**TOOLBOX TALK - Near Miss accident theory**

A near miss is an event or hazard that does not result in injury, illness or damage, but had the potential to do so. Near misses must be reported, regardless of how severe, in order to ensure that the appropriate steps are taken to prevent a recurrence in which serious injury or loss may occur.

Near misses happen in the construction industry on a regular basis. We can recognize near misses and use them as a tool to change processes and prevent future incidents and serious injuries from happening. With proper reporting and investigation, these incidents should never reoccur.

**Examples of Near Misses**

* A worker not wearing the proper PPE for the job
* A worker not following proper procedures or safe work practices
* A person slips on ice, but does not fall or hurt themselves
* Tool malfunctions or misuse
* A tool that is dropped and lands beside another person
* A missing guard rail and a person nearly slips into the opening
* Nearly hitting underground utilities or lines
* Using the top of the step ladder as a step
* Equipment nearly contacting overhead power lines

**Accident Theory and the Accident Pyramid**

Many safety practices are reactive and not proactive as they tend to happen after a near miss or loss has already occurred. We must be proactive in our approach to safety and help protect our most important assets - our employees. There is a theory suggesting there is a ratio between the number of serious accidents compared to the number of near misses or close calls. This is called the Accident Pyramid. In essence what the triangle portrays is that for every 600 near misses there are typically 30 property losses, 10 lost time accidents and one major accident. The top three levels are part of the reactive process of an accident where it is too late: damage has occurred, and people are hurt. Focusing on the lowest level, the proactive process provides an opportunity to: make changes to policy, procedure, practice, job task, and habit; implement a new tool or PPE; and/or engineer a solution. Investigations of serious accidents often reveal earlier incidents of a similar nature that were dismissed.

**Why Investigate and Discuss a Near Miss?**

Investigation into near misses could help prevent an injury or even a fatality. Near miss reports and findings should be discussed in regularly scheduled meetings with employees from each shift to create awareness and to seek additional ideas or corrective actions from the people that perform the work every day. Positive change can result. For example, if five near misses are reported and then through your investigation, your team discovers three positive changes for each near miss, it would result in 15 positive changes that otherwise may have resulted in damage, injury or worse.