



Understanding the  
Impact of Participation  
in ABC's Safety  
Training Evaluation  
Process on Overall  
Safety Performance

# ABC 2018 SAFETY PERFORMANCE REPORT



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## UNDERSTANDING THE IMPACT OF PARTICIPATION IN ABC'S SAFETY TRAINING EVALUATION PROCESS ON OVERALL SAFETY PERFORMANCE

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The information contained within this report is for reference purposes only and reflects data submitted by ABC member companies during the 2017 Safety Training Evaluation Process (STEP) term. Any unauthorized use or distribution of this information without the express written consent of Associated Builders and Contractors, Inc. (440 First St. NW, Suite 200, Washington, DC 20001) is strictly prohibited.

Tate & Tryon, CPAs, performed the following agreed-upon procedure to review the data published in the *ABC 2018 Safety Performance Report*: Using the 2017 Safety Training Evaluation Process participant self-assessment data, Tate & Tryon recalculated the formulas used to generate the results and compared the results to the data in the *ABC 2018 Safety Performance Report*. No formula errors were noted.

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## Introduction

Every company that works in nonresidential construction wants to send its workers home in the same condition in which they arrived—if not even better—after an active day of work that stimulates the mind and the body.

Until now, relatively few studies have been conducted on the correlation between the use of measures companies can take to keep workers safe on jobsites—leading indicators—and the number of incidents, accidents and injuries that occur—lagging indicators. The empirical evidence didn't exist.

Associated Builders and Contractors (ABC) created the Safety Performance Report to address this issue.

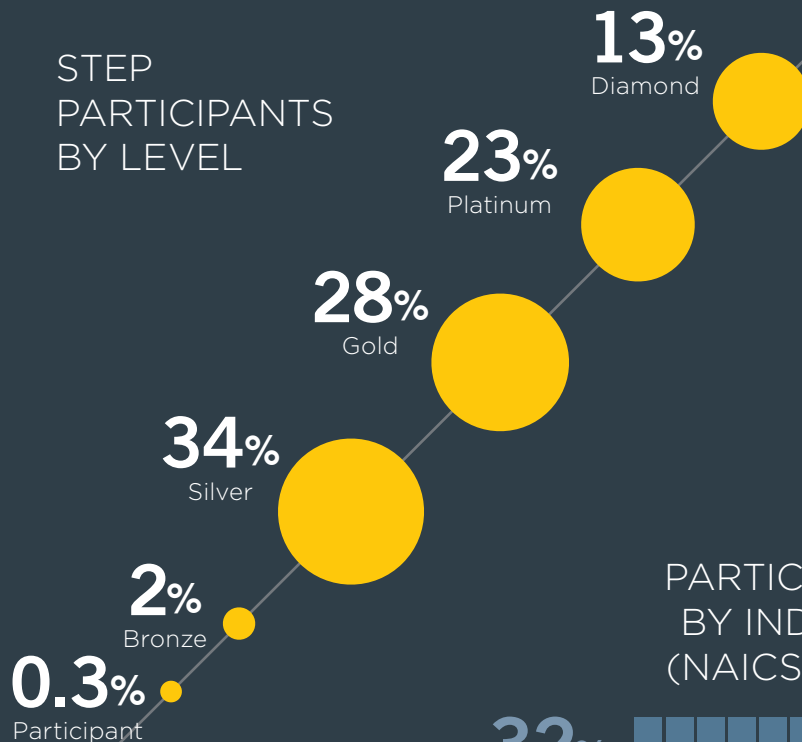
The charts and summaries within this report present the clearest picture yet of the remarkable impact that leading indicator use has on a company's safety performance: fewer disrupted or lost lives and a safer, more productive jobsite regardless of the size of the company. In fact, companies that engage in leading indicator use are, statistically, considerably safer than their peers.

**Leading indicator programs work  
to improve safety performance.**

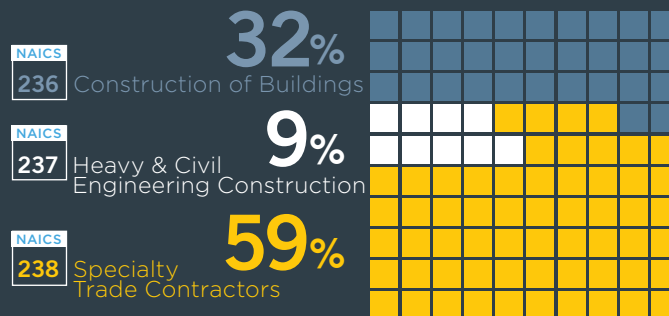
## Methodology

The 2018 ABC Safety Performance Report is based on submissions of unique company data gathered from participants in the 2017 Safety Training Evaluation Process (STEP). ABC collects each company's lagging indicator data as reported on its annual Occupational Safety & Health Administration (OSHA) Form 300A ("Summary of Work-Related Injuries and Illnesses") and its self-assessment of leading indicator practices from its STEP application. Each of the 35 data points collected is sorted using statistically valid methodology developed by the U.S. Bureau of Labor Statistics (BLS) for its annual Occupational Injuries and Illnesses Survey, and combined to produce analyses of STEP participant performance against BLS industry average incident rates.

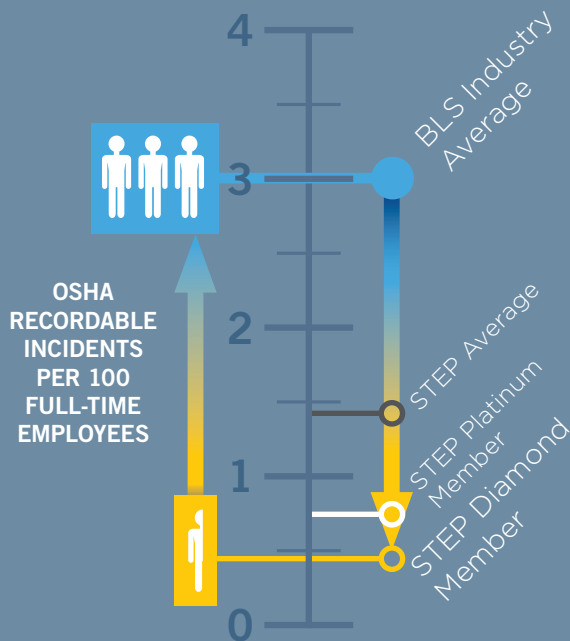
### STEP PARTICIPANTS BY LEVEL



### STEP PARTICIPANTS BY INDUSTRY (NAICS) CODE



## ABC STEP PARTICIPANTS ARE SAFER THAN THE INDUSTRY AVERAGE



Total Recordable Incident Rate (TRIR): STEP vs. the U.S. Bureau of Labor Statistics Industry Average

**85%**  
REDUCTION IN  
TRIR RATES

**670%**  
SAFER

## What If Your Company Could Be 670 Percent Safer Than the Industry Average?

And you could reduce your Total Recordable Incident Rate (TRIR) by 85 percent?

