

# Near Miss

## INCIDENT

An event or incident in a Near-Miss lethal accident case are in the of a Tertiary Care Hospital.

### Case History:

A fifty-five-year-old man was taken up for MRI of the lumbosacral spine for detecting metastases from bronchogenic carcinoma of the lung. He was accompanied by his son (a government security officer) who was allowed with him for assistance in the MRI scanner room. Both the patient and accompanying person were verbally asked to remove all ferromagnetic unsafe objects, from their possession. The accompanying person wore a jacket with a pistol in the inside pocket, which was inadvertently forgotten and not removed. As a result, when the patient's son neared the magnet, he felt a strong pull towards the magnet of the scanner. He was frightened and quickly pulled off his jacket which flew to the magnetic bore where it was lodged. The examination was abandoned at the time. Fortunately, the jacket could be removed along with the pistol by a careful and sustained pull, without quenching the magnet without damage to all the persons in the magnet room, computer room, or the equipment. Otherwise, quenching the magnet would have been required as suggested by engineering department.

In the case under discussion, although the pistol of the officer was dual locked, the magnetic pull could have unlocked the pistol and a potentially fatal accident could have occurred.

## NEED TO KNOW

A near miss is a chain of events that very nearly results in property damage, serious injury, or death, but not quite. The official definition of a near miss is: "an unplanned event that had the potential to result in an injury or physical damage (but did not)."

A near miss is not a lucky break. A near miss is an indication of

a problem, either systematic or mechanical, that has very real potential for hazard. It's a red flag calling for change to ensure that a similar situation in future doesn't result in worker injuries or deaths.

A near miss can occur in virtually every industry. Many incidents of property damage, injury or death can be predicted by near misses. Engaging a near miss as a preemptive problem-solving opportunity is crucial.

## **BUSINESS / REGULATIONS**

The conclusions set out very clearly the limitations and shortcomings of the policies and procedures of MRI in place at the time incident described.

- Faulty design and consequent improper zoning of the MRI section of the hospital,
- unrestricted access of patients and their attendants,
- incomplete screening partly due to
- inadequate training of the personnel, including doctors and technologists, and
- absence of signage and posters.

These conclusions drawn about the incident reveals a system of near-miss reporting.

## **STATISTICS**

- According statistics provided by Safety Unlimited INC, about 3 billion "close calls" or "near misses" occur annually in the U.S workplaces. Statistics show that for every 300 near misses, 29 minor injuries occur, along with one injury serious enough to keep the injured out of work.
- Report by Houston Business Bureau, Cll and Exxon Chemical estimates about 1,000 near miss events for every fatality. According to the Bureau of Labor Statistics, 4,836 people died in workplace accidents in 2015 – which equates to nearly five million near misses.

Even though 85.66% of companies track near misses and 71% of

employees say safety training was part of their new employee orientation, the vast majority of near misses go unreported.

- The National Safety Council provided a recent survey that 50% of workers said they were afraid to report safety issues.
- The National Safety Council survey said 76% of workers agreed with management that they care about employee safety.
- Researchers estimate that near misses cost organizations over 6 trillion dollars which is twice as much as serious incidents or fatalities.

## **PREVENTION**

Specifically, the incident was an eye opener regarding potential adverse events lurking in the relatively safe MR environment and provides an opportunity to rectify the inadequacies in MR safety. It is recommended that guidelines should be followed, MR safety manual developed and used. Adequate screening and warning systems should be established. A system of reporting of the near-miss/adverse incidents should be established in the hospital.

Generally, several solutions can be put forward to achieve a culture-based safety system:

- Define expectations that all employees report unsafe conditions or perceived risks
- Provide employees with safety training
- Provide measurement for how near-miss reporting has improved safety performance
- Recognize and reward employees and crews for pro-active safety actions.
- Close call incidents trigger the fact that something is seriously wrong. They allow us the opportunity to investigate and correct the situation before the same thing happens again and causes an injury or death.
- Experience has proven that if the causes of accidents are not removed, the potential for an accident will occur again and again. Unfortunately, a typical story told after many accidents is; "Yeah, that happened to Jim as well – just

last week!”

- Why are close call incidents not reported? Typical reasons are: fear of reprimand or repercussions, red tape, not being aware of their importance in controlling future accidents, embarrassment, the spoiling of a safety or production record or lack of feedback when similar issues have previously been raised.
- If you keep silent about a close call – you may avoid having to deal with it. But try to explain that to a co-worker who ends up in a wheelchair because of a hazard that you knew existed but were too proud to talk about.
- Controlling close call incidents is really the secret to reducing the overall frequency of accidents. One survey of 300 companies discovered that for every 600 close call incidents, they had 30 property damages, 10 minor accidents and 1 very serious accident.
- Close call incident reporting is a very valuable tool in helping us all manage an effective safety program.
- But the vital part is to apply corrective action immediately. The only way this can be done is if a close call is reported immediately after it has occurred. This way we can learn as much as possible.