

# HSE BULLETIN

HEALTH . SAFETY . ENVIRONMENT



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## NEAR MISS

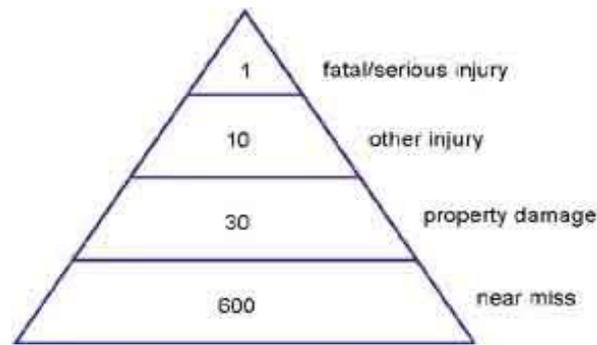
### What is near miss?

Near miss is a condition or situation where an accident nearly occurs. It can be simply translated into "close to mishap" and according to OHSAS 18001:2007, near miss is an incident not resulting in injury, illness or fatality.

A near miss, despite its being harmless, has to be reported. Reporting and controlling of causes of the near miss has many benefits. In many cases of accident, the real accident is preceded by repeated near miss incidents. A simple example of near miss is when we walk in the work area and get stumbled but we do not fall down. The point is when we got a near miss incident, we would usually sigh and say "luckily it's almost".

### Near Miss in Accident Ratio

Near miss basically refers to potential accident. This was first stated by Heinrich who conducted statistical research on accidents and made a pyramid of accidents that is currently known as the accident ratio. The results of this study were then refined in 1960 by an industrial insurance specialist named Frank Bird in the Pyramid of Occupational Accidents as follows:



In his explanation, Bird stated that accidents primarily have pattern where all types of accident are preceded by near miss. From his research, Bird stated that in every 600 cases of near miss there would be 30 cases of accident resulting in damaged, 10 cases of accident resulting in light injury, and up to 1 case of accident resulting in fatality or serious injury.

Therefore, we should not underrate or underestimate near miss because it is forerunner of occupational accident resulting in fatality. It is best to report near miss directly to first line manager for the hazards to be eliminated immediately.

### **How to classify incidents into near miss?**

To facilitate the classification of incidents into near miss category, we can refer to "Contact and Exchange of Energy" in which risky action or condition will result in energy exchange and contact in an accident where an individual's body or piece of equipment is exposed to external forces which is greater than its resistance, causing injury or damage. Whereas in a near miss, there is a luck factor causing the absence of energy contact or the existing energy is not great enough to cause harm.

### **What triggers accidents?**

1. Direct causes of accidents can be categorized into:
  - a. Unsafe Action; individuals' attitudes at work that do not follow the procedures
  - b. Unsafe Condition; the surrounding situations or conditions of individuals at work that are not safe.
2. Basic causes that result or encourage direct causes can be categorized into:
  - a. Personal Factors; inner factors within the individuals of workers/casualties encouraging them to conduct unsafe actions.

- b. Occupational Factor; e.g. lacking of leadership, insufficient material and equipment, the absence of work standards, work shift pattern.
3. Lacking of Control; it is simply translated as management's failure in meeting and enforcing standards at work environment.



### Tips

- Never underestimate Near Miss incidents as they can be indicators of fatality.
- When you experience Near Miss incident at work, immediately report it to the line managers who will further report to QHSE for written reports and follow up actions.
- Recognize the situation at your work location, immediately report any identified unsafe condition and/or unsafe action to the PIC for immediate follow up actions to prevent higher risk near miss or fatality.

### Sources:

1. Training Material of General AK3 PT Indo Training regarding Occupational Accident, 2014.
2. HSE Group Discussion Material – Balikpapan: Terms in Occupational Health & Safety Reporting, 2017.
3. E-Book Safety Management: Near miss Identification, Recognition and Investigation, Ron C. McKinnon, CSP, 2012.