



Understanding the Impact of Deploying **ABC's STEP Safety** Management System on Overall Safety Performance

ABC SAFETY PERFORMANCE REPORT

ABC 2019 SAFETY PERFORMANCE REPORT

UNDERSTANDING THE IMPACT OF DEPLOYING ABC'S STEP SAFETY MANAGEMENT SYSTEM ON OVERALL SAFETY PERFORMANCE

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You Can Achieve World-class Safety. Start Today.

Executing on your commitment to world-class safety takes fortitude and effort, as it is fraught with leadership challenges. During this journey, leaders eventually ask themselves and their employees questions such as:

- Do we truly believe that all incidents are preventable?
- Are we unwilling to compromise someone's safety for profit, productivity, schedule or any other priority?

ABC provides the industry with three tools that help create the conditions for everyone to complete their work without incident and go home safe and healthy every day.

• ABC's STEP is a world-class safety management system improved annually by the ABC National Safety and Health Committee.

² The annual ABC Safety Performance Report analyzes the cause-and-effect relationship between best-in-class processes and incident prevention.

³ABC's Safety Academy helps construction companies lay out a multiyear plan to achieve industry-leading safety results. Michael D. Bellaman President and CEO

Greg Sizemore Vice President, HSE and Workforce Development

Stephen M. Wiltshire Director of Safety

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

These tools provide leaders with a roadmap to win and deliver their work without incident:

Leadership commitment to an **Cultural transformation** organization that creates the into a company where every conditions for all to do their employee believes all incidents work without incident are preventable. Deployment of a world-class World-class results delivered safety management system using leading and trailing throughout the organization indicators to share successes and lessons learned with all with the desire to achieve industry-leading results. employees.

I am confident the 2019 ABC Safety Performance Report will help you on your journey. Please feel free to share the report widely with your teammates, subcontractors, clients and competitors.

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

Michael D. Bellaman President and CEO Associated Builders and Contractors

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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 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—trailing indicators. The empirical evidence did not exist.

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

The charts and summaries within this report present the clearest picture to date of the remarkable impact that leading indicator use has on a company's safety performance: fewer disrupted or lost lives and a safer 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 2019 ABC Safety Performance Report is based on submissions of unique company data gathered from members that deployed STEP in 2018. ABC collects each company's trailing indicator data as reported on its annual Occupational Safety and Health Administration 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 for its annual Occupational Injuries and Illnesses Survey, and combined to produce analyses of STEP member performance against BLS industry average incident rates.



ABC STEP MEMBERS ARE SAFER THAN THE INDUSTRY AVERAGE



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

What If Your Company Could Be 680 Percent Safer Than the Industry Average?

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

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

The 2019 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 nearly a billion hours of work annually presented in the 2016, 2017 and 2018 reports to identify what comprises a world-class safety program.

Measuring Safety Performance

The construction industry has long evaluated safety performance based on trailing 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. Trailing indicators only tell part of the story.

Safety performance isn't reflected in what you did. It's reflected in what you're doing.

TRAILING INDICATORS: OUTPUTS AND RESULTS



FATAL INJURIES PER DAY



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

LEADING INDICATOR IMPLEMENTATION



TRAILING INDICATOR PERFORMANCE

GOAL: Determine the correlation between **leading** indicator implementation and **trailing** 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. Members that deploy STEP 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 trailing indicator performance.

20 Key Components of a world-class safety program.

STEP Improves Safety



STEP is a safety management system. Participating ABC member firms measure their safety processes and policies on 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.

SAFETY PROGRAM GOAL SETTING AFETY PROGRAM PERFORMANCE REVIE TRAILING INDICATORS

USE OF PERSONAL PROTECTIVE EQUIPMENT EMPLOYER SUPERVISORY MEETINGS TOOLBOX TALKS TECTIVE EQUIPMENT TRAILING INDICATORS PROGRAMS E ABUSE PROGRAM PERF **VR** G FOR JOBSITE SAFETY EMPLOYER USE OF PERSONAL PROTECTIVE EQUIPMENT PROGRA TOOLBOX TALKS TRAILING INDICATO PROGRAM GOAL SETTING

STEP ACHIEVEMENT LEVELS

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

TRIR 25 percent below 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



The Roadmap to World-class Safety

LEADERSHIP

is the courage to be out front, challenge the status quo and 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 leaders, but for all employees. A culture of safety cannot exist without leaders taking a stand that includes an unwillingness to compromise safety and modeling this belief in every action.

