



Guide to
**Near-Miss
Reporting**



WSHCOUNCIL

Tripartite Alliance for
Workplace Safety and Health



Contents

What is a Near-Miss?	01
Why Should We Track Near-Misses?	02
What are the Key Components in Near-Miss Reporting?	04
How do we Encourage Near-Miss Reporting?	06
References	08
Annexes	09
Annex A: Template for Near-Miss Report	09
Annex B: Definition of Terms Used	10

What is a Near-Miss?

A near-miss is an incident where no injury and ill-health occurs but has the potential to do so.

The Workplace Safety and Health (WSH) Council had released a video entitled "[Stories of Near-Misses](#)" to share how quick worker response to unsafe situations at work can prevent accidents.

In the first story "*What If I Looked Away*", a lifting team member noticed a tipper bin positioned too close to the travelling path of a gantry crane's leg. He also noticed workers doing painting works next to the bin. He immediately made a report to stop the lifting operation. If the crane had hit the bin, the workers next to the bin could have been injured.

In the second story "*What If I Were Seconds Too Late*", a worker opened a wrong flange in a piping system and high-pressure air suddenly came out. He quickly closed the flange and stopped work. After the incident, the company conducted training for all workers and introduced a system of double checks and final checks to ensure the correct flange was identified before it could be opened.

By interrupting the sequence of events that could lead to an accident, serious injury or harm can be prevented



Why Should We Track Near-Misses?

Managing near-miss events can avoid future accidents from taking place.

Near-misses can happen in any company regardless of industry or scale of operation. Near-miss reporting (NMR) prevents injuries and ill-health at work, and thus improves a company's WSH performance and bottom line. The benefits of NMR are listed below:

Proactive monitoring

Near-misses are symptoms of an undiscovered problem at the workplace and may occur repeatedly before an accident happens. Many companies tend to wait for an accident to happen before taking corrective action.

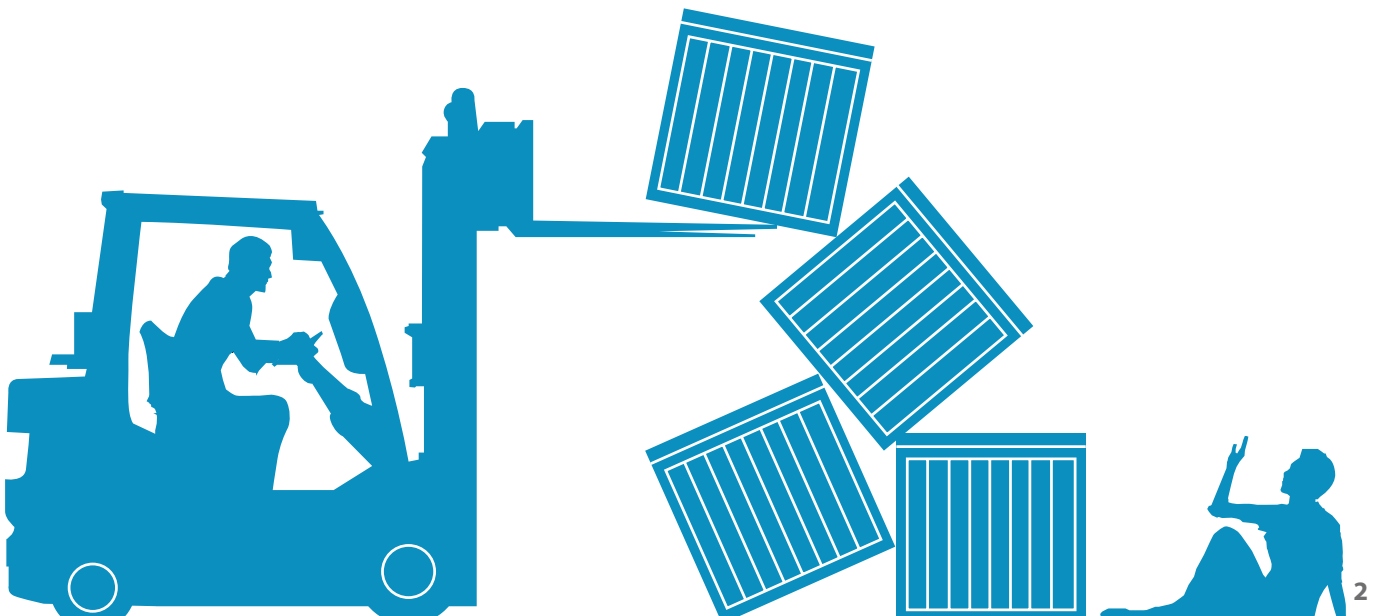
Near-misses is a leading indicator of a company's WSH performance. By tracking near-misses, companies will be able to take preventive action before an accident happens.

