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Near misses

Are near misses leading or lagging indicators?

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You're not likely to have opened a business journal within the past few years without seeing a reference to the latest corporate buzzword, "Big Data." Business intelligence and predictive analytics will be a part of everyone's jobs, if it is not already. And no other area in businesses could benefit more from using Big Data than safety departments. The safety field collects a plethora of safety intelligence from safety observations to near misses. Unfortunately, this critical safety intelligence is often not used, misused or just plain ignored.

Near misses as cultural proxies

In the spirit of ending death on the job, organizations have been shifting their focus from reacting to injuries to predicting them. To do this, businesses need to begin with identifying quality leading indicators of a strong safety culture. Because organizations cannot directly measure their safety cultures, leading indicators can be good proxies. As such, many safety professionals focus on "near misses" as cultural proxies. Near misses have been defined as unplanned behaviors or events that did not result in injury, illness or damage, but had the potential to do so. Near misses can identify safety system weaknesses, as in the types of near misses reported, and cultural weaknesses, as in cases in which near misses are not reported. However, some argue that near misses happen after the fact and are nothing more than a less serious incident and a lagging indicator. Others would argue that near misses are leading because they give us a glimpse into the future and could be predictive of a future safety-related incident. Could both perspectives be correct?

A near-miss continuum

Often, near-miss programs have cultural or system barriers impacting their effectiveness. There is sometimes confusion as to what is considered "worthy" of reporting a near miss. I would suggest a

continuum that spans from the possible to the probable. A “near hit” could be considered more toward the “sharp end” of the continuum and closest to injury or property damage. For instance, a construction worker could be walking his site on a designated path and a wrench falls from scaffolding above, nearly hitting him. This near-hit example falls in the “probable” realm and should be addressed immediately. The next level would be similar to the above example, except no one, or nothing, was close to the wrench when it fell. In this instance, the situation might be described as a “near miss.” This situation still has potential for injury, so it also should be addressed quickly. The third level might be called a “good catch.” In continuing with the above example, a “good catch” might describe an instance in which a superintendent is walking the site and discovers wrenches on a piece of scaffolding without the required toe boards installed. Although no incident occurred, this has the potential to cause harm and thus the safety systems surrounding installation of toe boards should be assessed. Finally, the least severe case could be called “error likely.” This example might find the safety professional assessing the tasks being performed for that day and find some subcontractors erecting temporary scaffolding for a few minutes of work to be performed. Because of the short-term nature of that task, it is likely that these subcontractors might not take the time to install the required toe boards. This opportunity might motivate the site safety pro to attend the subcontractor’s pre-job brief to ensure toe boards are discussed and used.

In regards to the question as to whether near misses are leading or lagging indicators, the answer is “yes.” If we are proactive enough in our safety observations, “error likely” and “good catches” can be considered leading indicators. When there are “near hits” and “near misses” where it’s not a matter of *if* something is going to happen, it’s *when*, then those are lagging indicators.

‘For want of a nail’

Some might argue that the “good catch” and “error likely” examples happen during more formal and routine safety audits and don’t fall into the realm of near misses. They indeed would fall into these procedures; however, audits and inspections are often done by the safety pros or the leadership team and are infrequent. To gain better insight into the safety culture, we need to enlist the observations of everyone in the organization.

The most successful near-miss program I observed had the reporting form on a business card-sized piece of cardstock. It was easy to carry around and took only a couple of minutes to complete. Companies that encounter problems with participation typically have near misses filled out on incident report forms. This is not only intimidating to the employees, but it also takes too much time to find and fill out one more piece of paperwork. If we are to obtain quality near misses and begin to forecast where our next incident might occur, we need to make it easy to report. Thus, if we look at near misses as a continuum we can not only assess the severity of these observations, but we also can gain the much needed employee engagement to help end death on the job this century.

Editor's note: This article represents the independent views of the author and should not be construed as a National Safety Council endorsement.