WORLD-CLASS SAFETY

World-class Safety System Process Introduced and Deployed

Cultural Transformation and Commitment to World-class Safety



Leadership Commitment to World-class Safety





Current Safety Performance

LEADERSHIP COMMITMENT C-suite Engagement and Commitment Matters

Employer involvement at the highest level of company management produces a 63 percent reduction in TRIR. In highscoring ABC STEP member firms, the owner/CEO:

LEADERSHIP



"Within our company, we define leadership as a behavior. If we do our jobs as leaders, all in, all day, every day, and have each other's backs, we will send our team members home more enriched and in better condition than when they arrived."

-Michael W. Bennett, vice president, The Cianbro Cos., Pittsfield, Maine, STEP Diamond and ABC Accredited Quality Contractor

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



CULTURAL TRANSFORMATION New Hire Safety Orientation



Companies that conduct an in-depth indoctrination of new employees 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 HIRE SAFETY ORIENTATION: LOW SCORE VS. HIGH SCORE



IN-DEPTH SAFETY ORIENTATIONS ARE MORE EFFECTIVE

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



Eight 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 eight core leading indicators that have the most dramatic impact on safety performance.



FREQUENCY OF TOOLBOX SAFETY TALKS



core leading indicators Toolbox Safety Talks

Can you brief employees on safety too much? No matter what you may have heard, there is no negative effect to conducting daily toolbox safety talks—brief, single-topic training sessions of 15 to 30 minutes held on the jobsite for all employees. The less frequently this type of training is conducted and the fewer safety topics covered, the higher the trailing indicators. Companies that conduct daily toolbox talks reduce TRIR by 85 percent compared to companies that hold them monthly.



"Starting each day with a toolbox safety talk not only reinforces those general safe work expectations and obligations, but more importantly, demonstrates to the workforce the importance of putting safety first each and every day."

-Shelley Sutton, vice president of shared services, hth companies inc., Union, Missouri, STEP Platinum, ABC Accredited Quality Contractor



SUBSTANCE ABUSE PROGRAMS: LOW SCORE VS. HIGH SCORE

core leading indicators Substance Abuse Programs

One-third of all incidents on construction jobsites are drug- or alcohol-related. Companies with substance abuse programs/policies with provisions for drug and alcohol testing where permitted are 60 percent safer than those without a 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.



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, randomly and with reasonable suspicion

An employee assistance program and available education on substance abuse prevention "Substance abuse policies are vital to every safety-minded company's ability to ensure a safe jobsite for their employees. As responsible employers, we are obligated to ensure that our employees are free from substances that may impede their ability to make sound decisions that have a direct impact on their safety. That's why ABC requires all members who deploy STEP to pledge to confront this important issue head-on as part of its annual application process."

-Frank Trujillo, vice president of safety, Miller & Long Co. Inc., Bethesda, Maryland, STEP Gold



CORE LEADING INDICATORS

A biannual review of safety program performance by executive leadership that evaluates whether the program is producing expected results and identifies opportunities for improvement leads to a 59 percent reduction in TRIR and a 60 percent reduction in DART rates.

"To consistently achieve an elite level of safety performance, it is critical to know which tools, programs and procedures are the most effective. Conducting a safety performance review on a monthly, quarterly and annual basis keeps us grounded in reality and focused to make any necessary adjustments or improvements for greater success."

–James K. Thompson, corporate EH&S director, Kwest Group LLC, Perrysburg, Ohio, STEP Diamond





Results and expectations are discussed with safety staff and supervisors LEADERSHIP MEASURES PERFORMANCE OF THE SAFETY PROGRAM: LOW SCORE VS. HIGH SCORE





REVIEW OF CLAIMS AND KEY SAFETY RATES: LOW SCORE VS. HIGH SCORE



Training personnel to know the meaning and relevance of key safety rates and numbers such as EMR, TRIR and DART leads to a 57 percent reduction in TRIR and a 62 percent reduction in DART rates.

Taking Action on Trailing Indicators



CORF | FADING INDICATORS

"Trailing indicators are valuable tools to measure safety performance over time and provide insight into the frequency, severity and cost of injuries. These tools allow us to see how we have improved over the years and to set attainable goals as we work to create a workplace free from injury-producing events."

