



## Why the word “Zero” is a Rational part of a stated Safety Goal

It is common to hear from knowledgeable safety specialists, that we who seek a goal of “zero injury” outcomes face at least four problems.

### The Safety Specialists’ Four Problems

1. Using the term “zero injury” in the real world of the construction/maintenance workplace ignores that it is statistically impossible for a group of employees to achieve zero results due to the nature of man and the ever-present risk taking.
2. Using “zero injury” implies you are not concerned with all of safety, but only that which results in an injury. What about safety incidents that occur with no injury?
3. Leaders using the term “zero recordable injury” to establish safety goals promote the possibility of loyal employees not reporting injuries and creates the temptation for management to falsify injury classification.
4. Using “zero lost time injury” in a goal statement ignores the fact that this measurement leaves one accepting an unlimited number of injuries such as restricted duty, job transfer and first aid cases.

### The Zero Injury Users’ Response

On the premise that these problems are hindering many construction industry participants from embracing the now proven zero injury safety performance goal, NAC has formally promoted the Construction Industry Institute (CII), zero injury research through its NAC Safety White Paper (SWP) series. These SWPs are designed to inform those not using “zero” that these problems do exist and how to apply research based safety strategies to avoid them as follows:

1. When properly used, the term “zero” is ideologically coupled with the term “zero at-risk behavior,” the latter being the root cause of all unwanted events. These terms are used to communicate safety goals that keep the subject of working safe personal to the employees. When employees are personally focused on working safe, all incidents can be prevented more effectively. In keeping the focus personal, the individual worker and the leader automatically promote the avoidance of “at-risk behavior” by all employees.
2. The argument that “zero” is statistically impossible, while true for the long term, is not true for the short term. Replicating the “zero” performance being achieved by many employers promises to improve performance for all to work longer periods with zero injury.
3. There are many reasons injuries are not reported, none of them good. It is a leader’s responsibility to create a team safety consciousness that understands not reporting any injury and gaining the knowledge needed to prevent the next injury, is another form of “at-risk behavior.” Creating an atmosphere where all team members see the importance of integrity in enlisting everyone to report any injuries, will begin to build a culture of injury prevention and eliminate “at-risk behaviors.” It is in this manner that a goal of “zero” is achieved.
4. The word “zero” in a lost time injury goal statement is only the first step in the hierarchy of the progressive zero injury chain of goals. As success comes in achieving zero lost time injuries, those companies seeking continuous improvement will begin setting zero recordable goals and eventually progress to a zero harm goal. Many of the

safety leaders in the engineering and construction industry have already moved their safety goal to “zero harm,” one that seeks to eliminate all injuries including first-aid cases and other types of incidents.

CII member reported safety performance on over 3.3 billion work hours, reached a combined Total Recordable Injury Rate (TRIR) per 100 workers of 0.26. This is 12 times better than the U.S. Bureau of Labor Statistics (BLS) national average for 2016 of 3.2 TRIR. In doing so, CII members experienced 48,510 less recordable injuries than average industry members.

Over the last 30 years, CII has conducted multiple instances of academically-led research seeking safety best practices, that when used in an informed manner, result in zero injury. Application of these best practices by enlightened and committed employers is resulting in millions of work hours free of OSHA recordable injuries.

Remember: Doubting that Zero injury can be achieved on a project is your enemy. Dozens of reputable companies are achieving zero injury results and are dramatically improving their safety outcomes as they do so. Working more hours with no injury/incident (Zero) is the only statistical path available to improvement. NAC urges any doubting reader to become a believer in zero injury!

---

**NAC Safety White Paper authored by Emmitt J. Nelson and provided by the NAC Safety Committee.**

The National Academy of Construction (NAC) is an organization that recognizes uniquely outstanding leaders participating in construction from the industry, from the military and academia formed as a knowledge base of American competence in the construction of capital facilities. NAC Safety White Papers (SWPs) are created from the experience base of NAC membership in applying the Zero Injury safety research of CII and are offered to American business and government leaders as answers to safety challenges facing American enterprise. SWPs from NAC are issued after review and consent by a majority of the current members. <https://www.naocon.org/wp-content/uploads/2014/12/NACSafetyPaper6.pdf>