These types of events are known as near misses. A near miss is an unwanted, unplanned event that did not cause an injury or property damage but may have done so if conditions had been slightly different. A near miss is also called a “close call” or a “narrow escape”. In each case, if there had been a slight shift in the timing or position of a worker or an object, the result would have caused harm or damage.

Leading indicators of health and safety

Near misses are leading indicators of health and safety performance. To understand how, we should consider a core theory in workplace accidents or incidents: The Safety Triangle.

The Safety Triangle is a ratio of major and minor injuries to near misses, established by H. W. Heinrich in his 1931 book, Industrial Accident Prevention. The ratio states that for every 330 incidents, there is one major lost-time injury or fatality, 29 minor injuries requiring first aid, and 300 near misses.*

The ratio is not necessarily identical for all occupational groups or organizations. But the lesson is that there are many opportunities to learn from the events leading up to a near miss in order to prevent similar situations before workers are injured or property is damaged.

The Safety Triangle theory demonstrates that the more frequently near misses occur, then the more likely an incident resulting in injury or property damage will occur. For example, if your co-worker trips on loose debris and garbage on the worksite every day, it’s only a matter of time before they actually fall and hurt themselves. For this reason, near misses are considered an important leading indicator of a company or project’s health and safety performance.

Leading indicators are used to predict the likelihood of future incidents so that the necessary steps can be taken to proactively prevent such incidents. Associated with the leading indicator is the lagging indicator, which measures safety performance only after an incident has occurred. The number of lost-time injuries, non-lost-time injuries, and property damage are all lagging indicators of health and safety performance.

Leading and lagging indicators can be thought of in terms of whether they precede (lead) or follow (lag) an incident.
Why report near misses?

While it is necessary to report and record incidents that cause injury or damage, nothing can be done to prevent them after the fact. This is why it is so crucial to report, record, and learn from leading indicators such as near misses in order to prevent future incidents from taking place.

The information gathered through near-miss reporting is valuable for finding the root causes of dangerous incidents, proactively taking steps to reduce the danger, and improving the company’s health and safety performance metrics.

By reporting near misses, employers and workers can significantly improve worker health and safety, enhance the health and safety prevention culture of the company, and ensure that the day-to-day operations meet the health and safety standards required by law.

Encouraging near-miss reporting

By encouraging employees to report near-miss incidents, companies can promote health and safety measures before workers are injured or property is damaged. To help encourage this, employers can take the following steps to involve all workers in reporting the near misses they see:

- Create a workplace culture that puts health and safety and reporting first and put a policy and procedure in place that is communicated to all employees with the support of senior management. The attitude of an organization towards health and safety starts at the top of the organization.
- Educate employees on why near miss reporting is necessary, the important role that workers play in reporting events, and the process for reporting. Build examples of near misses into training programs and use them during safety meetings.
- Use near miss reporting as a leading indicator and report back to the organization and staff on the positive steps taken to improve workplace safety. Consider also compiling a monthly “lessons learned” report, which is an anonymous summary of near-miss reports, and give it to all staff.
- Ensure the near miss reporting system is easy to understand and use. Workers should be trained in the system and reminded periodically to use it.
- Emphasize to employees that they will not be punished for reporting near misses, and that their names will not be included in any “lessons learned” reports or training materials.
- Express appreciation to those who do report near misses. Offer small incentives, such as company recognition or gift cards, to encourage employees to report near misses.

Reporting, recording, and learning from leading indicators such as near misses is a key building block of the health and safety culture of any company. Identifying weaknesses in the safety process by reporting near misses will help predict the likelihood of future incidents and ensure the necessary steps are carried out to prevent such incidents. Everyone who participates in a near miss reporting system is proactively working together to improve their workplace health and safety performance, reducing both the human and financial costs of workplace injuries and incidents.

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