Other WSH performance indicators to monitor include incident trends, medical leave trends, inspection or audit findings, and employee feedback.

Zero-cost lesson

Near-miss events are zero-cost lessons as they do not result in worker injury. Companies can learn from them by tracking, analysing, and managing reported near-misses and make workplace improvements.

Acting only after an accident is too late as these accidents would have brought about fatalities or injuries, devastating losses, and extended operational downtime. Massive resources/expenses may also be required for rectification works and additional controls to prevent any recurrence.



It makes better business sense to learn from near-misses to uncover and address WSH risks at the onset before issues are escalated beyond control and result in undesirable outcomes.

Preventive action

Figure 1 shows an accident pyramid adapted from Heinrich's study of workplace accidents.

Heinrich observed that for every accident that results in a major injury, there would be 29 minor injuries, and 300 near-misses. This means frequent occurrences of near-misses is an indication of an accident waiting to happen.

Companies should recognise near-misses as opportunities to identify workplace hazards and take action to eliminate or mitigate the risk of exposure to the hazard.

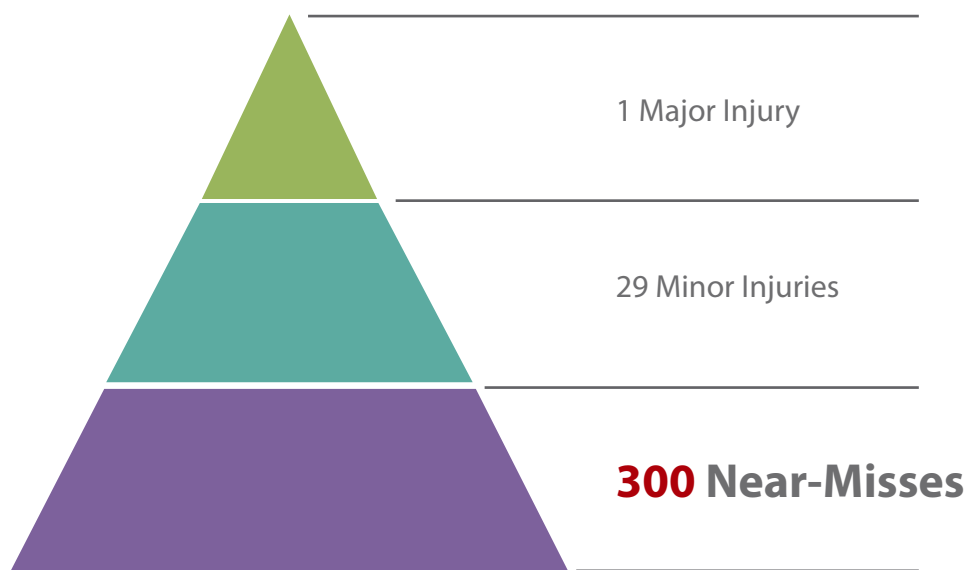


Figure 1: Accident pyramid based on Herbert William Heinrich's findings.

Culture building

Near-miss reporting can be a means to engage and empower workers. It helps companies to improve their communication channels and work environment. It can also foster an open WSH culture where every worker actively participates and contributes towards workplace safety and health.

What are the Key Components in Near-Miss Reporting?

There are five key components in an NMR system. Companies may revise their existing WSH management systems to include these five components of an NMR.



Figure 2: The five components of near-miss reporting.

Identify

Train workers to recognise near-miss incidents. Involve workers in site walkabouts and risk assessments that highlight potential WSH risks in their work areas.

In the beginning, workers may not fully understand the concept of near-misses, hence the quality of near-miss reports coming in may vary. Past reports may be used to refine their understanding of a near-miss incident.

