

# OHS Program: 8 Steps for Effective Near Miss Management



Getting workers to report safety incidents is hard enough; getting them to report near misses can seem impossible. As a result, many near misses go unreported. But near misses are a valuable source of information for safety coordinators as they provide an opportunity for you to identify hazards or weaknesses in your OHS program and make corrections to prevent future incidents. Two papers from researchers at the Wharton School at the University of Pennsylvania provide some insight on how to effectively manage near misses. We'll tell you what these papers have to say and how to apply their findings in your workplace.

**MODEL REPORTING FORM:** [Download a Model Near Miss Reporting Form you can adapt for use in your workplace.](#)

## LEARNING FROM NEAR MISSES

The Wharton School researchers explain that it's long been recognized that by focusing on minor incidents, such as near misses, it's possible to reduce the probability of having major incidents. Think of the well-known safety pyramid. Near misses, which are at the base of the pyramid, occur much more frequently than serious incidents. They're also smaller in scale, often simpler to analyze and easier to resolve. And

usually each major incident can be linked to a number of minor ones that happened earlier. So by addressing the causes of these precursor events effectively, you can avoid more serious—and costly—incidents and/or minimize the damage that they might cause if they occur.

*Example:* Several rows of shelving collapse in a storeroom. No one is hurt and only minor property damage is done. However, an investigation into this near miss or minor incident may reveal that the shelves collapsed because they weren't installed properly, were damaged or were overloaded. Once you know what caused this incident, you can take steps to prevent a similar collapse from happening in the future, such as by ensuring that shelving is properly installed, repairing or replacing damaged shelving or setting rules for storing materials on shelves to prevent overloading.

## **COMPONENTS OF EFFECTIVE NEAR MISS MANAGEMENT**

The Wharton researchers conducted over 100 interviews of employees at all levels of various Fortune 500 companies and concluded that there are eight components of an effective near miss management program:

### **1. Broad Definition of Near Miss**

The first step is identifying what constitutes a “near miss.” So you need a clear definition of this term. And everyone must be trained on this definition and how it applies in the workplace. The researchers recommend that your definition of “near miss” be broad and cover a wide variety of events, such as:

- Unsafe conditions;
- Unsafe behaviour;
- Minor incidents/injuries that had potential to be more serious;
- Events where injury could have occurred but didn't;
- Events where property damage resulted or could have

- resulted but didn't;
- Events where a safety barrier was challenged, such as a worker bypassing a machine guard; and
- Events where potential environmental damage could result.

The researchers note that there's merit in distinguishing these categories and addressing them by different means. But because the overriding objective is to improve workplace safety, encompassing these events in one broad definition is also beneficial.

*The recommended definition:* "A near miss is an opportunity to improve health and safety in a workplace based on a condition or an incident with potential for more serious consequences."

## **2. Reporting**

You can't manage near misses and learn from them unless you know they're occurring. So once a near miss is identified, it should be reported, preferably in writing, by either the person who identified the near miss or by a supervisor to whom a near miss was reported verbally by someone else. The researchers recommend having a clear and simple procedure for reporting near misses to encourage this process and increase the probability of reporting near misses.

The OHS laws, either directly or implicitly, require workers to report near misses. (The chart below notes the language in each jurisdiction's OHS act that contains or suggests this requirement.) But workers may still be reluctant to report near misses. They may be afraid of being disciplined if the near miss involved a violation of your safety rules or procedures. Or they may not believe management will actually do anything to improve safety if they report a near miss. So they stay mum about their close calls.

To overcome workers' reluctance to reporting near misses, train them on the value of near misses and their role in

properly managing these events. This type of training should cover the following:

- What near misses are and how you can identify them;
- Why near misses are important;
- The role of each person involved in near miss reporting;
- What a near miss management system is and how it works, including the responsibilities of all management levels;
- How to report a near miss; and
- How to prioritize a near miss.

You can also encourage near miss reporting by providing incentives or by telling workers that they'll be disciplined for *not* reporting near misses. And taking swift action in response to a reported near miss can also encourage reporting because it demonstrates to workers that management is actually listening to them and taking safety seriously.

But the researchers don't recommend that you allow anonymous near miss reporting for two reasons. First, it's often necessary to follow-up with the person who reported the event to determine its root cause. Second, anonymous reporting suggests that near misses are unfavorable and undesirable events.

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### **3. Prioritization**

Once a near miss is reported, you need to prioritize it. This critical step determines:

- The path to be followed in the subsequent steps;
- The amount of attention that will be given to the incident;
- The depth of analysis that will be performed in finding its causes;
- The amount of resources that will be dedicated to

- finding and implementing solutions; and
- The extent to which the information about this incident will be disseminated throughout the company.

