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How to Create a Zero-Injury Culture

Key Points

- Keep zero-injury safety focused on people.
- A zero-injury result is composed of content, process, and a culture**.**
- Content is about much more than work safety. It extends to the human relations work environment being used as well as leader/employee relationship management.
- Process activates positive leading indicators and empowers craft personnel.
- Culture reflects the quality of the people-centric relationship model, the essence of which is "good feelings about safety."
- Lead safety as a team.
- No one has ever "punished their way" to a zero-injury outcome.
- Demonstrate management commitment.
- Basic zero-injury concepts to emphasize are discussed and people-focused priorities enumerated.
- Zero injury is achievable.

Introduction

A safety program that yields a zero-injury result is composed of three distinct parts: content, process, and a culture. This Executive Insight integrates these three elements.

In simple terms, culture is the product of the content and process used for implementation of the safety program in its entirety. A safety program's overall objective is to create a safety culture that appeals to employees in such a way that they become co-creators and thus co-owners of the program. Another objective is to eliminate all at-risk behavior.

Successful creators of a zero-injury culture are adding to the safety program by making some of the content and process voluntary and by using findings from the zero-injury research of the Construction Industry Institute (CII). That CII research offers over 100 safety performance leading indicators (LIs), which are primarily people focused. Those experienced in the use of this research have found it is common for projects to be completed with a zero-accident outcome.

The greatest success is found when employees' exposure to the zero-injury, culture-creating process begins in the boardroom and extends to all supervision and employees going through their safety orientation/training, and on into the working life of all. Experience shows that uninvolved, uninformed, non-participating senior leaders will often become an inadvertent impediment to progress in the field unless all are included.

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 at-risk 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 Culture

The three interdependent parts essential in delivering a zero-injury result are described in the following sections:

- ***Content*** is the **what.**
- ***Process*** is the **how.**
- ***Culture*** is the **result**.

Keep zero safety focused on people—
zero at-risk behavior yields zero injury.

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:

1. Information about the origin of the performance vision of zero Injury

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 behind why a zero-injury vision is viable*

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 legislated content of OSHA, state, and local rules

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

[1] https://www.tandfonline.com/doi/abs/10.1080/01446198700000009
[2] CII/CURT data

Regulations (Standards — 29 CFR)

By Industry

- Recordkeeping (Part 1904)
- General Industry (Part 1910), includes owners
- Maritime (Parts 1915, 1917, 1918, and 1919)
- Construction (Part 1926)
- Agriculture (Part 1928)
- State Plans (Part 1952)

When complying with OSHA, harsh, punishment-driven safety compliance working conditions severely hamper safety outcomes. To not comply with OSHA defeats the opportunity to excel in safety. Non-compliance with OSHA is a form of at-risk behavior, primarily by project leadership. When OSHA compliance is ignored by project leaders, such leader behavior witnessed by employees undermines confidence in the possibility of ever achieving zero injury outcomes.

4. *Voluntary safety practices*

CII research strongly recommends nine critical categories of voluntary actions that are leading indicators for a construction safety program to yield zero injuries.

1. Demonstrated management commitment
2. Staffing for safety
3. Safety planning
4. Safety training and education
5. Worker participation and involvement
6. Subcontractor management
7. Recognition and rewards
8. Accident/Incident reporting and investigations
9. Drug and alcohol testing

The research also shares other leading indicators that support these. The research finds those contractors using a full complement of leading indicators have much lower injury rates.

Safety program content must also explain the history of the zero-injury safety movement. This information should be shared using an employee friendly “we can do this together, if we really want to” vocabulary. A simple motto to use is “The fact that injuries occur does not mean injuries must occur.”

The CII Knowledge Base on Safety website[3] 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.
3. 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. Use research-based safety leading indicators.

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

"Demonstrate management commitment."

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] https://www.construction-institute.org/resources/knowledgebase/best-practices

These CII websites are well organized and have an abundance of construction base cost effectiveness research, much of which will be of interest. Choose "Knowledge Base," scroll down the 17 options, and select "Zero Injury Techniques." Here, "Topic Resource" contains nine topics under which are 20 descriptive papers.

CII Research Report RS160-1, "Safety Plus: Making Zero Accidents A Reality" is available for purchase.

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

6. Use the leadership skills and craft involvement actions to win the hearts and minds of all personnel.

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 being the "head" safety initiator, formally activates the positive human behavior culture-building process, and assigns two individuals, one to oversee safety support and the other to oversee safety performance. The secret is to become counter-traditional, where it is common that the top safety executive oversees both safety support and safety performance. In a zero-injury culture, safety support and safety performance are separated.

