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How to Create a Zero-Injury Culture

Key Points

Implementation Cost

There is an attendant cost incurred to prepare the content and administer the process for a zero-injury culture, and that cost goes beyond the cost of a minimum safety program. Since this expense is typically a normal budgeted outlay for operating a corporate safety department, it is normal to compare the cost of the zero-injury culture's installation to current costs. The total cost of all the injuries being incurred at the present time should also be calculated and included. This will result in the current cost of a safety program plus the cost, direct and indirect, of injuries on an annual basis. Some of the indirect cost will be that of accident and injury-insurance premiums.

Brief U.S. Construction Safety History

For decades prior to the 1980s, "failure to prevent injuries" was the expected safety performance of the U.S. construction industry. Some feel this attitude has been the greatest obstacle to safety improvement. During the 1950s, some felt the industry had become accustomed to this failure because the common excuse was to blame injury on the workers. Every contractor had their own safety practices. These varied widely with competitive bidding. Safety concerns by business owners and the public escalated for many years, culminating in 1970 when the U.S. Congress enacted the Occupational Health and Safety Act (OSHA). Soon after, OSHA published safety injury measurement standards and set required safety practices for contractors to use when performing construction work in the U.S.

Embracing the Vision of Zero-Injury Outcomes

The reason zero is so important is that one can never know when the next injury will be a fatality. There are many *reasons* injuries occur, but only one *cause*: engaging in some form of atrisk behavior, either by leaders or by crafts. Setting goals for some number of injuries to be acceptable is nothing less than management acceptance of at-risk behavior and the injuries that result

Content, Process, and

CONTENT

Content is about much more than work safety. It extends to the human relations work environment being used and also to leader/employee relationship management. In documenting a zero Injury safety program, six content elements are found:

The zero-injury journey began in 1977 when The Business Roundtable (BRT) launched its landmark Construction Industry Cost Effectiveness (CICE) Project, a five-year intensive study of the construction industry. The Roundtable's resulting 23 CICE Reports in 1982 contained over 200 recommendations that have had far reaching positive effects on the U.S. construction industry.¹

One CICE recommendation was to form a construction research organization, which resulted in the creation in 1983 of the Construction Industry Institute (CII). CII was instrumental in focusing the industry on safety to reduce the Total Recordable Injury Rate (TRIR) on construction projects. In 1989, CII commissioned its Zero Accidents Research Task Force. The research conducted by the task force found that projects were able to achieve one million hours of construction work injury free. Subsequently the TRIR for CII members decreased from 1.16 in 2003 to 0.39 in 2020.²

2.

The logic begins with the following realities:

- "If zero injury is not your true heart's desire, then what is? After all, no one wants an injury to occur."
- " The fact that injuries do occur does not mean that injuries must occur; injuries are preventable."
- "Just because zero injury is impractical for the long term does not mean zero injury is impossible for the short term; our job is to go for the longest 'short-term period' possible with our current successful safety culture."
- "The only way a TRIR can be improved is to work greater numbers of work hours with zero injury between recordable injuries."

3.

The Occupational Safety and Health Act dictated that each construction employer (owner and contractor) would be accountable for the safety of their own employees. Thus, it remains the employers' task to determine what portions of OSHA apply to any given construction project. The following URL will direct the reader to the OSHA website.

https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926TableofContents

The CII Knowledge Base on Safety website³ details the leading indicators.

Many employers are prone to limit safety program content due to cost. By doing so, they overlook the added profit of achieving zero injury outcomes. Zero-injury outcomes save the high cost of injury and also provide a productivity increase of five to 10 percent by the employer.

A safety program should include a list of prevalent leadership skills/traits usable in the safety program process, including items such as:

- 1. Lead safety as a team and put everyone on the project site as team members, even visitors when they are present.
- 2. Create an atmosphere-focused orientation module for all employees and visitors on their role in maintaining a culture awareness and participation.
- Create a 100-word corporate safety mission statement that includes: "The following skills/traits of successful leaders and are crucial to gaining buy-in and co-ownership of safety:
 - a. Be a smiling, caring, appreciative leader who asks for participation and involvement.
 - b. Involve all employees in selecting leading indicators to use in order to create co-ownership of the safety program. Co-ownership results in success.
 - c. Successful leaders use recognition events that celebrate achievements of the entire project team within a safety culture and know the following operating premise: All need to buy in to zero at-risk behavior."

