Railway Association of Canada

# Near Miss Insights from Interviews in Canadian Rail

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## Introduction

This report is a follow-up to the RAC's report *Shared Lessons about Near Miss Reporting Across Industries* that was updated in May 2023. The literature review for the report demonstrated a need for more knowledge of how near miss reporting systems operate in Canadian rail. In consultation with the RAC safety culture steering committee, the decision was made to interview member railways about their near miss reporting systems.

The RAC invited members of the safety culture steering committee to participate in interviews to better understand how near miss reporting systems were implemented and are managed in Canadian rail. The interview guide was created by the RAC safety culture team and reviewed by the safety culture steering committee. The interview guide can be found in Appendix A.

Interviews were conducted with 10 participants from 8 member railways during the spring of 2023. Participating sites had their near miss reporting systems in place for 13 years to less than one year. Four organizations had specific systems for reporting near misses. Other organizations reported near misses using an incident or safety hazard reporting system in which the report could be flagged as a near miss.

Interviews were approximately 25 minutes to an hour in length. Notes were taken during the interview to capture key points. The notes were de-identified and analyzed for common themes. The interview findings were sorted into the following categories:

1. Implementation Process
2. Barriers
3. Facilitators
4. Post-Submission Process
5. Benefits

## Implementation Process

Participants described the implementation of near miss reporting systems as multi-faceted. During implementation, the focus was on educating staff about what a near miss is, how to report, the process that follows the submission of the report, who see the reports, and the potential benefits of reporting for individual employees and the company.

Methods of communicating the near miss system included educational campaigns, emails, in-person training, and e-learning modules. Participants also discussed the importance of going out in the field and talking to staff in small groups or one-on-one to promote the near miss reporting system and to teach staff how to report. Most participants mentioned the importance of consistency in promoting the near miss system. Even in organizations where the near miss system was widely used, participants stated that there were ongoing efforts to promote near miss reporting to prevent complacency.

## Barriers

The main barriers mentioned by participants were a lack of understanding of what constitutes a near miss, mistrust of the reporting system, a lack of buy-in, and logistical problems.

### What is a Near Miss?

Some participants mentioned there is confusion among staff about constitutes a near miss. One participant stated that when employees are unsure if something is a near miss, they are less likely to report the event. Organizations took different approaches to remedy this confusion, with some creating a formal near miss definition and others allowing employees to report a near miss as a different type of event, such as an incident or safety hazard. The definition of a near miss is still

unclear in a few organizations, however, many participants stated they are less concerned about whether employees report a near miss under the category of “near miss” and are more concerned that the near miss is reported at all.

### Mistrust

Participants mentioned that lack of trust was a barrier when implementing the near miss reporting system. Many participants stated that their organization adopted a non-punitive approach to encourage near miss reporting and combat trust issues. However, it took time for employees to believe that reporting wouldn’t be followed by negative consequences. For example, participants described situations in which staff did not want to report near misses if their co-workers could be deemed at fault. Over time as employees saw the near miss system being used without negative consequences, more employees started to report.

One participant mentioned they still encounter trust issues when attempting to identify the root cause of a near miss if the cause is related to personal issues. For example, if an employee is distracted at work because of mental health or a fight with their significant other, they do not feel comfortable sharing this information. As a result, the near miss is recorded as a “failure to comply”. There is a concern that if this information isn’t captured, the organization will not make changes to prevent similar issues from occurring.

### Lack of Buy-in

Many participants said there was a lack of buy-in during the implementation and early days of operating their near miss system. Perceived reasons for lack of buy-in included high cost and time commitment, not seeing the value of near miss reporting, and departments with low rates of reporting incidents and safety hazards. As near miss reporting became a regular part of day-to-day work, employees began to see the value in near miss reporting and concerns about costs and time commitment became less prominent.

Within departments with low reporting rates, middle management was perceived to be the main barrier. To combat this issue, participants focused on organizational learning when promoting the near miss system to supervisors and managers. One participant focused on the potential time savings near miss reporting could offer by reducing time spent in incident investigations. One organization focused on getting employees to report near misses in hopes that supervisors would eventually see the value near miss reports provide. Others described the importance of ongoing senior leadership commitment and support for near miss reporting to get supervisor buy-in.

### Logistical Barriers

Some participants referred to logistical barriers in near miss reporting. Under this theme, participants mentioned time constraints as a barrier as some employees perceived near miss reporting to be too time consuming given their workload. Participants described challenges for employees working in remote locations when the near miss reporting system requires access to the internet. Additionally, if near misses are reported over the phone, employees in some remote locations do not have cellphone reception to report the near miss at the time they encounter it and may be reluctant to report after hours. Lastly, some participants described challenges for a small number of employees in using electronic near miss reporting systems due to a lack of familiarity using cell phones or computers. Participants stated that there are supports (ex. the safety department or a supervisor will guide them through using the system, training in place to teach staff how to use the system) and/or alternatives (ex. report over the phone, paper reporting, tell a supervisor) in place to assist these people.

## Facilitators

The main facilitators of near miss reporting mentioned by participants were rewards and incentives, a non-punitive approach, making the system easy to use, and providing feedback.

### Rewards and Incentives

Many participating organizations had incentives or rewards to encourage near miss reporting. Examples include rewarding the top near miss reports of the month with a cash prize or award. A few participants mentioned that a beneficial part of this process is sharing the winning reports with the workforce as it demonstrates to staff what a quality near miss report looks like. One participant mentioned that as time went on, the quality of near miss reports improved, and it became more challenging to choose a winner each month due to the number of high-quality near miss reports they received. In one organization, people were awarded for the frequency of near miss reporting in addition to the quality of reports.