It's more than possible. **It's doable.**

The 2018 ABC Safety Performance Report is not a research project or academic study. It captures the results of ABC STEP member companies performing real work on real projects. ABC is building on analysis of more than a billion hours of work annually presented in the 2016 and 2017 reports to identify what comprises a world-class safety program.

## LAGGING INDICATORS: OUTPUTS AND RESULTS

### Measuring Safety Performance

The construction industry has long evaluated safety performance based on lagging indicators—statistics that measure performance based on past incidents or conditions. These statistics judge companies not on the steps taken to prevent jobsite injuries and fatalities, but rather on the number of past safety failures. Lagging indicators only tell part of the story.



Total Recordable Incident Rate



Days Away, Restricted or Transferred Rate



Experience Modification Rate

# 3

FATAL  
INJURIES  
PER DAY



Every workday in the construction industry, an average of three people are fatally injured.

## LEADING INDICATOR IMPLEMENTATION



## LAGGING INDICATOR PERFORMANCE

GOAL: Determine the correlation between **leading** indicator implementation and **lagging** indicator performance

## What's Behind World-class Safety Performance

Innovative thinking from contractors, the owner/user community and insurers puts leading indicators under the microscope.

ABC has been studying how to improve safety through STEP since 1989.

STEP is comprised of 20 “Key Components,” leading indicators that are proven to improve safety performance and the criteria that indicate best practices. Participating companies score their level of achievement for each component on a weighted scale of 0 points (low score) up to 12 points (high score). Companies receive a recognition level of Diamond, Platinum, Gold, Silver, Bronze or Participant based on their score.

ABC quantified the positive impact of proactive injury and hazard elimination tools on the jobsite using data gathered from STEP participants in construction, heavy construction, civil engineering and specialty trades. Analyzing aggregated data allows ABC to determine how measures taken to prevent incidents actually improve lagging indicator performance.

**20 Key Components** of a  
world-class safety program.

## STEP Improves Safety



STEP is a safety benchmarking and improvement tool. Participating ABC member firms measure their safety processes and policies on the 20 Key Components through a detailed questionnaire with the goal of implementing or enhancing safety programs that reduce jobsite incident rates. Applying world-class processes dramatically improves safety performance among participants regardless of company size or type of work.





# STEP ACHIEVEMENT LEVELS

STEP Diamond  
STEP Platinum  
STEP Gold  
STEP Silver/Bronze

TRIR at or below 50 percent of the BLS NAICS code average in each of the previous three data years



TRIR at or below 25 percent of the BLS NAICS code average for the data year



TRIR at or below BLS NAICS code average for the data year



EMR at or below 0.7 beginning Jan. 1 of the application year



EMR at or below 0.8 beginning Jan. 1 of the application year



No lives lost or catastrophic incidents, company-wide, during the application year



No lives lost or catastrophic incidents, company-wide, during the previous three years resulting in an OSHA citation

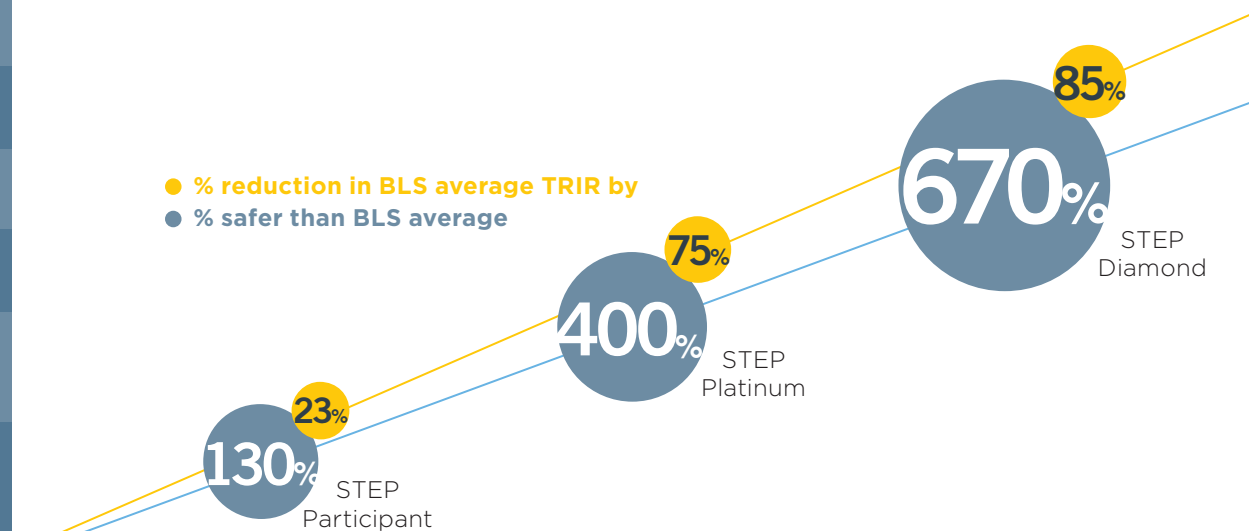


Minimum 20 Key Components score



## Get Into STEP

- Analyze your safety and loss program
- Learn the best practices that reduce TRIR and DART rates and mod factor (EMR)
- Benchmark your safety record against similar companies and industry averages
- Measure improvement from year to year
- Show your safety commitment to potential clients and insurers



Getting started is free up to the STEP Platinum level. Visit [abc.org/step](http://abc.org/step).

# The Roadmap to World-class Safety

## LEADERSHIP

is the courage to be out front and take a stand to challenge and transform the status quo to create a

## CULTURE

that is passionate in its belief that all incidents are preventable—a culture where safety is considered a moral obligation not just for leadership, but for all employees. A culture of safety cannot exist without leadership taking a stand that includes an unwillingness to compromise safety and modeling this belief in their every action.