Not all near misses are high priority nor are all of them low in priority. But although labelling a large number of near misses as high priority may overburden the management program, having all near misses as low priority items prevents identification of major issues. And if a seemingly simple, low priority near miss happens too often, it should increase in priority. So it's important to monitor the system to ensure that near misses are properly prioritized. Adequate training of those people who'll most likely determine the priority of a near miss when it's reported, such as supervisors or members of the JHSC, can help you achieve this goal.

#### **4. Distribution of Relevant Information**

Information about the incident should be distributed to the people who'll be determining its cause. Who the appropriate people are will depend on the priority and nature of the near miss. So develop distribution procedures for various priority levels. But keep in mind that the goal is for the information to:

- Be transferred quickly;
- Reach all appropriate people; and
- Be presented in a useful and understandable format.

#### **5. Determination of Cause**

Next, you need to identify both the direct and root causes of the near miss. If the causes aren't readily apparent, you may need to form an investigative team to look into the event. But conducting a root cause analysis of a near miss is no different than doing one for an incident in which a worker was injured or killed.

## **6. Identification of Solutions**

For each identified cause of a near miss you need to identify a solution. In some situations, several causes can be corrected with a single solution. In others, there may not be a feasible, effective solution to eliminate the hazard, so you may need to take a less than ideal corrective action. Generally, for an identified near miss, safety improvements can be ranked from most to least beneficial as follows:

- Elimination of the cause of the hazard;
- Reduction of the potential hazard level or degree of risk of exposure to it;
- Installation of safety devices;
- Installation of warning signs to alert people to the hazard;
- Implementation of new safe work procedures to account for the hazard; and
- Increased worker awareness of the hazard, such as through safety talks.

## **7. Implementation of Solution**

Once you identify the necessary solutions, you should implement them and inform anyone affected by the particular near miss, such as workers and supervisors who work with the equipment involved or in that section of the workplace. And if the solution includes new or revised safety procedures, make sure to train all workers who'll have to use these procedures.

## **8. Monitoring**

Implementing the solution to a near miss isn't the end of the process. You should carefully monitor the changes made to ensure that they effectively address the causes of the incident. In addition, remedying one problem can sometimes create other unforeseen hazards, particularly for subtle changes. Thus, managing these changes and ensuring no new hazards are created is critical to the success of a near miss

program. And make sure that the person who reported the near miss is aware of the outcome of this process.

### **BOTTOM LINE**

Near misses are a largely untapped safety improvement resource, say the Wharton researchers. An effective near miss management program can help you tap the potential of this valuable source of safety information and use it to improve your workplace's overall OHS program.

### ***INSIDER SOURCES***

["Near Miss: A Tool for Integrated Safety, Health, Environmental and Security Management,"](#) Ulku G. Oktem, PhD, the Wharton School, University of Pennsylvania, Risk Management and Decision Processes Center, Nov. 14, 2002

["Near miss System Analysis: Phase 1,"](#) James R. Phimister et al, the Wharton School, University of Pennsylvania, Risk Management and Decision Processes Center, Dec. 2000

<b>DUTY TO REPORT NEAR MISSES</b>	
Here's language in your jurisdiction's OHS act that either expressly or implicitly requires workers to report near misses:	
<b>REQUIREMENTS</b>	<b>LAW</b>

<p><b>FED</b></p>	<p>While at work, every worker must report to the employer:</p> <ol style="list-style-type: none"> <li>1) any thing or circumstance in a workplace that's likely to be hazardous to the worker's health or safety or that of other workers or other persons granted access to the workplace by the employer [Part II, Sec. 126(1)(g)]; and</li> <li>2) any situation that the worker believes to be a violation of this Part by the employer, another worker or any other person [Sec. 126(1)(j)].</li> </ol>	<p><a href="#"><u>Canada Labour Code</u></a></p>
<p><b>AB</b></p>	<p>Every worker must, while engaged in an occupation:</p> <ol style="list-style-type: none"> <li>1) take reasonable care to protect his health and safety and that of other workers present while he's working [Sec. 2(2)(a)]; and</li> <li>2) co-operate with the employer for the purposes of protecting the health and safety of the worker, other workers engaged in the work of the employer and other workers not engaged in the work of that employer but present at the work site at which that work is being carried out [Sec. 2(2)(b)].</li> </ol>	<p><a href="#"><u>OHS Act</u></a></p>