Conformance to safety execution rules is essential, and the **vice president of safety** is responsible for *safety support only.* The **vice president of construction operations** is responsible for *safety performance.* Owner and construction contractor line leaders function as safe work leaders and overseers and thus are accountable for a no at-risk behavior environment.

The Leader Role Behavior Norms

The first action as a construction *leader* is to empower craft personnel with coordinated support by involving the crafts in safety planning. Leaders do that by the following actions:

1. Create a project craft safety committee.
2. Use formal pre-task safety planning.
3. Involve crafts in routine safety inspections.
4. Use craft safety perception surveys.
5. Use a recognition process for zero-injury safety performance.
6. Share information about the CII leading indicators.

[4] https://www.safetyandhealthmagazine.com/articles/10414-the-roi-of-safety

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

"The fact that injuries do occur does not mean injuries must occur.'

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

obtained when safety leaders seek gifted current employees "to be trained as specialists," and these specialists become dynamic in presenting the multiplicity of safety modules. Once these are created, one must decide how and when the content will be implemented. This requires insight into safety program priorities.

The vocabulary used in a zero-injury safety program is very important. Up until the 1980s, the U.S. construction industry accepted safety failure as the norm. An "injuries happen" attitude prevailed. Consequently, employee injury, even fatalities, were often accepted as part of building. The possibility of working long periods injury-free was introduced in the 1980s. Along with zero injury came the need for new words to be added to the construction safety vocabulary.

Zero is used in two ways when describing a zero-injury safety vision/mission. Avoid asking for "zero injury" for there will be employees who will be tempted to hide an injury to fulfill a sense of loyalty or simply avoid the embarrassment that some have when injured. Prefer the use of the term "committed to zero injury" when speaking about the safety program because it places attention on avoiding harm to all employees.

Ask employees to not use the word safety "goal." Rather than saying "Our safety goal is zero injury," say "Our commitment is to zero at-risk behavior as we seek a zero-injury outcome." There is a big difference in the meaning of the word "goal" versus the word "commitment."

These behavior norms are strategically selected with the purpose to "win" the leader and craft safety support so that they buy-in and become co-owners of the safety program. In such a case, in the mind of the employees, the safety department ceases to be the sole sponsor of safety, while the employees accept their role as co-owner.

Use of leading indicators is critical. One major reason owners and contractors who have successfully developed safety programs that yield zero injury outcomes is because their content goes well beyond OSHA rule compliance to include the use and measurement of multiple (sometimes over 100) research-based, people-centered "leading indicators." Do not be frightened to take on such a task. These are simple indicators, such as JSA/TSA.[5] With a sincere commitment, it is easier than it might appear.

The use of the research backed leading indicators is strategic because they introduce the "demonstrated leader caring" model reflected in an integrated, interpersonal relationship-nurturing implementation plan. These plans are to be designed to facilitate the creation of the unique safety culture "atmosphere" required to achieve zero at-risk behavior (ZARB).

It is ZARB that is foundational to contractors achieving zero OSHA recordable safety outcomes, with over 250 of these known records exceeding one million consecutive hours worked with zero TRIR.

[5] Job Safety Analysis/ Task Safety Analysis

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

> ***"Make safety a 'team' matter. All employees, from boardroom to crafts, on each project are members of the safety team."***

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 "plans, tools, and materials" are reached. All preceding interface activity is focused on *the people*. These seven people-centered items and

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 information of the project owner’s safety program. “Orientation” is about the project, the employer, and the owner, the latter who should always be part of the orientation presenting their safety requirements, including on-site contractor safety behavior expectations. Trainee involvement in creative thinking should be built in and a part of the safety modules content.

Begin the initial orientation with a project executive welcoming the trainees to the company and thanking them for selecting the firm as their new employer. State the zero-injury safety vision of the employer. Following all the safety training, ask for each new employee’s signature on a safety commitment card asking for zero at-risk behavior. The card should already be signed by the project executive/project manager.

CULTURE

There are many *reasons* injuries occur, but only one *cause:* engaging in some form of at-risk behavior, either by leaders or by crafts. Thus, the key to zero-injury outcomes is the complete commitment by all employees to avoid any form of at-risk behavior.

While the humanitarian safety objective is
zero injury,
a zero commitment should be pointed out as the cause of injury—
at-risk behavior.