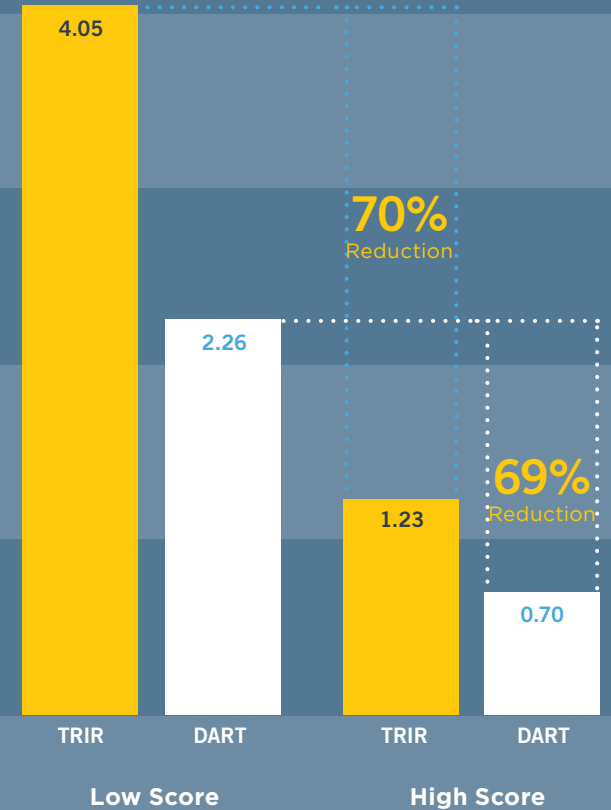


# C-suite Engagement and Commitment Matters

Employer involvement at the highest level of company management produces a 70 percent reduction in TRIR rates. In high-scoring ABC STEP member firms, the owner/CEO:



## EMPLOYER INVOLVEMENT AT THE HIGHEST LEVELS (C-SUITE): LOW SCORE VS. HIGH SCORE



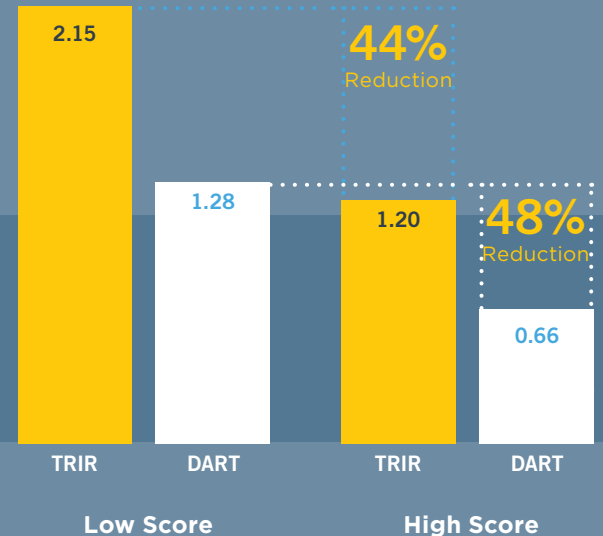
# Employee Participation Counts

Employee participation throughout the safety management system improves TRIR rates and DART rates by more than 40 percent. High-scoring STEP firms:



A commitment to **employee safety training** lowers incident rates.

## EMPLOYEE PARTICIPATION THROUGHOUT THE SAFETY MANAGEMENT SYSTEM: LOW SCORE VS. HIGH SCORE



1

SUBSTANCE  
ABUSE  
PROGRAM

2

NEW HIRE  
SAFETY  
ORIENTATION

3

SITE-SPECIFIC  
SAFETY  
ORIENTATION

4

TOOLBOX  
TALKS

5

NEAR-MISS/  
NEAR-HIT  
ANALYSIS

6

SITE SAFETY  
COMMITTEE

## Six Core Leading Indicators

A leading indicator is a system or process used to identify hazards and eliminate or minimize the condition to prevent injury.

This report focuses on six core leading indicators that have the most dramatic impact on safety performance.

# 1

## CORE LEADING INDICATORS

### Substance Abuse Program

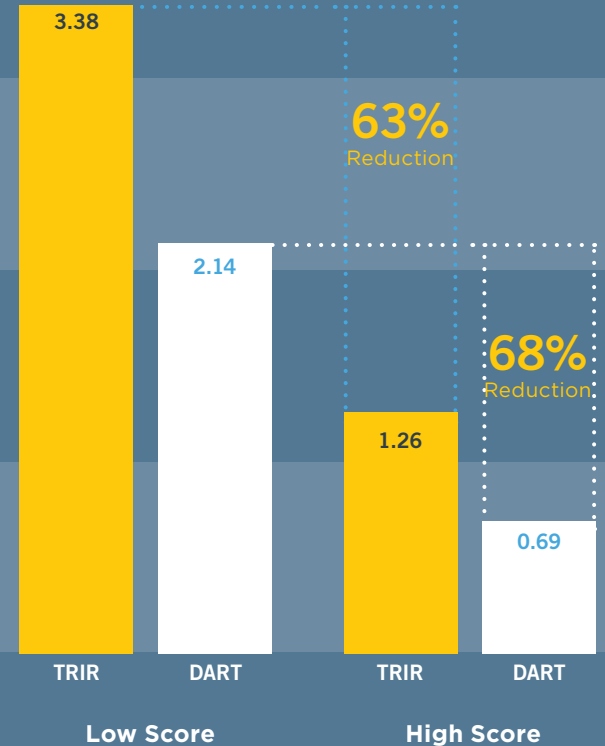
*A written substance abuse program/policy with provisions for drug and alcohol testing where permitted.*

One-third of all incidents on construction jobsites are drug- or alcohol-related. Companies with substance abuse programs in place are more than 60 percent safer than those without an implemented program. Plus, substance abuse testing can be an effective method of incident prevention if used properly.