Report

Ensure the process for reporting near-misses is easy to understand and hassle-free. A complicated procedure or a form that asks for many details would discourage reporting.

Keep the form for reporting as simple as possible with just the key facts needed, such as date, time, location and a general description of the near-miss incident.

See Annex A: Template of a Near-Miss Report.



Investigate

When conducting a near-miss incident investigation, probe into what could have happened, and not what had happened. Evaluate the possible consequences of the reported near-miss and rank it by its potential severity and likelihood of occurrence. This is similar to how identified (foreseeable) hazards are risk-assessed.

Find out more about risk assessment in the [Code of Practice on WSH Risk Management](#).

Basic guidance on conducting investigations can be found in [WSH Guidelines on Investigating Workplace Incidents for SMEs](#).

Based on investigation findings, companies should review their WSH management system and initiate company-wide intervention as necessary.

Intervene

Interventions can also take place before or after an investigation.

The staff working in the area where the near-miss took place may suggest or implement temporary solutions to the problem as they are most familiar with the work and the worksite. Encourage workers to take immediate action to temporarily mitigate the danger before investigations begin.

Once investigations are complete, permanent solutions can be implemented.

Review

The data collected from NMR are leading indicators of WSH performance. Use it together with other leading and lagging indicators to evaluate the company's overall WSH performance.

The review can be done on a weekly, monthly or quarterly basis to identify performance trends. Analysing the data provides an opportunity to obtain evidence-based feedback on WSH performance.

How do we Encourage Near-Miss Reporting?

Employee participation is vital for an NMR system to succeed. Workers must understand why NMR is necessary and how they play a critical role in the reporting process.

The following sections covers good practices to encourage workers across all levels to participate in NMR.

Create a culture for reporting

Top management can establish a strong reporting culture, by creating a policy that supports NMR. Middle management can support by being role models and explaining the value of NMR to workers.

Provide training on NMR for new hires as part of their orientation and include NMR into the job scope of every worker.

Some companies may be tempted to set employee quotas for NMR. This may make workers submit poor quality or unhelpful reports for the sake of meeting the quota and not out of genuine concern for WSH. Workers who met their quota for the month may also choose to stop reporting, resulting in some near-misses not reported. Thus, top management would need consider what are the appropriate steps they need to take to ensure the spirit of NMR is not sidelined.

Foster a no-blame environment

It is important to earn workers' trust and create an environment where workers are comfortable to step forward without fear of reprisal.

Some workers may be reserved in voicing out concerns. Reassure workers that information collected will be used for learning and improvement, and not to assign blame.

Companies may consider anonymous reporting to improve the quality of near-miss report submissions, thus making workers more comfortable with sharing information. However, anonymous reporting may hinder information gathering during investigation if further assistance from the reporting worker(s) is needed.



Make the process easy

A complicated or confusing process would discourage workers from reporting. Ensure the reporting process is simple and easy to understand. Keep the NMR form concise and the questions straightforward. If hardcopy forms are used, make them easily available.

Empower workers

Empower workers by establishing clear responsibilities and encouraging them to actively contribute to hazard identification, NMR, and suggesting possible solutions. Companies can also consider empowering workers to stop ongoing work when safety is compromised.

Communicate

Regular communication is key to promoting NMR and sustaining workers' motivation to report. Creating conditions conducive for NMR will encourage workers to do so.

Open communication and a no-blame culture will do well to demonstrate an organisation's commitment to workers' safety and well-being.

Provide closure

Make known to workers the actions taken in response to reported near-misses. Such feedback can be shared at company-wide townhalls, toolbox meetings or internal bulletins.

Feedback motivates workers as they can clearly see their suggestions being valued, how their reports helped improve the workplace, and management's commitment towards WSH.

Provide incentives

Recognise the contributions of workers to NMR by giving due recognition to workers who had submitted a report that led to WSH improvement.

While setting a target (e.g. every team to submit 10 reports per month) may drive up the volume of reports, this may have a negative impact on the reporting culture as the motivation is wrongly placed. Hence, management needs to strike a balance to ensure that the focus of NMR is on improving WSH and not on the quantity of reports submitted.

