Put the Proper Focus on Safety

Research shows that most accidents are caused by at-risk behaviors, which is where safety programs can make real strides.

by Zach Knoop

If you surveyed a group of safety professionals and asked them what percentage of accidents are caused by conditions and what percentage are the result of at-risk behaviors, you would likely get a response of about 10 percent conditions and about 90 percent at-risk behaviors. There are numerous studies that validate similar percentages. Yet the Mine Safety and Health Administration (MSHA) and Occupational Safety and Health Administration (OSHA) continue to focus the vast majority of their resources toward the enforcement of regulations that primarily focus on conditions. Whenever there is a spike in injuries and/or fatalities, as we have seen in the mining industry recently, the response is typically a combination of more standards, enhanced enforcement, and an increase in penalties.

This is not a new trend. In 1971, Dr. Dan Petersen, an industrial psychologist and arguably one of the most influential safety professionals in the areas of safety management and theory, wrote in his book, *Techniques for Safety Management*, "Government safety organizations continue to focus on the physical to improve safety. We know that *things* don't cause the majority of accidents; it's bad *behav-*

iors." Forty-three years later not much has changed.

Relying on any government safety organization to improve your safety system and safety performance would be, as Petersen might say, foolish, because the majority of accidents are not the result of conditions, but rather the at-risk behaviors of workers. However, when it comes to accident prevention, where do we in the aggregates industry focus our resources? We spend far more time finding and fixing the 10 percent of the conditions that result in injury and largely ignore the 90 percent related to behavior. To turn the tide, we must look first to the root causes of those behaviors.

With his assertion that behaviors drive most incidents, Petersen was not suggesting that employees intentionally take risks in order to get hurt. No one begins a day's work with the goal of getting hurt. Rather, the risky behaviors are a symptom of the management system in place. All employees have certain attitudes, beliefs, and ideas about safety. These beliefs can be a product of personal risk tolerance. For example, some people find bungee jumping to be risky, while others do not. Beliefs are also shaped by life and work experiences, influenced by upbringing, societal factors, and industry expo-

sure. At work, the attitudes, beliefs, and ideas that employees have about safety are mainly shaped by what they see and hear from their direct supervisors and others in management. As an example, consider how employees might interpret the following conversation between a crushing foreman and his crew:

"Our construction division was just awarded an emergency bid to repair several sections of road that were taken out by a landslide. The work begins in two weeks, and we have to have 15 tons of material crushed by then. We will need to work extra hard and can't afford to have anything slow us down in order to get this job done. Let's get started right away and make sure to work safely."

The above conversation placed significant emphasis on production and no specific expectations on safety, other than to work safely. What employees heard from their boss was "get the job done." How did the discussion reinforce or influence risky or "bad" behaviors? Let's say the production pressures increase due to a motor going out on a radial stacker and weather delays. Senior leaders come out frequently to ask about production goals, but mention nothing about safety. Keeping the plant up and running is the top priority, so rather than locking and tagging out conveyors to clean out under tail pulleys and perform routine maintenance tasks, certain shortcuts are taken to save time and keep the plant running. In the end, the crew gets the job done, nobody gets hurt, and they are praised for going the extra mile by management.

Through this experience, employees start to establish a belief that certain safety short cuts are acceptable under tight production deadlines.

Another example of nonverbal communication that influences the attitudes and beliefs of employees is when they see their boss or other members of management

Six Criteria for Safety Excellence

Top management is visibly committed
Middle management is actively involved
Front-line supervision is performance-focused
Employees are actively participating
System is flexible to accommodate the culture
Safety system is positively perceived by the workforce

walking the operation and not wearing the appropriate personal protective equipment. The employee takeaway may be, "If it is not important to them, it is not important to me."

The norms of the organization, what is tolerated, influence how employees will work. The unwritten rules that are formed over time through employees' daily interactions with their supervisors define the safety culture of the organization. In his book, *Organizational Behavior and Management*, Petersen said, "It is the culture, not the elements, that determine safety success." In other words, the elements of an organiation's safety program — the policies, procedures, and specific programs like near-miss reporting, job hazard analysis, and incident investigation — by themselves do not determine safety success. You can have an industry best-in-class written safety program, but if your front-line doesn't believe in it and you lack well-defined accountabilities for the completion of the safety activities identified within the program, Petersen would say you're fooling yourself. You may have a safety culture, but you won't have a culture of safety. Do you know what the difference is?

Through years of research and working with companies throughout the world, Petersen determined that, although there

was no one right way to manage safety, there were six criteria common to all organizations that were successful in creating a culture of safety, or in achieving safety excellence.

In the months to come, I will describe each of the Six Criteria to Safety Excellence (see above), how you can build them into your organization and ultimately realize safety excellence. **AM**

Author's Note: Dr. Dan Petersen passed away in 2007. He was a true safety pioneer who helped countless organizations improve their safety management system, which ultimately has resulted in lives saved. I know this personally, as I worked for a large construction and construction materials company that utilized Dr. Petersen's Safety Perception Survey and worked hard to establish his Six Criteria of Safety Excellence throughout the organization. It is not easy work, but if it were, everybody would be doing it.

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