<p><b>BC</b></p>	<p>A worker must:</p> <ol style="list-style-type: none"> <li>1) take reasonable care to protect his health and safety and that of others who may be affected by his acts or omissions at work [Part 3, Sec. 116(1)]; and</li> <li>2) report to the supervisor or employer: <ol style="list-style-type: none"> <li>a) any violation of this Part, the regulations or an applicable order of which he's aware; and</li> <li>b) the absence of or a defect in any protective equipment, device or clothing or the existence of any other hazard that he considers likely to endanger himself or any other person [Sec. 116(2)(e)].</li> </ol> </li> </ol>	<p><a href="#"><u>Workers Compensation Act</u></a></p>
<p><b>MB</b></p>	<p>Every worker while at work must take reasonable care to protect his safety and health and the safety and health of other persons who may be affected by his acts or omissions at work [Sec. 5(a)].</p>	<p><a href="#"><u>Workplace Health and Safety Act</u></a></p>
<p><b>NB</b></p>	<p>Every worker must:</p> <ol style="list-style-type: none"> <li>1) conduct himself to ensure his own health and safety and that of other persons at, in or near his place of employment [Sec. 12(b)]; and</li> <li>2) report to the employer the existence of any hazard of which he's aware [Sec. 12(c)].</li> </ol>	<p><a href="#"><u>OHS Act</u></a></p>

<p><b>NL</b></p>	<p>A worker must:</p> <ol style="list-style-type: none"> <li>1) while at work, take reasonable care to protect his own health and safety and that of workers and other persons at or near the workplace [Sec. 6]; and</li> <li>2) co-operate with his employer and with other workers in the workplace to protect: <ol style="list-style-type: none"> <li>a) his or her own health and safety;</li> <li>b) the health and safety of other workers engaged in the work of the employer; and</li> <li>c) the health and safety of other workers or persons not engaged in the work of the employer but present at or near the workplace [Sec. 7(a)].</li> </ol> </li> </ol>	<p><a href="#"><u>OHS Act</u></a></p>
<p><b>NWT/NU</b></p>	<p>Every worker employed on or in connection with an establishment must, in the course of his employment, take all reasonable precautions to ensure his own safety and the safety of other persons in the establishment [Sec. 5(a)].</p>	<p><a href="#"><u>Safety Act</u></a></p>
<p><b>NS</b></p>	<p>Where a worker believes that any condition, device, equipment, machine, material or thing or any aspect of the workplace is or may be dangerous to his health or safety or that of any other person at the workplace, he must immediately report it to a supervisor [Sec. 17(2)].</p>	<p><a href="#"><u>OHS Act</u></a></p>

<p><b>ON</b></p>	<p>A worker must report to his or her employer or supervisor:</p> <ol style="list-style-type: none"> <li>1) the absence of or defect in any equipment or protective device of which he's aware and which may endanger himself or another worker [Sec. 28(1)(c)]; and</li> <li>2) any contravention of the Act or the regulations or the existence of any hazard of which he knows [Sec. 28(1)(d)].</li> </ol>	<p><a href="#"><u>OHS Act</u></a></p>
<p><b>PE</b></p>	<p>If a worker believes that any item, device, material, equipment or machinery, condition or aspect of the workplace is or may be dangerous to his occupational health or safety or that of other persons at or near the workplace, he must immediately report it to a supervisor [Sec. 16(2)].</p>	<p><a href="#"><u>OHS Act</u></a></p>
<p><b>QC</b></p>	<p>A worker must:</p> <ol style="list-style-type: none"> <li>1) take the necessary measures to ensure his health, safety or physical well-being [Sec. 49(2)];</li> <li>2) see that he doesn't endanger the health, safety or physical well-being of other persons at or near his workplace [Sec. 49(3)]; and</li> <li>3) participate in the identification and elimination of risks of work accidents or occupational diseases at his workplace [Sec. 49(5)].</li> </ol>	<p><a href="#"><u>Act respecting occupational health and safety</u></a></p>
<p><b>SK</b></p>	<p>Every worker, while at work, must take reasonable care to protect his health and safety and the health and safety of other workers who may be affected by his acts or omissions [Part II, Sec. 4].</p>	<p><a href="#"><u>OHS Act</u></a></p>

<b>YT</b>	<p>Every worker must, so far as is reasonably practicable, in the course of employment:</p> <ol style="list-style-type: none"><li>1) report immediately to their immediate supervisor any situation which he has reason to believe would present a hazard and which he can't correct [Sec. 9(d)]; and</li><li>2) report any accident or injury that arises in the course of or in connection with his work [Sec. 9(e)].</li></ol>	<a href="#"><u>OHS Act</u></a>
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