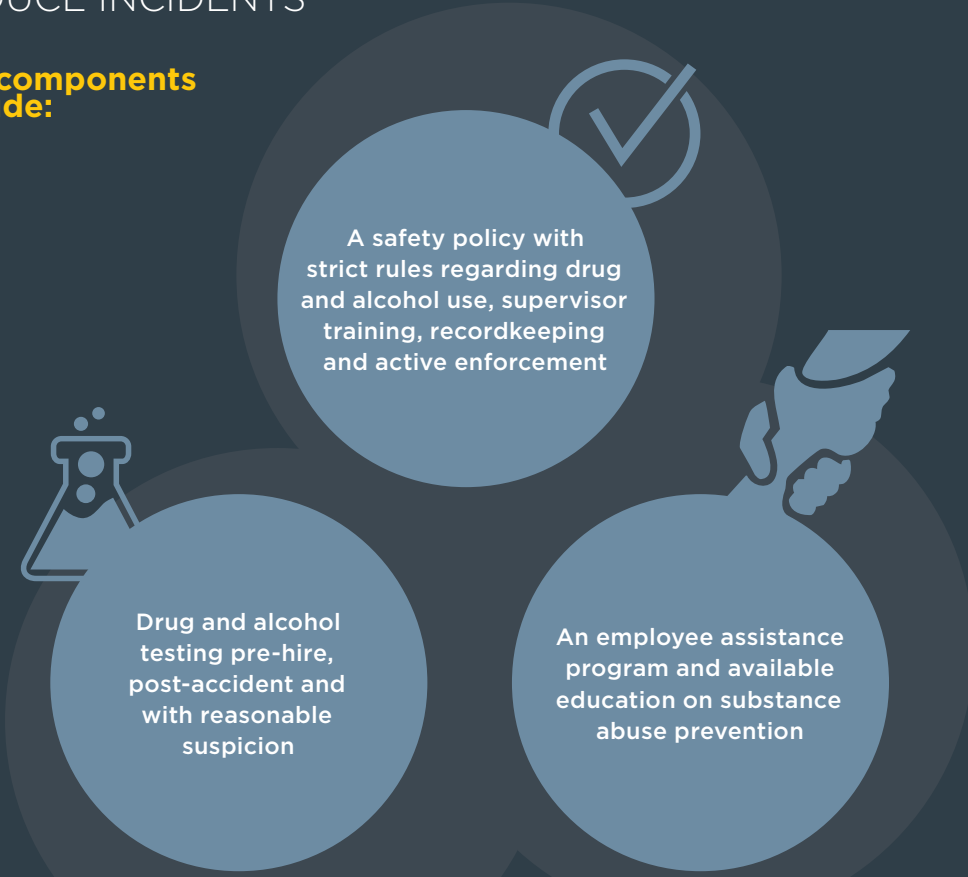
ABC is an active member of the Construction Coalition for a Drug- and Alcohol-Free Workplace. Take the pledge at [drugfreeconstruction.org](http://drugfreeconstruction.org).

## SUBSTANCE ABUSE PROGRAMS: LOW SCORE VS. HIGH SCORE



## SUBSTANCE ABUSE PROGRAMS REDUCE INCIDENTS

### Key components include:



A safety policy with strict rules regarding drug and alcohol use, supervisor training, recordkeeping and active enforcement

Drug and alcohol testing pre-hire, post-accident and with reasonable suspicion

An employee assistance program and available education on substance abuse prevention



“Our team is absolutely committed to ensuring alcohol- and drug-free jobsites and workplaces through adoption of, monitoring and strict adherence to clear policies that both set forth our expectations and reflect our culture. We know that introducing the effects of drugs and alcohol into our work processes greatly increases risk to our workers and customers, negatively impacts productivity and quality, and prevents us from fulfilling our commitments to each other and the customer. **We consider an effective substance abuse policy a cornerstone of workplace and workforce safety.**”

—Jon Lynch, president, Three Rivers Corp.,  
Midland, Mich., STEP Diamond-level member

# 2

CORE LEADING INDICATORS

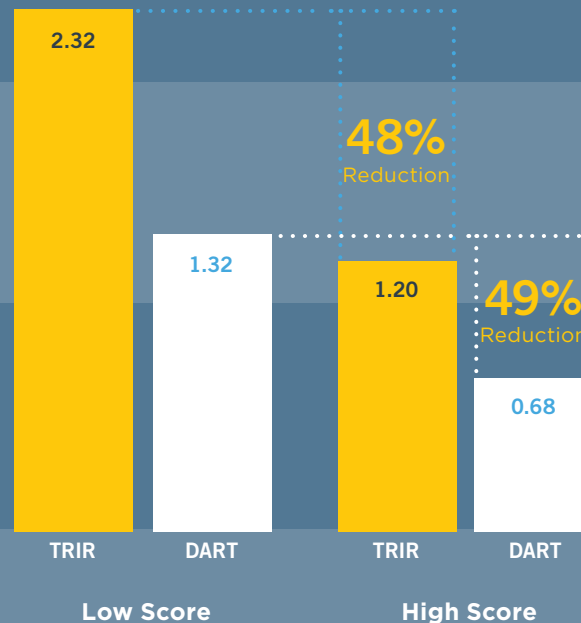
## New Hire Safety Orientation

*Length of time spent on safety awareness and education during training for new hires.*

Companies that conduct an in-depth indoctrination of new hires into the safety culture, systems and processes based on a documented orientation process experience nearly 50 percent lower incident rates than companies that limit their orientations to basic safety and health compliance topics. The CEO or senior leadership delivers that introduction to the company's safety culture and core values, including:



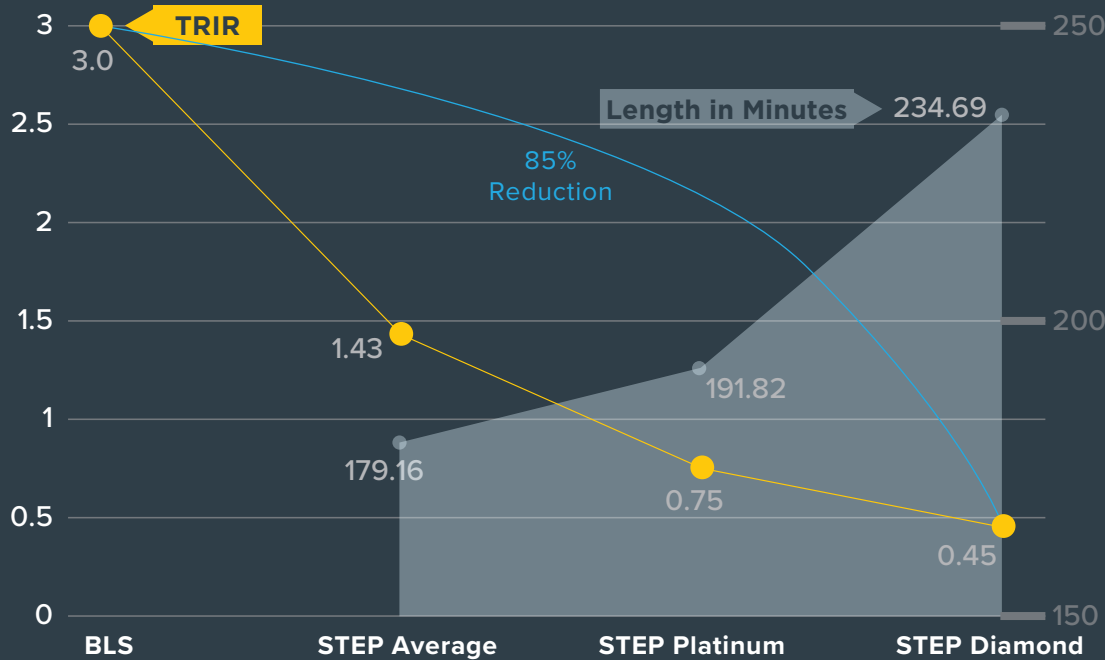
## NEW EMPLOYEE SAFETY ORIENTATION: LOW SCORE VS. HIGH SCORE





# IN-DEPTH SAFETY ORIENTATION IS MORE EFFECTIVE

STEP Diamond companies that conduct new hire orientation sessions of more than 200 minutes on average improve their TRIR rates by 85 percent.



