Employers have traditionally evaluated program effectiveness or safety performance based on quantitative data or trailing indicators such as incident rates, regulatory citations, cost associated with disability and worker compensation. Petersen (2005) advocates the use of leading indicators such as in-depth interviews, behavioral observations, and the creation and implementation of organizational policies to measure safety performance when evaluating programs for effectiveness. Using this type of qualitative data might also eliminate the need to wait for a system to fail in order to identify weakness in elements of a safety program (Falbruch & Wilpert, 1999).

Performance measurement should be based on data that indicate whether a program achieved its goals and objectives, and to improve its operation. In the author’s experience as a lead auditor on several voluntary protection program site inspections and evaluating hundreds of safety and health programs as an OSHA inspector, it is difficult to determine program effectiveness based on traditional empirical measures such as incident rates.

A major flaw in policy and procedure effectiveness in traditional safety management systems is their application as criteria for measuring safety outcomes. Policy and procedure effectiveness are typically determined by lagging safety indicators, such as workers’ compensation claims and costs, OSHA incident rates and incident investigations (Table 1).

Acting on lagging indicators can only prevent repetition of similar incidents, rather than proactively predicting or preventing an event (Booth & Lee, 1995). Workers’ compensation information and OSHA incident reports always trail an incident, whereas safety management policies and procedures try to prevent events from occurring. Safety professionals must also contend with variables such as OSHA incident rates and workers’ compensation claims and costs that cannot fully explain complex, multi-causal accidents (Booth & Lee, 1995; Petersen, 2005; Slates, 2008).

Formal safety policies and intervention strategies derived from safety statistics investigations may not reflect the way safety exists within the organization (Fogarty & Shaw, 2004; Kirwan, 1998). Therefore, the true measure of safety performance outcomes effectiveness is not found within safety policy or procedures, but in the way a policy exists or is acted on by leaders who shape downstream employee safety behavior.

How Does Your Safety & Health Program Measure Up?

By Kevin Slates, Ed.D., M.P.A., CSP

Performance measurement should be based on data that indicate whether a program achieved its goals and objectives, and to improve its operation.
Employee behavior has been found to play a significant role in workplace incidents, so judging a safety management system by counting workplace accidents is an inadequate approach. More proactive safety performance indicators are needed (Mitchison & Papadakis, 1999). For a more complete understanding of workplace safety behavior, the safety management system must embrace a behavioral approach and assessment mechanism. Self-reporting of safety behaviors and perceptions of safety are an alternative or complementary approach (Brown, Willis & Prussia, 2000; DeJoy, 1994; Hoffmann & Stetzer, 1996; Seo, Torabi, Blair & Ellis, 2004; Tomas, Melia & Oliver, 1999). It is imperative for a safety system to incorporate behavioral metrics and other leading metrics as safety performance indicators in order to achieve improvement in safety performance goals.

### References


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In the Know Resources

- BISE Information
- International Resource Guide
- Journal of SH&E Research
- Networking Opportunities
- Professional Safety Journal
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