Sharing the winning near miss reports was viewed as a way to celebrate employees for their work and share organizational learning. Near miss reports were shared with employees via newsletter, TV screens stationed at the workplace, or during job briefings. In a couple organizations, winning near miss reports were selected by the occupational health and safety committee. One participant perceived a benefit in having a member of the OHS committee give the winner(s) their reward to promote peer to peer interaction.

In addition to rewards or incentives, some participants mentioned that senior leadership would call employees to congratulate them on high-quality near miss reports and explain to them how their near miss reports led to improvement in the company. In one organization, there was a near miss KPI for management.

### Non-Punitive Approach

Among the organizations who adopted a non-punitive approach to near miss reporting, there was the perception that this was a crucial part of the system's success. There was the perception among participants that if employees faced negative consequences to reporting near misses, they would not report. Adopting a non-punitive approached allowed participants to have non-anonymous reporting systems in which the company could follow up with employees when they required more information. Many participants mentioned the importance of being able to follow up with employees to gather additional information about reports and to provide feedback. Many participants mentioned that anonymous near miss reporting systems lead to poor quality reporting because it does not allow the organization to collect additional information and that in their experience, anonymous reports are vague. One organization mentioned they previously had a way to report near misses anonymously but removed this option because reports were difficult to act on due to their ambiguity.

### Ease of Use

Participants also mentioned simplicity and ease of use as an important component of near miss reporting success. This included reducing the number of ways to report so employees are not overwhelmed or confused, making the system easy to find and access, and keeping the near miss form as concise as possible.

### Feedback

A few participants mentioned the importance of providing feedback to employees to inform them the near miss was resolved and to show that near miss reports are being reviewed and acted on by the company. Some organizations have an automated system that notifies employees when the near miss report is closed, and any actions taken to resolve the issue. One participant stated that a

member of their safety team will notify employees of actions taken to resolve near misses and the closure of the report.

## Post-Submission Process

Most participants described a similar process following the submission of a near miss report. Generally, near miss reports were received by supervisors of the employee, managers, or the safety department, and these individuals would be responsible for reviewing the report. If necessary, the person responsible (ex. a supervisor or safety personnel) would follow up with the person who submitted the report to gather more information. Some organizations conducted investigations for all near miss reports. In a couple instances, near miss reports were prioritized based on severity which would determine whether an investigation was required. In terms of resolving the near miss, the processes varied within and across organizations. A few participants mentioned that their near miss systems are designed to encourage the person reporting the near miss to resolve the issue as they encounter it or identify potential corrective actions to be taken. This is facilitated by including a field in the near miss report to capture “actions taken”. Near miss reports may also be resolved by the safety department, the supervisor/manager of the person who submitted the report, or the investigation team.

Once a near miss is closed, the process for providing feedback varied. Some organizations sent emails to employees regarding the closure of the report and any actions implemented. A couple organizations stated that their process for providing feedback to staff following near miss reports needed improvement.

At an aggregate level, all participants stated that their near misses are analyzed for trends and put into a report. Reports are shared with various levels of management and the OHS committee. Frontline employees learn about near miss trends through their supervisor or foremen, during toolbox talks or pre-shift briefings, newsletters, or a TV screen stationed in the workplace showing near miss and other safety statistics. Generally, participating organizations did not share every near miss with all employees. High-quality (i.e., winning) near miss reports were shared with staff or reports that were relevant for learning.

## Benefits

Generally, participants considered near miss reporting systems to be valuable for organizational learning. Participants were hesitant to say that near miss reporting systems contributed to fewer incidents, but many sites mentioned increased awareness, more conversations about near misses, and employee engagement in near miss reporting. Additionally, a few sites implemented their near miss reporting system in conjunction with their incident or safety hazard systems and cannot separate the benefits of near miss reporting versus other types of reporting.

Many participants mentioned that near miss reporting enabled the organization to identify and understand trends. Discussing near miss trends at supervisor/manager and OHS meetings has become a norm in many participating organizations. Participants perceived an increased awareness of near misses and safety hazards in the workplace as near miss systems became more widely used. One participant described conversations in their workplace in which employees discussed near misses they encountered in the past and realized that others had encountered similar situations. This realization that a near miss encountered by one employee can affect other employees demonstrated the importance of reporting to staff. As mentioned previously, many participants described the quality of near miss reports increasing with time as employees saw examples of reports within their organization.

## Conclusion

This report begins to shed light on the implementation and management of near miss reporting systems in Canadian rail. While participants encountered barriers during implementation, near miss reporting systems are perceived to be a valuable tool for organizational learning, safety awareness, and employee engagement. Many organizations took a non-punitive, non-anonymous approach to near miss reporting, which participants perceived to be an important part of the system's success, and which fostered trust between levels of the organization. Based on the experiences of interview participants, consistent promotion of near miss reporting and resources on how to report are necessary for wide-spread use. As near miss reporting is still a relatively new phenomenon in Canadian rail, further investigation is required to better understand obstacles and facilitate shared learning across the industry.

## Appendix A – Interview Guide

**Near Miss Interview Guide**

1. Tell me about your near miss reporting system.
2. What led the company to implementing a near miss system?
3. Explain to me how your near miss system was implemented?
    a. Probes: How did you decide what type (confidential or not) to implement? Who was involved in this process?
4. Were there barriers, facilitators, and lessons learned from your experience implementing the near miss system?
5. Did anything change as a result of implementing the near miss system?
6. Explain how employees were informed about how to use the near miss system.
7. How do you know employees are using the system?
8. How is the system promoted?
9. Once a near miss is reported, what is the process?
    a. Who does it go to?
10. How are the learnings from near miss reports shared?
11. Is there anything else you would like to share with me about the near miss reporting system at your company?