Guide to
Near Miss Reporting

WSHCOUNCIL

Contents

What is a near miss?

A near miss is an unplanned event that did not result in any injury, illness or damage, but had the potential to do so.

The Workplace Safety and Health (WSH) Council produced a short video called "Ying Yang Twins"[1] as part of its education campaign to educate the public on the importance of working safely. In the video, the characters experienced multiple near miss situations due to unsafe acts or conditions; all of which could have led to serious injuries.

In one instance, an assistant cook was pulled aside just in time from scalding hot liquid by his colleague—a female chef with superhuman reflexes. She saved the day (and his life) by preventing slips, and catching falling and flying objects.

The Singapore Standard defines a near miss as an unplanned event that did not result in any injury, illness or damage but had the potential to do so. When the sequence of events that could lead to an accident is interrupted by chance, it prevents any harm or loss from taking place.

[1]You can find the "Ying Yang Twins" on the WSH Council website under the video tab at www.wshc.sg

Why should we track near misses?

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

Near misses happen in all companies regardless of their industry or scale of operation. Hence, all companies can tap on the benefits of near miss reporting to give their WSH journey a boost. The many benefits are described below but ultimately, the main desired outcome is to prevent all injuries and ill-health at work.

Proactive monitoring

Some companies use near misses as a leading indicator of their WSH performance. Near misses can be thought of as symptoms of an undiscovered problem at the workplace. It can occur repeatedly before an accident finally happens. Hence, it is a leading indicator, amongst other safety performance indicators, you should take advantage of. Other safety performance indicators include, but are not limited to, incident trends, medical leave trends, inspection findings, audit findings, and employee feedback.

Companies usually wait for an accident to happen before taking corrective action. By tracking near misses, they can take pre-emptive action before an accident happens.

Zero-cost lesson

Near miss events do not result in personal harm or property damage. By tracking, analysing and managing reported near misses, companies can learn from these zero-cost lessons and make improvements.
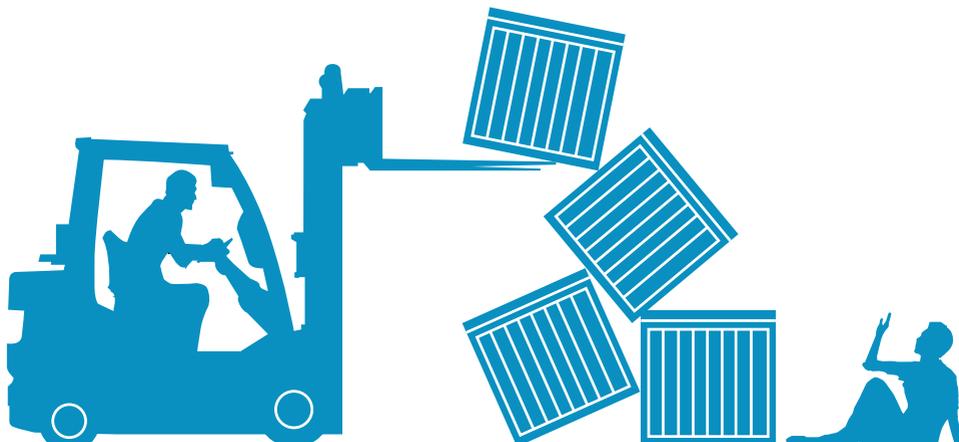
Conversely, acting only after sustaining injuries or damages creates a major hurdle. Every accident will bring about devastating loss and incur massive expenses that will interfere with daily operations. Furthermore, the company has to spend additional resources to prevent a similar accident from happening in the future.

Therefore, it makes better business sense to work with near misses to uncover and arrest hazards at the onset before they escalate to outcomes that are beyond control.

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 accidents with minor injuries, and 300 near misses (i.e., in a ratio of 1:29:300). Although other studies conducted based on Heinrich's theory presented different ratios, the general rule remained—near misses always occur in larger numbers than accidents.

From Heinrich's observation, it is clear that a hazard can manifest its presence through near misses. Companies should recognise that near misses provide the opportunity to identify workplace hazards. Accidents can be prevented once hazards are known and prompt your company to take action to eliminate or mitigate the hazard.