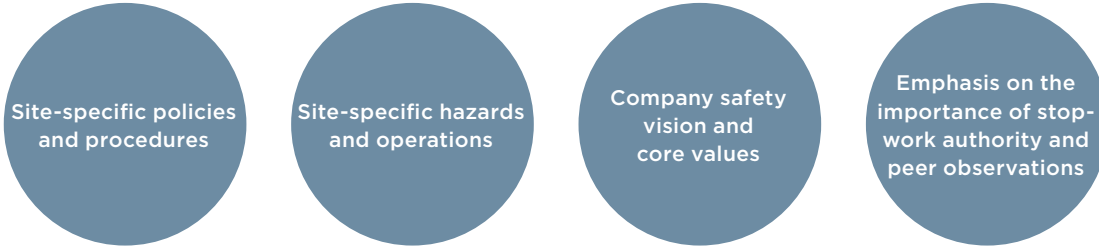
“New hire orientation is the employer’s opportunity to **make a first impression, setting precedents for worker safety and expectations.** It is the opportunity to demonstrate what safety means within your team and to define their obligations in protecting themselves and others around them.”

—Shelley Sutton,  
director of shared services, hth companies inc.,  
Union, Mo., STEP Diamond-level member

# 3 CORE LEADING INDICATORS

## Site-specific Safety Orientation

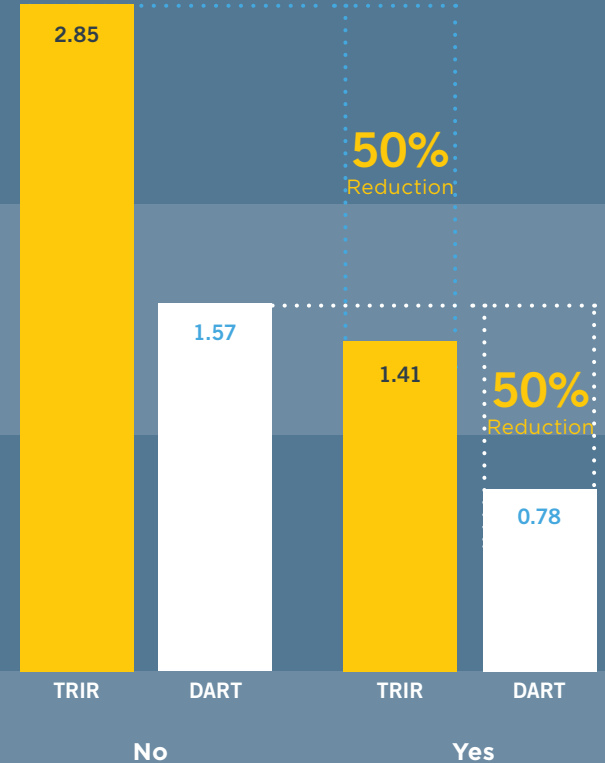
Companies that conduct site-specific orientations reduce their TRIR and DART rates by 50 percent. These sessions incorporate:



**Site-specific orientations are an invaluable tool. Through the orientation, new hires meet construction managers and see firsthand our concern for their safety, which is woven into our safety culture.**

—Gordon Beaver, senior vice president of environment, health, safety and security, S & B Engineers and Constructors Ltd., Houston, STEP Diamond-level member

### SITE-SPECIFIC SAFETY ORIENTATION (NO/YES) VS. TRIR & DART



# 4 CORE LEADING INDICATORS

## Toolbox Talks

*Brief, single-topic training sessions of 15 to 30 minutes conducted on the jobsite for all employees.*

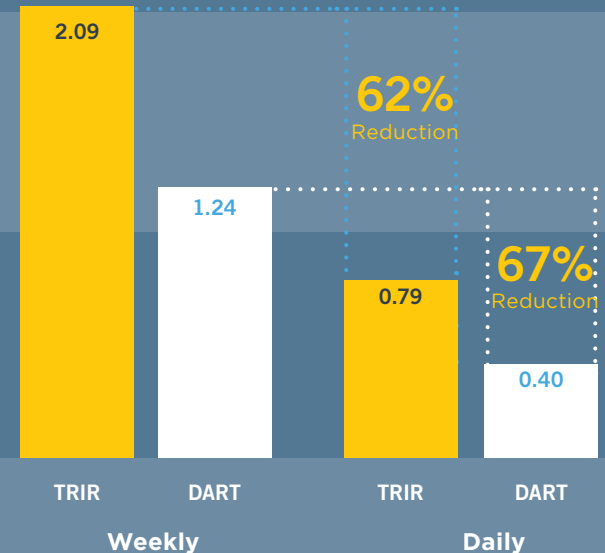
Can you brief employees on safety too much? No matter what you may have heard, there is no negative effect to conducting daily toolbox talks. The less frequently this type of training is conducted and the fewer safety topics covered, the higher the lagging indicators. Companies that conduct daily toolbox talks reduce TRIR by more than 60 percent compared to companies that hold them weekly.



**“Toolbox talks are one of the easiest and most fundamental ways to improve your company safety training, employee knowledge and performance. We have utilized toolbox talks for many years to keep our employees up to date and refreshed on the many important safety topics and workplace hazards they may face during any given day. These moments of ongoing training throughout the year are tracked in our training records.”**

—James K. Thompson, corporate EH&S director,  
Kwest Group LLC, Perrysburg, Ohio, STEP Diamond-level member