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

Zero-injury culture — a set of shared attitudes, values, commitment, and practices focused on the avoidance of at-risk behavior.

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 counter-productive, 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 relationships are present in the culture. Successful construction owners and contractors have proved a careful and caring nurturing approach can provide excellent results.

Introduction of "Essence"

In Webster, *essence* is defined as "the basic nature of a thing: the quality or qualities that make a thing what it is."

[6] www.osha.gov/SLTC/etools/safetyhealth/mod4_factsheets_culture.html

In defining a safety culture, the OSHA definition aptly suggests there is yet another ingredient not fully captured by the word "climate." OSHA terms it "atmosphere." It is likely that "*atmosphere*" is used to describe our "*feelings*" about the health of the safety culture.

It is proposed that the word "*essence*" be used to assist in defining this important aspect of a safety "*culture*." Using essence will highlight the need to be aware of the importance of and to nurture "employee feelings."

Safety Essence

Experience has shown that the successful in virtually eliminating OSHA recordable incidents create a culture that contains the desired safety "*essence*" of "*good feelings about safety*."

Once the safety program implementation content is executed via the process, the culture element of climate essence can be good or bad. The desired essence can only occur when leader-to-worker communications show sincere concern for worker welfare versus showing a cold and distant interest, where all leaders are friendly versus unfriendly, are respectful versus disrespectful, are merciful versus "quick to punish."

Since we know "*feelings*" are associated with emotions, essence can be thought of as the "*all important employees felt*" residual of the culture climate creating process. Once created, it is the essence that serves to assure an employee's emotional desire to become a part of the sought-after culture that is free of at-risk behavior. The presence of employee "*good feelings*" gives a successful safety program the resulting prevention of injury. This is because employees "*feel*" appreciated, respected, and included. It is these "*feelings*" that promote employee buy-in and co-ownership of the safety program.

To describe the desired result of the foregoing essence-creating effort, three more words can be added to define the end "*felt*" product. The words to be added are *felt productive safety* essence."

In summarizing culture, two elements are combined:

1. **Climate** — the result of the implementing process that is successful in aligning attitudes, values, commitments, and practices of all employees, leaders, and workers alike.

2. **Essence** — the presence of the critical employee-felt, productive safety feeling that is achieved when the above alignments are secured.

Achieving the Desired Zero-Injury Outcome

Cease setting safety goals. Instead, replace goals with an "unrelenting, uncompromised leadership commitment" to zero at-risk behavior. It is essential an employer is willing to implement the necessary leading indicators that ensure reaching the *sure to succeed*, *felt productive safety essence* culture status.

The most important question for a leader is: "How do I do that?"

Mimic the successful. Research has yielded over 250 occasions where zero OSHA recordable injuries for over one million in-sequence work hours have been logged. One only needs to follow

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 the assured outcome is this ‘essence’ that underlies ultimate success in safety?”

The answer is to consciously define the word *essence* to be an in-resident, employee-felt effect that is dependent on the quality of human relationships, that is, interactions and communications. Then focus line leadership (all leaders, not just the safety function leaders) on the creation of that “*employee-felt, productive safety essence*.”

It is not only the construction worker but, all employees, including clerical, and then that quality level is achieved that produces the “*employee-felt, productive safety climate*.” The resulting safety culture is one where employees, *en masse*, feel they are treated with dignity, feel respected, feel appreciated, feel included and wanted, and feel a part of the organization.

Safety Culture Success

In the case of safety, it is within this “*friendly, felt safety culture*” that the desired “*essence*” comes into being. The employee response to the presence of the “*seen and heard*” climate and *“felt, productive”* safety essence is employees willingly respond in positive ways by being more cooperative and communicative. When the described conditions exist, experience shows that the craft employees willingly join in as they “*see and feel*” their leaders demonstrate their individual and collective safety commitment.

Lastly and not surprisingly, when the desired safety culture essence is in place, the entire project team becomes significantly more productive.

Without this described “*soft content*,” culture-cultivation process and desired “*essence*,” safety programs falter. With it, the ultimate limit of hours that can be worked recordable-free remains to be defined. With safety program content, process, and culture tuned to the CII research findings, new corporate safety records are being set.

The current construction company record known by this author of hours worked at zero recordable injuries is now nearing five million hours in-sequence. A TRIR of less than 0.04 will surely occur. Just give it time. After all, it took 28 years for the current nine records exceeding four million hours to occur.

Looking Forward

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.

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