can be even more far reaching. An Illinois judge sentenced three executives of Film Recovery Systems, Inc., to prison because of the poisoning death of an employee. They each received a 25-year term. A Texas grand jury recently indicted three executives of a construction company on charges of criminally

negligent homicide, after two workers were killed by the cave-in of a trench. The propensity towards holding corporate executives criminally liable for injuries sustained on the job is expected to intensify. The Los Angeles district attorney has ordered his staff to investigate all occupational deaths as possible homicides.

We [authors] believe that the Occupational Safety and Health Administration (OSHA) is partially to blame for the present situation since it inadvertently sent the industrial/occupational safety movement thundering off in the wrong direction. Before OSHA, industrial safety was developing into a commendable profession; a mixture of technology, psychology, economics and management. OSHA put too much importance on creating a foolproof workplace and too little on the single largest cause of accidents -people. Workers' attitudes, the supervision given them and other personal and interpersonal factors determine safety performance. Compliance with physical standards does not translate to a safe working environment unless workers are determined to "own" safety.

Compliance with OSHA does not necessarily produce steady improvements in safety records. Today there is a need to concentrate attention on how workers contribute to the accidents that occur in workplaces that OSHA would consider "safe." Redirecting attention from the relatively safe physical environment to the relatively unsafe worker may be the answer.

Most safety programs approach training the same way that parents teach children, by beating rules into the "kids'" heads. We treat adults like children, and are surprised that they act like kids by resisting our rules. As long as employees are passive participants in safety training, increasing the number of safety meetings may have no impact. Successful educators know that the most effective way to overcome

apathy and change both attitudes and behavior is to allow people to discover something for themselves. Discovery and inquiry lead to idea "ownership".

A research and consulting organization has developed an effective safety training program based on a number of simulated emergencies. A group of workers is brought together for half an hour and then posed a problem such as:

"You're driving home from a party one night. A car swerves in front of you. As you try to miss it, your car skids on a patch of loose gravel and smashes into a bridge. You are not seriously hurt, but the person with you is lying on the floor motionless with blood flowing from a deep gash in the arm."

Workers are then offered the following alternatives and are asked to order them by priority.

- tear clothing away from the wound
- place hand directly on the wound and press firmly
- check to see if bleeding has stopped
- yell to someone to get help
- cover the person
- get person out of the car
- apply tourniquet
- check vital signs
- slip cloth underneath your hand and continue pressing.

Workers are divided into teams and each team is asked to rank the steps to take in response to the situation. Voting is not allowed. The teams are required to reach consensus because consensus promotes discussion and "ownership" of the resulting lesson. Everyone is then given the correct responses to compare with what they worked out themselves and as groups. The group's answer is usually close to the experts', and this discovery -that within their group of workers they can find the same answers as the experts greatly increases and reinforces the learning.

The behavioral approach to safety is quite a lot like the quality circles that have become so popular. But, unlike quality circles, safety circles are easier to organize and much cheaper to implement. In fact, the consultant reports that most of its client companies simply hand the training duties to line supervisors and foremen. This is possible because the safety circles are standard training materials in the form of instructor's manuals and handout worksheets.

Clients report dramatic results as a result of using the simulations. Exxon saved over \$31 million by cutting accident frequencies 50 percent over a three-year period at their Baton-Rouge

refinery, representing a 620 percent return on their investment. Texas Utilities has gone over three million man hours at a major generating facility without a lost-time injury, a record for the industry. Its insurance premiums have been reduced by 40 percent since the program was implemented; a savings of \$600,000 in two years. General Motors is currently using the program at Buick, Hydra-Matic and Packard Electric Divisions.

In South Florida, Lanzo Construction, a major pipe laying contractor, was first introduced to the program by its insurance company. Joe D' Alessandro, a principal with the firm, commented from his office in Pompano Beach: "In the one year since we used the program company-wide, the incidence rate for injuries was reduced by more than 50 percent. People are consulting with each other more; things are less of a one-man show. The safety program is helping our goal of making Lanzo Construction more of a participatory organization."

Safety training can become a tool for cutting insurance bills and regaining lost productivity, and use of behavioral techniques may be the best way to revitalize this important training process.

Hank Sarkis is a director of the Silicon Beach Consultancy in Boca Raton.

Dr. Jay S Mendell is a professor at Florida Atlantic University.