## FREQUENCY OF TOOLBOX TALKS

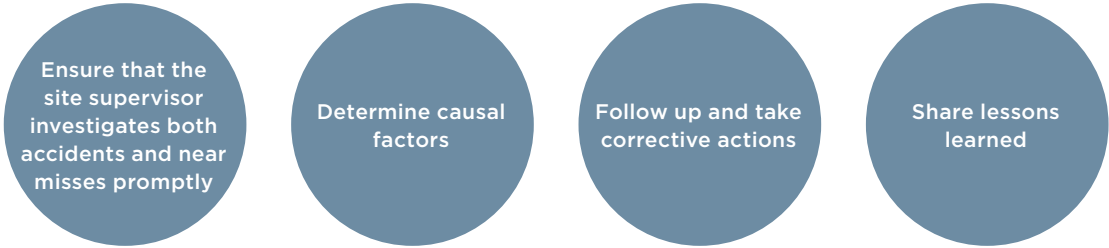


# 5

CORE LEADING INDICATORS

## Near-miss/Near-hit Analysis

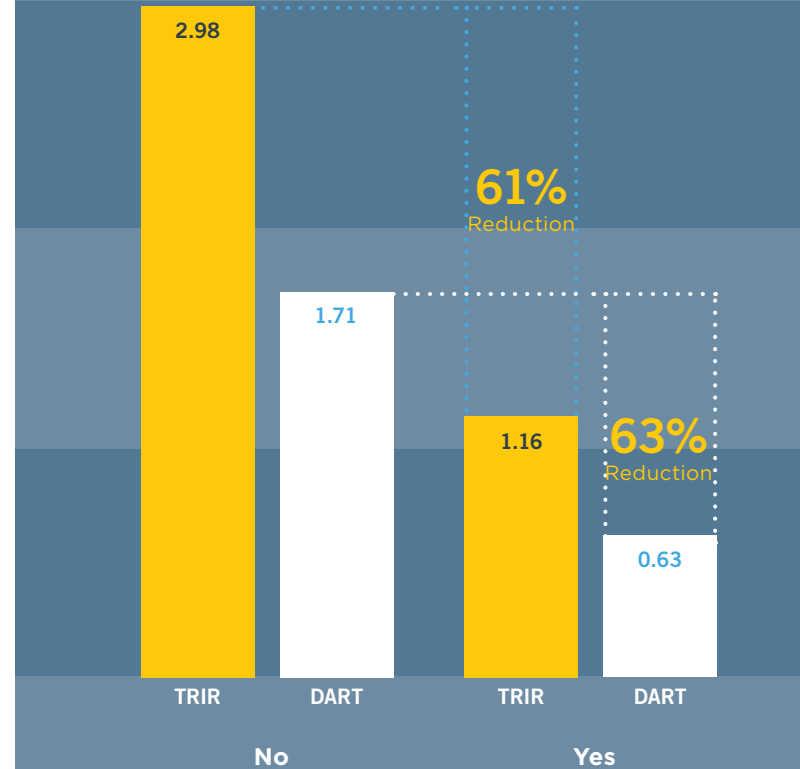
The quintessential leading indicator, near-miss/near-hit analysis records observations of situations that could have potentially been catastrophic, but did not result in disrupted or lost lives. While there is no industry-wide recognized definition of a near miss, tracking and learning from such episodes shows much promise in improving safety, with TRIR and DART rates reduced by 61 percent and 63 percent, respectively, at companies that do so. Companies that conduct near-miss/near-hit analysis:



**As part of senior management, it is my obligation to analyze every incident in order to extract information to prevent a reoccurrence. A near-miss incident receives an added amount of scrutiny because it is not far from a serious injury. We encourage employees to report near-miss incidents so that we can improve safety at our construction sites together.”**

—J.D. Slaughter, president, S & B Engineers and Constructors Ltd., Houston, STEP Diamond-level member

TRACK AND LEARN FROM NEAR MISSES (NO/YES) VS. TRIR & DART



# 6 CORE LEADING INDICATORS

## Site Safety Committee/ Principals' Council

*Regular meetings coordinated by the general contractor or construction manager that include representatives from site employees, subcontractors, vendors/suppliers and the client.*

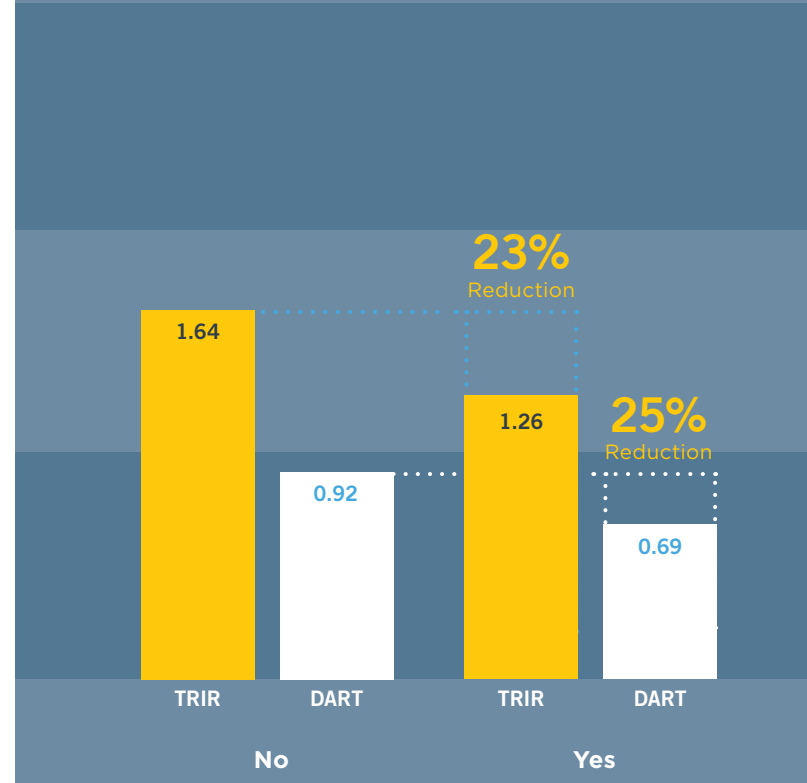
Companies that participated in site safety committee meetings had 23 percent to 25 percent fewer incidents. These information- and idea-sharing sessions:



**“Establishing a Site Safety Committee on our projects has spread the responsibility of safety to all companies on our construction sites. Weekly meetings establishing proactive planning of the following week’s events and the risks to all tradespeople has significantly reduced injuries and safety violations.”**

—Tony Roussey, chief operating officer, Elzinga & Volkers Inc., Holland, Mich., STEP Diamond-level member