1 Major Injury

29 Minor Injuries

300 Near Misses
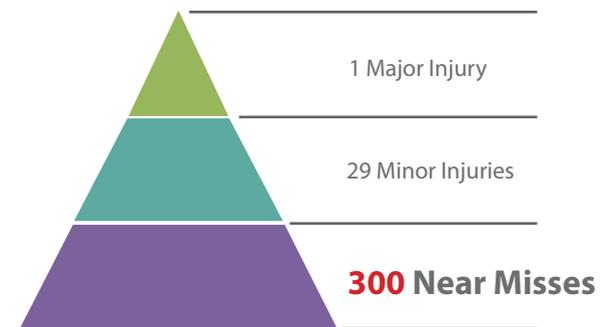
Figure 1: Accident pyramid adapted from HW Heinrich.

Culture building

Near miss reporting can be a means to engage and empower all your employees. It can help your company improve its communication channels and environment. On top of that, it can foster an open WSH culture where everyone shares and contributes in a responsible manner to improve safety and health for themselves and their fellow workers.

What are the key components in near miss reporting?

There is no need to set up a dedicated system for near miss reporting. You can achieve the same outcome by revising your existing safety management system criteria to include near misses. Companies that are new to a reporting culture can refer to the description of the key components in near miss reporting in Figure 2.

Identify → Report → Investigate → Intervene → Review

Figure 2: Five components in near miss reporting.

Identify

Employees need to understand how to properly identify and recognise near miss events. One method of training is to involve employees in job safety analysis or risk assessment that will highlight potential hazards in their work areas. This is extremely important as it will affect the quality of the near miss reports turned in.

In the earlier stages, while employees are still beginning to understand the concept of near misses, the quality of the reports may vary. But over time, you can use past reports to fine-tune their understanding or your company's definition of a near miss event.

Report

A complicated procedure and overly-detailed report would discourage staff. Ensure that the process for reporting near misses is hassle-free and easy to understand. The form for reporting should be kept as simple as possible. Dates, location, and general description of the near miss incident are key information to include in the form.

See Annex A for a template of a near miss report.

Investigate

When conducting an investigation, you should not only look at what had happened, but also probe further into what could have 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 risks are assessed in a risk matrix.

Read more about risk matrices in Code of Practice on Workplace Safety and Health (WSH) Risk Management.

If major injuries or fatalities are likely, a full investigation is encouraged. If the potential consequences were less severe, the hazard can be easily taken care of and communicated to everyone.

Using the investigation findings, intervention efforts can be prioritised accordingly and the risk management system reviewed. Guidance on conducting investigations can be found in *WSH Guidelines on Investigating Workplace Incidents for SMEs*.

Intervene

The staff working in the area where the near miss took place should rectify the problem because they are most familiar with the worksite. Interventions can take place before and after an investigation. Encourage your employees to take action to temporarily mitigate the danger before investigations start. After completing investigations, permanent solutions can be implemented.

Review

The data collected from near misses are leading indicators of your company's WSH performance. Use it together with other WSH safety performance indicators in your evaluation. The review can be done on a daily, weekly or monthly basis to identify trends and provide solutions to remove the hazard. Reviewing and analysing the data is an opportunity to gather feedback on performance and enhance your workplace safety.

How do we encourage near miss reporting?

Employees' participation is vital for near miss reporting to succeed. Therefore, we need to educate them on why near miss reporting is necessary. Employees should also understand that they play a crucial role in the process of reporting. These must be communicated and positively reinforced to all employees across all levels.

Here are some good practices that would encourage employees to participate in near miss reporting.

No-blame culture

Reassure your employees that the information being collected will be used to learn and improve—not to blame or punish.

To improve the quality of report submission, you can consider anonymous reporting. Employees would be more comfortable with sharing information when their identities are kept confidential. However, this could hinder information gathering during investigation when assistance from reporting employees may be needed.

It is important to earn your employees' trust when it comes to reporting. An environment where employees feel comfortable to come forward without any fear of repercussion would make the near miss reporting system a success.

Empower employees

All employees should be empowered to spot and fix hazards at their own discretion before near misses escalate into more severe consequences. Employees usually hesitate to take action because they are unsure if it is their responsibility to do so.

Establish clear responsibilities for your employees and encourage them to cooperate and actively contribute in providing solutions.

Communication

Communication is key in promoting near miss reporting among employees. Regular and consistent communication will help to sustain the interest to report. Combining open communication with a no-blame policy will let employees feel that their suggestions are valued.

Besides highlighting the benefits of near miss reporting, communication is also about sharing near misses that employees could relate to. The sharing can be carried out by supervisors or top management to demonstrate their commitment to the well-being of their employees.

Create a culture of reporting

To establish a strong reporting culture, you should act on every opportunity to identify and control hazards, reduce risk and prevent harmful incidents. The senior management can begin by creating a policy and communicating it to all employees. The support from middle management such as managers and supervisors is vital as they work closely with the workers. Middle management managers should be role models for their subordinates and set a good example to propagate the value of near miss reporting. Besides including near miss reporting into the job scope of employees, you may also consider providing training on near miss reporting for new employees as part of their orientation.

