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Brochure Description:

The latest corporate buzzword is "Big Data." Thus, you cannot open a business journal without seeing the phrases big data, business intelligence and predictive analytics. Many companies also search for true leading indicators, but often fail to use this observation intelligence. This talk will review our latest Safety Predictive Analytic research via a case study on over 120 million observations, provide ongoing research on the 4 Safety truths, and discuss other leading indicators to help predict, prevent and eliminate death on the job this century.

"Predicting Preventing & Eliminating - Using Big Data to Eliminate Death"

The latest corporate buzzword is "Big Data." Thus, you cannot open a business journal without seeing the phrases big data, business intelligence and predictive analytics. Big data is often solely associated with managing large amounts of diverse data. But more accurately, big data is about asking new types questions, exploring hunches, and making data-driven decisions. If big data is not a part of your business world today, it will be in the very near future. And, there is no better place to start than within your safety department. The safety field collects a plethora of safety intelligence. Unfortunately, this critical data is often used too late, misused, or just plain ignored.

Many companies search for true leading indicators. These indicators are essential for moving safety cultures from good to great. Much leading indicator data is gathered from inspections/observations, however, organizations often struggle with quality. This talk will help participants find their "cultural Proxies" through a case study and ongoing statistical research on over 120 million observations. This will help provide a gauge of your safety culture and ultimately may help predict your next incident.

For many years, organizations have established some form of inspection process to assess compliance with rules/regulations and policies/procedures (See Factories Act of 1833; Raouf, & Dhillon, 1994; Weindling, 1985; Wilson, 1985). More recently, companies have begun to add an observation process to focus on safety-related behaviors (Geller, 1996; Komaki, Barwick, & Scott, 1978; Krause, Hidley, & Hodson, 1996). Having an inspection and observation process can, by themselves, increase safety awareness and impact the organization's safety culture (Tuncel, Lotlikar, Salem, & Daraiseh, 2006). But while these methodologies are an essential part of a dynamic proactive safety

culture, they do not guarantee world-class safety performance. In fact, some practitioners question the validity and effectiveness of the intelligence collected from their inspections/observations (Guastello, 1993).

Next Generation Safety Metrics: Lead Your Industry by Using Leading Indicators

By considering inspection and observation information as leading indicators, organizations can now move beyond lagging indicators to measure the safety health of an organization. Only recently has technology evolved to the point where we can start to review leading indicators in real time, providing safety professionals with a new perspective and suite of tools from which to work.

Lagging indicators are the loss metrics that are already captured and recorded today by many organizations. These are your incidents, recordable incident rates, lost-time accidents, etc. In one sense, lagging indicators measure an organization's safety consequences in the form of past accident statistics. On the other hand, leading indicators are the precursors that may "lead" to property damage, risky behavior, or incidents.

Some examples of leading indicators relative to inspection and observations include at-risk conditions per inspection, rate of closing open issues or items, and the severity of an at-risk condition or behavior. These leading metrics can be used today to measure the "holes" in an organizations safety defenses and better allocate scarce resources. Furthermore, conditions and behaviors observed tend to be proxies for organizational discipline and cultural evolution, and thus represent good leading metrics of the overall health of your safety culture.

Participants will leave the presentation not only with suggestions on improving the consistency and quality of their inspection/observation process, but will also leave energized with insight into the next generation of safety metrics that they can begin to use today.