### SITE SAFETY COMMITTEE/ PRINCIPALS’ COUNCIL PARTICIPATION (NO/YES) VS. TRIR & DART



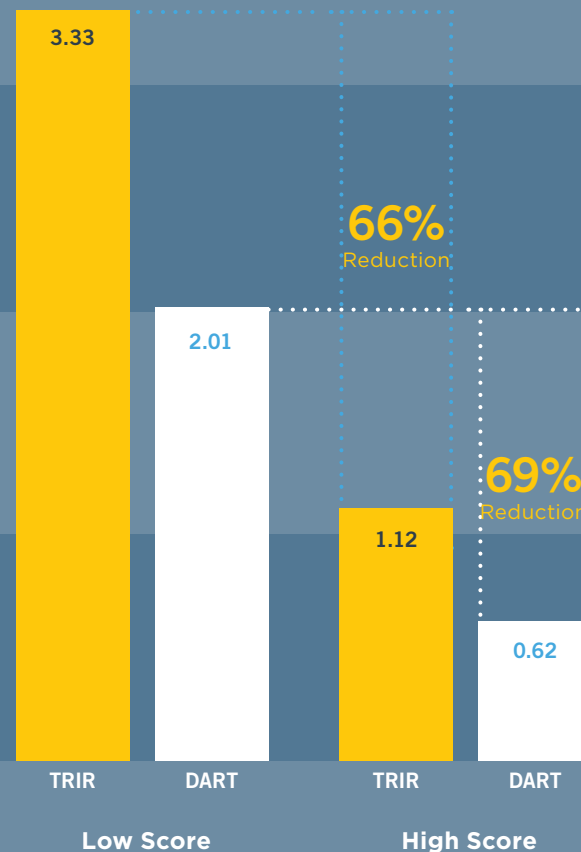
# 6 CORE LEADING INDICATORS

## Site Safety Committee/ Principals' Council

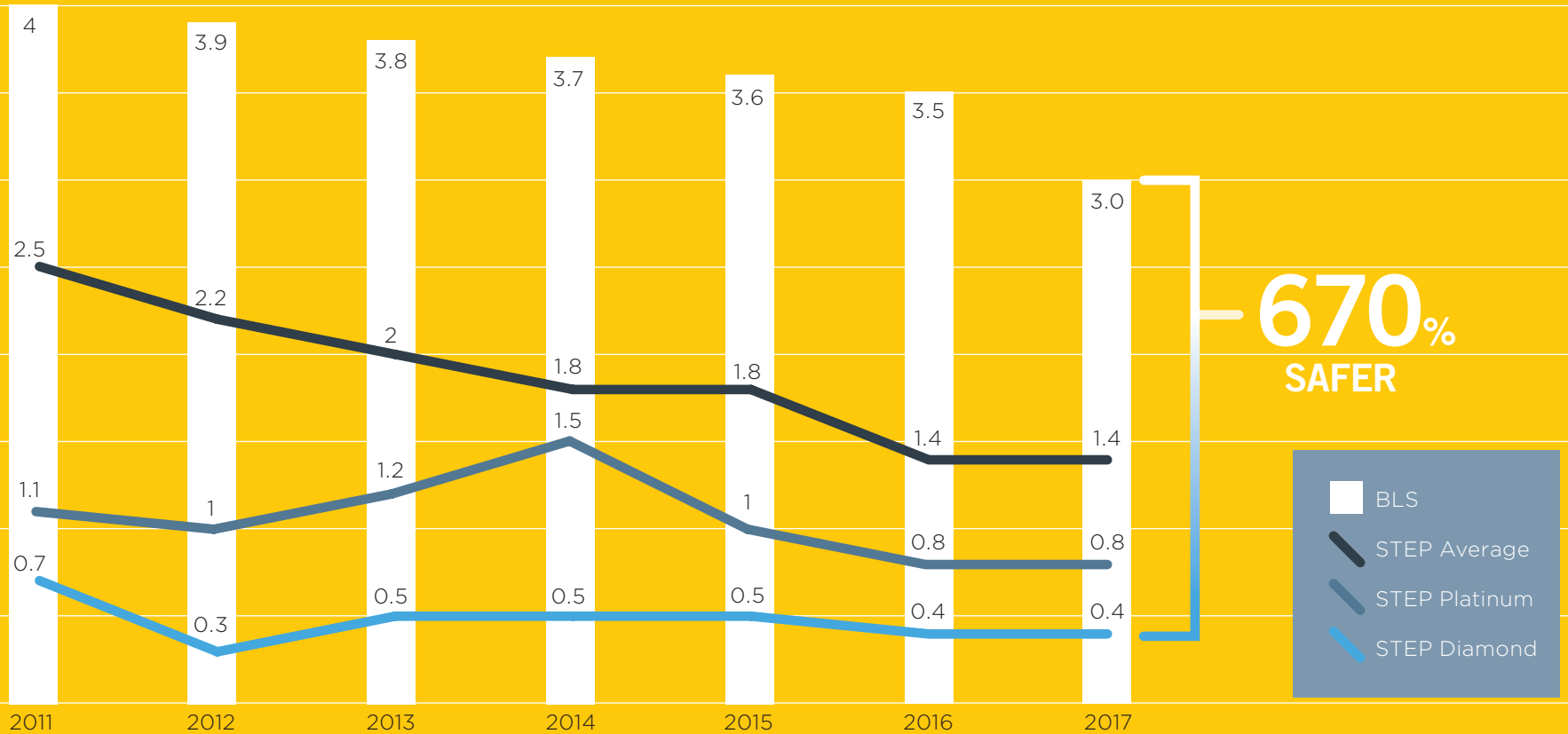
Weekly jobsite inspections by the site supervisor are a critical information input to the site safety committee. Frequent inspections, corrections and learnings lead to a 66 percent reduction in TRIR rates and a 69 percent reduction in DART rates.



FREQUENT INSPECTIONS,  
CORRECTIONS AND LEARNINGS:  
LOW SCORE VS. HIGH SCORE



# BENCHMARKING STEP MEMBER SAFETY PERFORMANCE IMPROVEMENT, 2011-2017



Total Recordable Incident Rate (TRIR): STEP vs. the U.S. Bureau of Labor Statistics Industry Average

# Glossary of Common Terms

**ABC** – Associated Builders and Contractors Inc., a construction trade association representing nearly 21,000 merit shop contractors and affiliated firms nationwide.

**BLS** – U.S. Bureau of Labor Statistics, a federal agency responsible for providing statistical analysis on workplace injuries, illnesses and fatalities. Operates under the scope of the U.S. Department of Labor.

**CII** – Construction Industry Institute, a consortium of owners, engineering-construction firms and suppliers focused on the effectiveness and sustainability of the capital facility life cycle through research and industry initiatives.

**CCDAFW** – Construction Coalition for a Drug- and Alcohol-Free Workplace, established in 2012 by construction trade associations to develop resources in the campaign to eliminate substance abuse in the industry ([drugfreeconstruction.org](http://drugfreeconstruction.org)).

**CURT** – The Construction Users Roundtable represents many owners, users and clients that hire construction industry firms.

**DART Rate** – Days Away, Restricted or Transferred rate. Measures the number of cases per 100 full-time employees where an injury or illness causes an employee to be restricted or transferred based on inability to perform normal job functions.

