

Near Miss Stats and Facts

DID YOU KNOW?

Near miss incidents, close calls, or close shaves have often been referred to as “safety in the shadows,” as this is where the heart of the accident problem lies. Near miss incidents offer management an opportunity to rectify a system breakdown before it happens. They are inexpensive learning opportunities. Because there are no losses as a result of an undesired event does not necessarily mean that the event is insignificant. Many of these seemingly unimportant events have high potential for injury and other losses. If recognized, reported, and rectified, near miss incident root causes will be eliminated leading to a radical reduction in injury-causing accidents.

Research of thousands of undesired (accidental) events has shown that the outcome of the event cannot be predicted and that, under slightly different circumstances, the consequences could have been better or worse if it were not for some factor of luck or good fortune.

The principle of multiple causes indicates that accidents are usually the result of a multitude of causes and there are usually many immediate causes and numerous root causes behind every event.

These loss-producing events are termed accidents. Some refer to them as incidents, but, for clarity, they will be referred to as accidents in this publication. No-loss events with potential for loss will be termed near miss incidents.

The high risk acts of a worker or a high risk work environment riddled with hazards, or a combination of both, are the immediate causes or the closest causes of an accident, which results in accidental losses, such as death, injury, property damage, fire, or business interruption. High risk acts and/or conditions are the most obvious accident causes, or the causes that lead to the contact with a source of energy that causes the subsequent loss.

Root, or basic, causes are the deep hidden person and job factors that give rise to the immediate causes in the form of high-risk acts and/or conditions. If they are not identified and rectified, the accident problem will not be eliminated. Fixing the immediate causes rectifies the symptom, but not the root or basic cause. Risk assessment of all near miss incidents will determine which near miss incidents warrant a full investigation to track and eliminate the source of the problem at the root.

Near misses don't exist in a vacuum. Conoco Phillips Marine conducted a study in 2003 that examined at-risk behaviors, near misses, injuries, and fatalities. The study found that, for every fatality, there are at least 300,000 at-risk behaviors (such as skipping a safety step to save time).

300,000 at-risk behaviors (estimated)

3,000 near misses (estimated)

300 recordable injuries

30 lost workday cases

1 fatality

2,953,500 injuries and illnesses to private-sector workers in 2014.

4,821 worker deaths in 2014

8,092 injuries and illnesses to private-sector workers in 2014

13 worker deaths per day in 2014

Most safety managers do not usually put much credence to near-miss accidents. Most employees do not even consider reporting them when one happens to them or a coworker, dismissing it as a "no harm done" incident. However, near-miss accidents could be opportunities for corrective actions to prevent serious injuries or even worse, fatalities in the workplace.

Let's start out with some sobering statistics reported by the U.S.

Occupational Safety and Health Administration (OSHA) and the U.S. Bureau of Labor Statistics:

- In 2018, there were 2.8 million lives impacted by workplace incidents that resulted in injury or illness.
- 900,000 of those incidents were so harmful that workers needed days away from work to recuperate.
- Out of all goods-producing industries, the manufacturing industry had the highest rate of incidents resulting in days away from work.
- 14 workers died per day in work-related incidents, which was a 2% increase from the year before.

According to the NSC, “a Near Miss is an unplanned event that did not result in injury, illness, or damage – but had the potential to do so. Only a fortunate break in the chain of events prevented an injury, fatality or damage; in other words, a miss that was nonetheless very near.”

The NSC points to faulty processes or management systems as the most common root causes of near misses. When near misses go unreported, accidents are likely to occur.

Simply, reporting a near miss isn't enough. Each report must be thoroughly investigated in order to identify the root cause. After the root cause is identified, corrective actions must be taken to eliminate the likelihood of injury, damage or loss. Corrective actions can take many different forms including:

- Safety training
- Process changes
- Maintenance
- Procurement of protective equipment and more

To make the most out of any near miss reporting system, you should establish a reporting culture and conduct all investigations in a timely manner and make the entire process simple.