5.

The number one leading indicator in safety is "demonstrated management commitment." The word commitment means "I will do whatever it takes to avoid the next injury." Inside this

logic is the question: "Is it morally right to try to increase profit by decreasing the safety budget, especially when research reveals that a culture that produces less injuries yields more profit?"

Some construction industry executives use the excuse for not embracing the zero-injury concept because of their concern about the added cost of the effort required. CII research, however, shows that projects achieving zero injury had close to five percent productivity improvement each for both contractor and owner. Other successful contractors have estimated at least a 10

³

percent improvement in productivity on projects that reach near one million hour zero-recordable safety record. 4

This subject will be covered in the next section.

PROCESS

How do the successful apply the CII zero-injury research material? They activate positive corporate *leading indicators* on human behavior to create a successful safety culture.

Corporate users who have the greatest success find best results when employee exposure to the zero-injury culture-building process begins in the boardroom and extends to all supervisory and craft employees as they go through the safety orientation/training and on into the working life of the project and to all other industry participants. Success will come if the following actions are taken.

Executive Roles

The **CEO** accepts the role of beingg of be

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- 7. Train leaders in how to involve foremen and crafts.
- 8. The sharing process provides leader instruction in:
 - a. Key operational precepts of a zero-injury culture.
 - b. Required "leader-to-craft" friendly interpersonal behavior norms.
 - c. "Zero-injury culture" vocabulary norms:
 - Stop using the terms "safety goals."
 - Start using the term "safety commitment."
 - Logic when a "commitment to zero" is made, the occurrence of an injury breaks no goal; learn from it and stay committed.
 - d. The use of leading indicator measurements.

The preceding four subjects (a-d above) are for leaders to emphasize in their communications with each other and the crafts each day as the implementation goes forward.

Basic Zero Injury Concepts to Empathize Daily

A zero-injury safety program differs noticeably from a traditional safety program because it puts emphasis on leaders showing a deep-seated "friendly, caring demeanor" for those supervised. A zero-injury program does not threaten the employees with punishment if they fail. Instead, it offers appreciation and recognition when they succeed. Achieving a zero-injury outcome requires "winning" the hearts and minds of all employees to become co-owners of the quest for zero.

Here, some will ask, "What do I do about an employee that repeatedly violates a safety rule?" Leaders can use the following employee "self-termination" technique.

On employment, the direct responsible leader enthusiastically emphasizes safety rule compliance by informing the newly hired employee that as leader, he/she is responsible for the safety of all and that compliance with safety rules is *primary* in what the new hire agrees to for gaining employment. It is a critical promise made by the leader and the employee.

State to them, "If as your leader I do not hold you to this promise, you are in fact asking me to ignore your safety and that of others by your bad example and this, I will not do. If a new hire chooses not to comply with the safety rules, they are thereby choosing to resign their job. Please avoid all at-risk behavior and comply with all safety rules."

No one has ever "punished their way" to a zero-injury outcome. The above is a rational, performance-based approach that all will view as fair and balanced.

The designers of a safety program apply these and other strategic, employee-friendly leading indicator implementation plans, including a well thought out schedule for administering the many safety training and instructional modules. The best results with craft employees are

It is the existence of a "feels good" winning safety "atmosphere" that causes employees to buy-in to a zero-injury safety program and to consider themselves co-owners. Note this buy-in and co-ownership requires in-workplace employee trust in the motives and actions of company leaders. To ensure employee trust in an employer's integrity, the employer must always be 100 percent in compliance with all pertinent parts of the OSHA required content, as well as

demonstrated integrity in compliance with their own added voluntary safety content features.

Classifying Injury

Achieving zero injury is not found in trying to find reasons to classify an injury as non-recordable, but to not have the injury at all. If there is evidence indicating misclassification, employees will suspect leaders of playing games. Obviously misclassifying an injury as not recordable to meet zero undermines employee confidence in management integrity. It virtually eliminates the possibility of achieving zero injury records. Thus, misclassification is a form of leader at-risk behavior. When it is necessary to name an injury as a non-recordable, then it is highly important that all employees are thoroughly informed on the detailed, logic-supporting non-classification.