**Disrupted Life/Lives** – Non-statistical term used to describe the impact on the employee, friends and family when a life has been disrupted because of an injury suffered during work hours.

**Experience Modification Rate (EMR)** – Also referred to as “mod factor.” Calculation normally performed by the insurance industry (National Council on Compensation Insurance or state-level agency) reflecting percentage of workers’ compensation payouts by a company compared to a company of similar size and type.

**FTE** – Full-time employee as defined by BLS and captured on a company’s OSHA Form 300A, which tracks the number of full-time employees that a company employs in the course of a calendar year.

**Lagging Indicators** – Metrics used by industry to measure safety performance based on historical data (i.e. incident rate, DART rate, etc.).

**Leading Indicators** – Metrics used by industry to measure the use and effectiveness of incident prevention (e.g. near-miss reporting, use of substance abuse programs, site safety orientation programs, etc.).

**Lost Life/Lives** – Non-statistical term used to describe a fatality caused by an injury suffered during work hours and the long-term impact, beyond the lost life, on family and friends.

**Near-miss Tracking** – Observations made and recorded of cases where, had conditions been different, an OSHA recordable incident would have occurred. Also referred to as “near-hits.”



**OSHA** – The Occupational Safety and Health Administration, a U.S. government agency tasked with establishing workplace safety and health requirements and enforcement of existing rules. Operates under the scope of the U.S. Department of Labor.

**OSHA Form 300A** – The “Summary of Work-Related Injuries and Illnesses” required by OSHA for all companies with 11 or more employees and is created using information gathered from a company’s OSHA Form 300, the “Log of Work-Related Injuries and Illnesses.”

**Safety Portion of a Company’s New-Hire Orientation** – Amount of time, in minutes,

a company devotes to covering safety-related topics during orientation for all new employees.

**Site Safety Committee** – Group comprised of employees and site management representatives, usually selected from the general contractor and subcontractors operating on the jobsite, tasked with reviewing and establishing safety and health training and education, as well as reporting on the general well-being of employees onsite. Also may be referred to as a “Principals’ Council.”

**Site-specific Safety Orientation** – Jobsite-specific training conducted by a construction firm designed to orient employees recently hired or assigned to the jobsite with operational procedures and safety hazards specific to the work being performed, and location-specific safety and health information, such as emergency contacts, first response procedures, etc.

**STEP** – ABC’s Safety Training Evaluation Process, created in 1989 to gather data related to member safety performance and to evaluate the effectiveness of safety programs based on 20 Key Components of world-class safety programs.

**Toolbox Talks** – Topic-specific, short-format training, usually conducted before the workday or during lunch breaks, aimed at crews and site employees to educate on specific safety and health topics/hazards/policies and procedures.

**TRIR** – Total Recordable Incident Rate. Measures the number of cases per 100 full-time employees where an injury or illness caused a loss of life, situation where an employee is unable to work (days away), is restricted or transferred based on inability to perform normal job functions or any other injury that falls under the OSHA definition of a recordable incident.

# You Can Achieve World-class Safety. Start Today.

A commitment to world-class safety takes tremendous effort and is fraught with leadership challenges.

Transforming a company is difficult. Transforming an industry is daunting. Once you resolve to make that transformation, ABC can help.

Whether your company is large or small, ABC's Safety Training Evaluation Process (STEP) gives you an organized approach to analyze and develop your company's safety and loss prevention program, wherever you are on the roadmap to world-class safety performance.

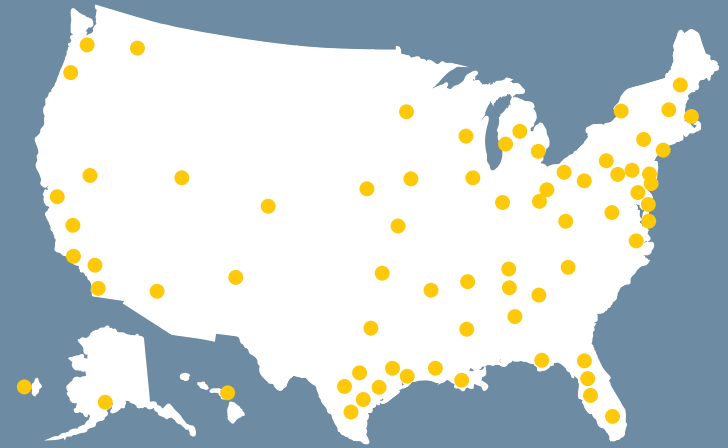
The STEP application is now online, making it faster and easier to complete your self-evaluation. You can also ask your ABC chapter to host an ABC STEP Plus Safety Academy.

I hope the 2018 ABC Safety Performance Report helps you discover how world-class results can be realized in your company. Please feel free to share the report widely.

If we choose to lead, if we choose to commit, if we choose to transform, together we will create the conditions for all to do their work without incident and go home safely every day.



Michael D. Bellaman  
President and CEO  
Associated Builders and Contractors



Founded in 1950, Associated Builders and Contractors (ABC) is a national construction industry trade association representing more than 21,000 members. Founded on the merit shop philosophy, ABC and its 70 chapters help members develop people, win work and deliver that work safely, ethically and profitably for the betterment of the communities in which ABC and its members work. [Visit us at abc.org.](https://www.abc.org)

# ABC 2018 SAFETY AND HEALTH COMMITTEE

## **Chair**

Ryan Odendahl  
*President*  
Kwest Group

## **Executive Committee Liaison**

Paul Lemley  
*Executive Vice President*  
BC Construction Group LLC

## **Chapter President Liaison**

Angela Latino-Geier  
*President*  
ABC New Orleans/Bayou Chapter

## **Staff Liaison**

Stephen Wiltshire  
*Director of Safety*  
ABC National

Cheyenne Wheeler  
*Manager of Workforce  
Development and Health  
Safety and Environment*  
ABC National

Karen Livingston  
*Senior Director of Government  
Affairs*  
ABC National

Kelly Tyroler  
*Manager of Labor & Employment  
Policy*  
ABC National

## **Committee Members**

Troy Allen  
*Primoris Services Corp.*  
Vice President of HSE

Gary Clevenger, MS, CSP, RRE  
*National Risk Control Director -  
Construction*  
CNA

Paul Crivac  
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Director*  
CB&I

Teresa Kee  
*Director, Environmental Systems  
& Sustainability*  
United Rentals Inc.

Ken Kyle  
*Executive Vice President, Risk  
Management & Safety*  
The Rinaldi Group

Melanie Laird  
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FC Construction Services

Joe McAnulty  
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Kencor Inc. Elevator Systems

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Performance Contractors

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