References

Singapore Standard

- *SS 651: 2019 Safety and Health Management System for the Chemical Industry – Requirements with Guidance for Use*

WSH Council Resources

- *Code of Practice on WSH Risk Management*
- *WSH Guidelines on Investigating Workplace Incidents for SMEs*
- *“Stories of Near Misses” video on WSH Council’s YouTube channel*

Other Resources

- *Guidance on How to Manage Near Misses*, International Social Security Association (ISSA) Section for Electricity, 2023
- *Near-Miss Book: Recording and Reporting Near Misses at Work*, UK Health and Safety Executive, The Stationery Office, 2021
- *Best Practices in Near-Miss Reporting: The Role of Near-Miss Reporting in Creating and Enhancing the Safety Culture*, Ilknur Erdogan, LAP Lambert Academic Publishing, 2013
- *Near Miss Reporting as a Safety Tool*, A.R. Hale, D.A. Lucas, T.W. van der Schaaf, Elsevier Science, 2013
- *Safety Management: Near Miss Identification, Recognition, and Investigation*, Ron C. McKinnon, CRC Press, 2012
- *Industrial Accident Prevention: A Safety Management Approach*, Herbert William Heinrich, Dan Petersen, Nestor R. Roos, McGraw-Hill, 5th Ed., 1980

Annexes

Annex A: Template for Near-Miss Report

You may adopt or make changes to this template to suit your near-miss reporting needs.

Report reference number:	<input type="text"/>		
Department:	<input type="text"/>	Date of incident:	<input type="text"/>
Location:	<input type="text"/>	Time of incident:	<input type="text"/>

Please check the boxes for the type of probable cause (you may select more than one).

<input type="checkbox"/>	Unsafe act	<i>An activity that is carried out in a way that can cause injury or property damage.</i>
<input type="checkbox"/>	Unsafe environment	<i>A condition in the work premise that can cause injury or property damage.</i>
<input type="checkbox"/>	Unsafe equipment	<i>A condition in the work premise that can cause injury or property damage.</i>

Description of incident:

Your suggestion for improvement (optional):

Name (optional):	Contact (optional):	Date of reporting:
<input type="text"/>	<input type="text"/>	<input type="text"/>

To be filled by Management

Potential severity:

Corrective actions taken:

Name (of Management representative)	Contact:	Date completed:
<input type="text"/>	<input type="text"/>	<input type="text"/>

Annex B: Definition of Terms Used

Terms used in this Guide are based on SS 651: 2019 and definitions provided by the Ministry of Manpower. They are:

Incident	Any occurrence arising out of, or in the course of, work that could or does result in injury and ill health.
Accident	An incident where injury and ill health occurs.
Near-miss	An incident where no injury and ill health occurs but has the potential to do so.
Hazard	Any source with a potential to cause injury and ill health.
Injury and ill-health	Something which causes an adverse effect on the physical, mental, or cognitive condition of a person.
Reportable injury	<p>Any injury in a work accident or disease contracted due to work exposure to a biological or chemical agent, resulting in any one of the following:</p> <ul style="list-style-type: none">• outpatient/ hospitalisation leave;• light duty;• death; or• occupational disease.
Major injury	<p>Non-fatal injuries which are more severe in nature. They are defined using a combination of factors, including the nature of injury, part of the body injured, incident type and duration of medical leave. These include:</p> <ul style="list-style-type: none">• Amputation;• Blindness;• Deafness;• Paralysis;• Crushing, fractures and dislocations: head, back, chest and abdomen, neck, hip and pelvis;• Exposure to electric current;• Asphyxia or drowning;• Burns with more than 20 days medical leave;• Concussion with more than 20 days medical leave;• Mosquito-borne diseases with more than 20 days of medical leave; and• Virus outbreak with more than 20 days of medical leave.
Minor injury	Non-severe injuries with any instance of medical leave or light duties.

Published in Feb 2024 by the Workplace Safety and Health Council in collaboration with the Ministry of Manpower.

All rights reserved. This publication may not be reproduced or transmitted in any form or by any means, in whole or in part, without prior written permission. The information provided in this publication is accurate as at time of printing. The Workplace Safety and Health Council does not accept any liability or responsibility to any party for losses or damage arising from following this publication.

This publication is available on www.wshc.sg

