Measuring Safety Performance to Achieve Long Term Improvement

James C. Manzella
Lonza, Inc.
17-17 State Hwy 208
Fair Lawn, NJ 07410
Ph: 281 291 2300   Fax: 281 291 2315
JManzella@lonza-us.com

ABSTRACT

The paper summarizes the types of "event" reporting (near misses, first aid cases, OSHA reportable injuries/illnesses, etc.) and stresses the importance of measuring worker conformance to established systems, as an effective and necessary tool in order to control injuries, process upsets and catastrophic events. Such measurements allow risks to be identified before injuries and process events occur.

A system that identifies and controls non-compliance to established standards is much more effective than one which identifies and corrects errors after an injury or process event occurs. When errors are common, risk is increased. The greater the likelihood of error, the greater the chance of injury and process upsets. If a safety program relies on "after the fact" data to establish safety performance objectives, these goals will be difficult to reach and maintain. If a firm establishes proper methods to perform activities and employees perform as expected, injury performances will continuously improve as risk is reduced. The key is to establish effective safety systems and measure conformance to those systems to ensure activities are performed as expected.

Safety and health system improvements based on injury data and process events alone will produce limited results. Upstream activities that result in non-conformance must be identified and analyzed so that corrective actions can target system defects. Measuring the performance of individuals and the organization as a whole -- in order to identify non-conformance and reduce risks -- will produce long-lasting improvements. Only through continuous improvements is the goal of zero accidents achievable.

The paper outlines a six-step approach which can be utilized to change from the traditional system of "after the fact" injury measurement to a system where upstream activities are measured before the injury or process event occurs. The six steps are:

1. Establish Standards
2. Set Priorities
3. Reach Agreement
4. Establish Accountability
5. Develop Communications
6. MEASURE (audits and observations) Effectiveness