> -Eric Simmons, corporate safety director, Helix Electric, San Diego, STEP Platinum, ABC Accredited Quality Contractor



Pre-planning

discussions are

conducted

A review of

serious incidents is

conducted

EMPLOYER-CONDUCTED SUPERVISOR SAFETY MEETINGS: LOW SCORE VS. HIGH SCORE



CORE LEADING INDICATORS Employer Supervisory Safety Meetings

Conducting weekly safety meetings with supervisors and distributing minutes for review leads to a 56 percent reduction in TRIR and a 59 percent reduction in DART rates.

Meetings include a

status report on site

safety activities

Lessons learned are

reviewed

"The best way to mitigate hazards is to know where they are in the first place—and talk about it! We make it a daily practice to identify the potential hazards and risks unique to each jobsite. We communicate this to our workers in English and Spanish during morning briefings and display it prominently so all workers can safely perform their duties and mitigate exposure to risk."

—Scott Skidelsky, president, Balfour Beatty, Orlando, Florida, STEP Platinum, ABC Accredited Quality Contractor



USE OF PPE: LOW SCORE VS. HIGH SCORE



"The best line of defense against injury and exposure to undesired events is to work diligently toward elimination of hazardous conditions in the work environment or planning for their avoidance. The cost to implement a robust PPE program on the forefront of technology is far outweighed by the dividends of effective PPE use."

CORF | FADING INDICATORS

—Troy Allen, vice president of HSE, Primoris Services Corporation, Baton Rouge, Louisiana, STEP Diamond







PRE-PLANNING FOR JOBSITE SAFETY: LOW SCORE VS. HIGH SCORE



core leading indicators Pre-planning for Jobsite Safety

Integrating safety pre-planning into the estimating, bid and premobilization phases of a project leads to a 53 percent reduction in TRIR and a 54 percent reduction in DART rates.

"Nobody starts their workday with the goal of having a job-related accident, but safety programs that over-rely on workforce interventions miss a substantial opportunity to proactively identify, mitigate and minimize risk. Preplanning the safety aspects of construction work helps identify potential problems before they mature to the point of threatening site safety."

—Jon Lynch, president, Three Rivers Corp., Midland, Michigan, STEP Diamond





ESTABLISHING SAFETY GOALS: LOW SCORE VS. HIGH SCORE

CORE LEADING INDICATORS
Safety Program Goal Setting

Implementing a formal process to annually assess safety program needs and establish safety goals leads to a 48 percent reduction in TRIR and a 50 percent reduction in DART rates.

"When it comes to safety, we must all be leaders. Our priority is the health and safety of everyone on our jobsites. We conduct behavioral-based field observations that are entered into a database for review and trend analysis to meet our global minimum."

—Joel Pickering, environment, health and safety director and senior vice president, Lendlease (US) Construction LMB Inc., New York, STEP Diamond





BENCHMARKING STEP MEMBER SAFETY PERFORMANCE, 2011-2018



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

Glossary of Common Terms

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

Accredited Quality Contractor - ABC's

credential recognizing members' commitment to corporate responsibility in quality, safety, talent management, education, community relations and diversity.

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, engineeringconstruction 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 Drugand Alcohol-free Workplace, established in 2012 by construction trade associations to develop resources in the campaign to eliminate substance abuse in the industry.

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

DART – 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.

EMR – Also referred to as Experience Modification Rate or "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.

Leading Indicators – Metrics used 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. It is created using information gathered from a company's OSHA Form 300, the "Log of Work-Related Injuries and Illnesses."

Pre-planning for Jobsite Safety - Evaluating safety, quality and efficiency processes to eliminate hazards and accident potential during the identification of potential projects. Continuing that process in the estimating, pre-bid planning, bidding, sourcing, permitting, staging, jobsite evaluations, jobsite management planning, job-specific training and repeating the process for any work order changes or job scope/plan revisions.

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.

Safety Program Goal Setting - Developing and implementing descriptive goals for a safety program that controls hazards. Additional safety goals may include participation in safety committees, setting a number of weekly observations, conducting emergency safety drills, etc.

Safety Program Performance Review -

Key safety leaders monitor performance and progress, verify the program is implemented and operating as designed, correct program shortcomings and identify opportunities to improve.

STEP - ABC's safety management system, 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 Safety Talks – Topic-specific, shortformat 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.

Trailing Indicators – Metrics used to measure safety performance based on historical data (e.g., incident rate, DART, etc.).

TRIR - Total Recordable Incident Rate. Measures the number of cases per 100 fulltime 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 OSHA's definition of a recordable incident.

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Established in 1950, Associated Builders and Contractors is a national construction industry trade association representing more than 21,000 members. Founded on the merit shop philosophy, ABC and its 69 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.**





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