The need for continuous leader emphasis during the building of such a culture must extend from the employee hiring experience through their safety orientation and training, culminating in how employees are treated by their leader. Success comes when supervisory and nonsupervisory craft personnel begin to buy-in and individually become co-owners of the safety program. These type leaders place the well-being of their people as their highest priority.

The top construction cultures emphasize the first seven priorities given below:

- 1. The people
- 2. Their knowledge
- 3. Their skills
- 4. Their involvement
- 5. Their attitudes
- 6. Their motivation
- 7. Their participation
- 8. Work safe plans
- 9. Their construction tools
- 10. The availability of construction materials

Notice it is not until numbers 8, 9, and 10

the priority they receive contain a lesson: "Successful leaders at all levels place their people first and treat them with dignity and respect as paramount."

The most prevalent opinion is: "Leaders can empower their people by using multiple avenues of craft treatment and engagement," such as the following:

- 1. Tell them the big picture.
- 1. Inform them on details.
- 2. Involve them in oversight.
- 3. Invite participation in decisions.
- 4. Affirm their contributions.
- 5. Treat them nicely.
- 6. Smile when speaking to them.
- 7. Use group recognition.
- 8. Apply Individual recognition.

These avenues can cause people to feel good about the leadership, the company, and the overall safety mission. One large U.S. contractor has a briefly stated safety motto, "Zero harm." That contractor has exceeded one million hours OSHA recordable-free over 30 times in the last six years, with one of their project records exceeding four million hours.

In presenting zero-injury material, time devoted to new employee safety orientation/training should be no less than one to two days (as many as four for some owner/contractor combinations). The longer times occur when the project is inside an existing operating facility. During these longer times in safety training, it normally will include significant safety

A safety culture is created by and reflects the quality of a people-centered, inter-employee relationship model that is established by safety program content and process used as project leaders implement the safety program.

If the leader-to-employee engagement is just because safety is required by law and little thought is given to creating the content and administering the process, then the resulting culture will yield at best only average safety performance. If the motive, however, is because the leaders, *en masse*, not only want to comply with the law but also truly care for the welfare of all employees in a non-threatening manner, then the zero-injury culture will begin to take shape. In

this case, when punishment is not the main tool used to gain cooperation but caring is, then the leaders demonstrate a "no harm" approach. This promotes a deep-seated employee buy-in and co-ownership of safety. It also is out of such a culture that zero at-risk behavior, thus, a zero injury performance, emerges.

OSHA defines a *safety culture* as: consisting of shared beliefs, practices, and attitudes that exist at an establishment. Culture is the atmosphere created by those beliefs, attitudes, etc., which shape our behavior.⁶

Picking up on the word "atmosphere," this Executive Insight proposes there are two elements of culture: climate and essence, substituting climate for atmosphere.

In defining "climate," the word describes how well leaders involved in a safety program implementation are unified in purpose, approach, and message so that the dedicated support of the employees is successfully gained. Once in place, "climate" includes a harmony in human relationships, i.e., how respectfully people treat people. The idea is to avoid the counterproductive, i.e., are leaders avoiding the use of punishment as a motivator? Considering all the above, it becomes apparent that "safety climate cultivation" means all employees must work at establishing interpersonal relationships to ensure the desired employee-to-employee relation

the guidelines from the CII research, which hass published answers to the question: "Why can a few contractors work one million hours and more with zero recordable injuries while most cannot?"

Remaining Questions

Three questions remain:

- 1. What are the key practices that yield shared attitudes, shared values, and culture essence essential to success?
- 2. If properly applied, will they create the "essence" sought?

The answer to the first is check out the CII research. The answer to the second is " Yes!" And -

3. Once this is accepted: "How do I go about applying the CII research in such a way that

Having a zero-injury objective by itself is not conducive to better safety performance. In the absence of a substantial leading indicators program, it can be conducive to a poor safety climate, one that inadvertently results in hiding and under-reporting of accidents. Positive, proactive safety leadership of a zero-injury culture and line managers who drive organizational learning and continuous improvement are the keys, regardless of the title of the program. The construction industry needs to continue to pursue emerging trends to move safety excellence forward. Recently the industry is benefitting from a razor-sharp focus on critical or fatal risks and on "human performance." These programs will be the topics of future Executive Insight articles.

References

Making Zero Injuries a Reality, Construction Industry Institute, The University of Texas at Austin, 2002. www.construction-institute.org