To cultivate the habit of submitting near miss reports or collecting adequate data for analysis, you may be tempted to set quotas. Although quota-setting may help set a clearer target and expectations on a new reporting programme, it could also dilute the quality of the information you receive. If made compulsory, employees may submit reports for the sake of meeting the quota, and not out of genuine concern for safety. Employees who met their quota for that period of time may also choose to stop reporting; hence some near misses would not be identified.

Easy to understand and use

A complicated or confusing process will likely discourage employees from reporting. Therefore, it is important to ensure that the reporting process is easy to understand and implement.

The form should be kept concise and questions straightforward so employees can easily learn how to use them. Lastly, obtaining the forms should also be convenient so employees can record and submit a report readily.

Feedback

Staff should be made aware of actions that are taken in response to reported near misses. It can be shared at company meetings and project sites via platforms such as toolbox meetings.

Feedback motivates employees to do near miss reporting as they can see that their suggestions are valued and help shape their workplace. In the event that more time is needed to rectify the condition, feedback will also reassure employees that their contributions are not being overlooked.

Incentives

One possible method to promote and encourage near miss reporting is to offer incentives to employees. An example of a good incentive is one that recognises the participation of employees in the recognition and reporting of hazards. For instance, giving due credit to employees who had submitted reports that helped avert potentially disastrous accidents.

Acknowledging contribution from your staff helps to nurture a stronger reporting culture and better engage employees in purposeful WSH activities.

An example of a poor incentive is one that measures performance by placing focus on statistics and setting numerical targets. This will have a negative impact on the reporting culture because the driving force behind reporting is to meet targets.

References

WSH Council Guidance Materials
- *Investigating Workplace Incidents for SMEs*
- *Code of Practice on Workplace Safety and Health (WSH) Risk Management*

Industry Standard
- *SS 506: 2009 – Singapore Standard on Occupational Safety and Health Management by Spring Singapore*

Other Resources
- *Industrial accident prevention: A scientific approach,* Herbert William Heinrich.
- *Near Miss Reporting Systems Case Study,* National Safety Council, USA, May 2013.
- *Near Miss Reporting,* Occupational Safety & Health Administration.
- "Reporting Near Misses – Why are they important and how can safety professionals get employees involved?" *Safety + Health Magazine.*

Annexes

Annex A: Template for Near Miss Report

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

	Report reference number: _____
Department: _____	Date of incident: _____
Location: _____	Time of incident: _____

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

☐ Unsafe act — *An activity that is carried out in a way that can cause injury or property damage.*

☐ Unsafe environment — *A condition in the work premise that can cause injury or property damage.*

☐ Unsafe equipment — *A fault with the work equipment that can cause injury or property damage.*

Description of incident:

_____

_____

_____

_____

Your suggestion for improvement (optional):

_____

_____

_____

_____

Name (optional):	Contact (optional):	Date of reporting:

- -

To be filled by Management

Potential severity: _____

Corrective actions taken:

_____

_____

_____

_____

Name (of management):	Contact:	Date completed:

Annex B: Definitions

The following definitions apply for terms used in this Guide:

Incident

Work-related event(s) in which an injury or ill-health (regardless of severity) or fatality or property damage or losses occurred, or could have occurred.

[SS 506 : Part 3 : 2013]

Accident

An incident that has resulted in injury or ill-health or fatality.

[SS 506 : Part 1 : 2009]

Near miss

An unplanned event that did not result in injury, illness or damage but had the potential to do so.

[SS 506 : Part 3 : 2013]

Hazard

Source or situation or act with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.

[SS 506 : Part 3 : 2013]

Reportable injury

Any injury or ill-health resulting in the following:

a. Hospitalisation more than 24 hours

b. Medical leave more than 3 cumulative calendar days (for the same diagnosis)

c. Diagnosed with occupational disease.

Major injury

Non-fatal injuries which are more severe in nature, 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:

- amputation;
- blindness;
- deafness;
- paralysis;
- crushing, fractures and dislocations: head, back, chest and abdomen, neck, hip and pelvis;
- exposure to electric current;
- acute illness requiring medical treatment or loss of consciousness from exposure to chemical and/or biological agents;
- asphyxia or drowning;
- hypothermia;
- burns with more than 20 days of medical leave; and
- concussion with more than 20 days of medical leave.

Minor injury

All non-reportable injuries that did not result in death or major injuries.

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Workplace Safety and Health Council
Website: www.wshc.sg
Email: contact@wshc.sg