NAC **Member Viewpoint**

Understanding Safety Culture in the Construction Industry

by Emmitt Nelson

The Occupational Safety and Health Administration (OSHA) rates the construction industry as one of the most hazardous to its workers. Research by the Construction Industry Institute (CII) confirms that just complying with OSHA's safety rules and working conditions helps but does not assure adequate safety outcomes.

What the industry needs is a commitment to zero injuries and accidents and the development of a safety culture that believes "all accidents can be prevented."

While the safety records of leading companies that follow CII guidelines in their safety programs has improved markedly, the industry's record as a whole has not. The National Academy of Construction (NAC) believes overall safety performance will be enhanced if more construction companies and owners adopt CII guidelines, make a conscious commitment to zero injuries and accidents, and establish and maintain a CII safety-research backed "safety culture" in their operations.

Definition of Safety Culture

A *safety culture* can be defined as "an all-employee system of shared beliefs, practices, and attitudes that exist In an organization that shapes behavior and drives the way in which all work is performed." This safety culture is created by a safety management system based on CII Best Practices, "Zero Injury Techniques," and the development of a safety climate, which defines the manner in which the employees in the operation actually behave.

Elements of a Safety Management System

A well-designed safety management system is an essential, but not sufficient, prerequisite to establishing a safety culture. Elements of a proper safety management system include:

1. Demonstrated management commitment (at all levels) to the belief that "all accidents can be prevented."
2. Adequate staffing with safety professionals.
3. Establishing safe work practices for common activities.
4. Job safety planning before undertaking specific activities.

5. Safety training and education.
6. Worker participation and involvement in defining the elements or the safety management system and making necessary adjustments. A true key to a successful safety program is all employee co-ownership and making sure they are involved in creating the program.
7. Subcontractor management.
8. Recognition and rewards.
9. Incident/accident/ near miss reporting, and investigations focused on root causes.
10. Disseminating learnings from Incidents/accidents/ near misses.
11. Drug and alcohol testing.
12. Periodic audits and worker surveys to assure the safety management system is working as defined.

There is much available in the CII Best Practices literature as to how to address each of these elements. One of the keys is top-level corporate commitment that permeates the organization, which includes worker involvement in defining each element of the safety management system.

Establishing a Safety Climate

A safety culture requires a proper safety climate as well as a working safety management system. In the desired safety climate, leaders are unified in purpose, approach, and message so that there is a harmony in human relationships. That is, both employer-employee and employee- to-employee relationships occur with mutual respect. Experience has shown that an appropriate climate where all supervisors at every level work at establishing a careful, caring, and nurturing approach can provide superior safety results. The desired safety culture can only occur when leader-to-worker communications demonstrate by their actions a sincere concern for worker welfare. This can be achieved when:

1. All leaders are friendly.
2. All leaders are respectful.
3. The organization is merciful and not “quick to punish.”

In a proper safety culture, all workers must feel that everyone in the organization is committed to safety and to learning from mistakes and incidents. They must feel free to bring safety observations to management without fear of reprisals, and the climate must encourage them to take personal responsibility for their own safety.

A zero-injury, safety-culture based program differs noticeably from a traditional safety program because it emphasizes that leaders show a deep-seated “caring demeanor” for those supervised. Leaders do not threaten the employees with punishment if they fail. Instead, they offer guidance and, if necessary, retraining on failure plus appreciation and recognition on success. Care must be taken to avoid employees hiding injury to avoid punishment.
Achieving a zero-injury climate requires “winning” the hearts and minds of all employees to become co-owners of the quest for zero. The NAC Executive Insight by Emmitt Nelson dated January 14, 2022, provides further guidance on how to create a safety climate.

The Bottom Line of Safety Culture

CII data show clearly that those organizations that adopt a corporate value that recognizes the benefits of a safety culture and believe all accidents are preventable both for themselves and for their onsite sub-contractors have significantly better safety outcomes than those that do not.

In addition, when the desired safety culture is in place, the entire project team becomes significantly more productive. CII research shows that projects achieving zero injury have close to five percent productivity improvement each for both contractor and owner. Some successful contractors have estimated at least a 10 percent improvement in productivity on projects that reach near a one million-hour zero-recordable safety record.

References

"CII Best Practices" link: https://www.construction-institute.org/resources/knowledgebase/best-practices

About the Author

Emmitt Nelson was elected to the National Academy of Construction in 2000. He is co-founder of the Zero Injury Institute and a leading construction industry safety expert. He founded Nelson Consulting, Inc. in 1994, and began offering consulting services for contractors and owners in creating zero injury cultures. He served as chair of the CII Zero Accidents Task Force 1990-1994 and was chair of the NAC Safety Committee from 2005-2014.