



NATIONAL SAFETY COUNCIL

Position/Policy Statement

Near Miss and Hazard Reporting

While great progress has been made at reducing unintentional injuries and deaths on the job, there are still about 11 unintentional injury worker deaths occurring each day in 2014.¹ More work can be done to prevent major injuries and incidents, including support for a strong reporting culture as a main tenet of an effective safety management system (SMS). Reporting near-miss events and hazards, which are far more common than serious injuries, provide opportunities for prevention and valuable insight to latent safety problems.^{2,3,4,5} If employees feel comfortable sharing information about these smaller events, employers can use this information to help with prevention and management of risk which will lead to a safer workplace by mitigating against recurrence and escalation.^{6,7}

Implementing a near-miss and hazard reporting system can help prevent more serious incidents and should be supported by employers and employees. Long-standing near-miss and hazard reporting systems have been in widespread use in many businesses, including the chemical and petrochemical sectors and are developing in the construction and healthcare sectors.⁸ The federal government has also successfully implemented non-punitive, self-reporting programs that allow individuals to report incidents without the fear of discipline or other retaliation.⁹ Such programs include:

- Federal Administration Aviation Safety Action Program (started in 1997)
- United States Air Force Aviation Safety Action Program
- National Aeronautics and Space Administration Aviation Safety Reporting System (started in 1976)

In addition to these established programs, the Federal Railroad Administration (FRA) recently created its own near-miss reporting system, the Confidential Close Call Reporting System (C³RS). Components of this system include

¹ Bureau of Labor Statistics

² Alamgir, Hasanat, et al. "Near Miss and Minor Occupational Injury: Does it Share a Common Causal Pathway With Major Injury?" *American Journal of Industrial Medicine* 52:69-75 (2009).

³ Gnoni, M.G., et al. "'Lean occupational' safety: An application for a Near-miss Management System design" *Safety Science* 53 96-104 (2013).

⁴ Hinze, Jimmie, et al. "Leading indicators of construction safety performance" *Safety Science* 51 23-28 (2013).

⁵ Lander, Lina, et al. "Near-Miss Reporting System as an Occupational Injury Preventative Intervention in Manufacturing" *American Journal of Industrial Medicine* 54:40-48 (2011).

⁶ Lander.

⁷ Willful violations of company policy resulting in a near miss can be handled in a different manner.

⁸ Gnoni, M.G., et al. "'Lean occupational' safety: An application for a Near-miss Management System design"

⁹ These public programs often have detailed information available about their structure and operations.

- Recording close calls, safety concerns, and suggestions
- Keeping reporting confidential and voluntary
- Providing protection from discipline except in cases of intentional activities
- Managing by a third-party
- Distributing reports to all participating organizations
- Tracking reports and corrective actions to measure the impact on safety
- Identifying opportunities for system improvement

C³RS stakeholders include the operators, regulator, labor organizations, NASA (an independent third-party that collects, analyzes and maintains the data), peer review team, steering committee and the Volpe Center, a component of the Department of Transportation.¹⁰

NSC Campbell Institute paper “Practical Guide to Leading Indicators: Metrics, Case Studies & Strategies” includes case studies from Honeywell and the NASA Safety Center that show how the tracking of near misses and safety observations through a widely accessible online system enables safety teams to quickly implement corrective and preventative actions. The tracking of near misses through a centralized, company-wide database was found to be a best practice among Campbell Award winners and world class companies.¹¹

As mentioned, near-miss incidents are considered major leading indicators, which are events that provide early warning signs of potential failure, and are tracked at a corporate (not just site) level. Campbell Institute survey respondents also noted that near-miss reporting is one of the leading indicators most associated with specific performance goals for leadership. Some organizations in this phase of the research said that they use near misses to calculate a statistical relationship between leading and lagging indicators. For example, sites with higher volume of near-miss reporting tend to have lower injury rates.¹²

James Reason, an expert in human error and organizational process, encourages the use of a reporting culture to prevent organizational incidents.¹³ Reason sites the following aspects as necessary for a strong safety culture that can effectively prevent organizational incidents:

- (1) An *informed culture* in which those who operate and manage the system have knowledge about the human, technical, organizational and environmental factors affecting the safety of the system;
- (2) A *reporting culture* in which people are able and encouraged to report safety concerns, errors and near-misses;
- (3) A *just culture* in which people are encouraged and rewarded for providing safety-related information without fear of blame;
- (4) A *flexible culture* that can break from a conventional management hierarchy when needed to handle safety concerns and
- (5) A *learning culture* that has the willingness and competence to draw the right conclusions from its safety information and to implement whatever reforms are necessary to address identified safety issues.¹⁴

Each of these components is present in a best-practice, near-miss and hazard reporting organization to enable these organizations to effectively identify problems and put systems in place to correct problems before an incident occurs.

¹⁰ <https://www.fra.dot.gov/Page/P0752>

¹¹ Campbell Institute, “Defining EHS Leadership in World Class Organizations,” 2013.

¹² Campbell Institute, “Transforming EHS Performance Measurement through Leading Indicators,” 2013

¹³ Organizational accidents result largely from the actions or inactions of companies or organizations. Organizational accidents include the Space Shuttle Challenger (1986), the Space Shuttle Columbia (2003), the Washington Metropolitan Area Transit Authority red line accident near Ft. Totten (2009), Chicago Transit Authority Clark/Lake and Grand/Milwaukee Stations (2006)

¹⁴ Managing the Risks of Organizational Accidents, pp. 293-306

Additionally, ANSI/AIHA Z10-2012 also recommends a near miss reporting system to address factors that could lead to incidents. Nonsupervisory employees should participate in this process as well.

The National Safety Council supports and encourages the development of a safety management system in organizations that include and encourage self-reporting of near-misses, hazards and other safety concerns. Other aspects of the reporting mechanism should include:

- Ability to report close calls, safety concerns and suggestions
- Voluntary and optional confidential reporting¹⁵
- Protection from discipline or retaliation except in cases of intentional activities
- Acknowledgment of receipt of reports
- Assigned roles and responsibilities for investigating and taking corrective actions related to reports
- Review by either representatives of stakeholders or a third-party that has no stake in the outcome
- Prioritization of reports to ensure handling of the highest risk items first
- Transparent distribution of relevant, confidential reports to all necessary stakeholders (management, labor and others)
- Visibility to aggregate safety concerns and recordable incidents to all employees
- Tracking reports and corrective actions to measure the impact on safety, including use of leading and lagging indicators
- Auditing and identifying opportunities for system improvement

These system elements are vital to a robust, inclusive safety culture within any organization.

This position statement reflects the opinions of the National Safety Council but not necessarily those of each member organization.

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¹⁵ When an organization is developing its near miss reporting system, it may benefit from starting with a confidential near miss reporting system to gain acceptance. As the safety culture of an organization matures, the confidential aspect can be revisited.