





The Road to World Class Safety

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Agenda

- The Road Map
 - Dissatisfaction with Current Performance
 - Leadership Commitment
 - Cultural Transformation
 - World Class Systems and Processes
 - World Class Results
- Q&A





The Road Map to World Class Safety

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





The Road Map to World Class Safety

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



STEP as a Benchmarking Tool

- ABC's Safety Training Evaluation Process (STEP) founded in 1989 by safety professionals
 - Designed to help companies evaluate every aspect of their corporate safety & health program and identify opportunities to drive towards world class performance
 - 20 Key Components self-evaluation portion of STEP that provides roadmap for companies to follow on journey towards world-class













- Annual report compiled from STEP data
 - Prepared using STEP data from previous calendar year's submissions (2015 safety data year)
- Identifies six leading indicator questions from STEP application and analyzes aggregate lagging indicator safety performance based on usage
- Goal: determine the correlation between leading indicator implementation and lagging indicator performance

Leading Indicator: system/process used by a contractor to identify hazards/hazardous behaviors and eliminate/minimize the condition to prevent injury Lagging Indicator: statistic that represents incidents/conditions that have already occurred and measures performance based on industry- recognized calculations





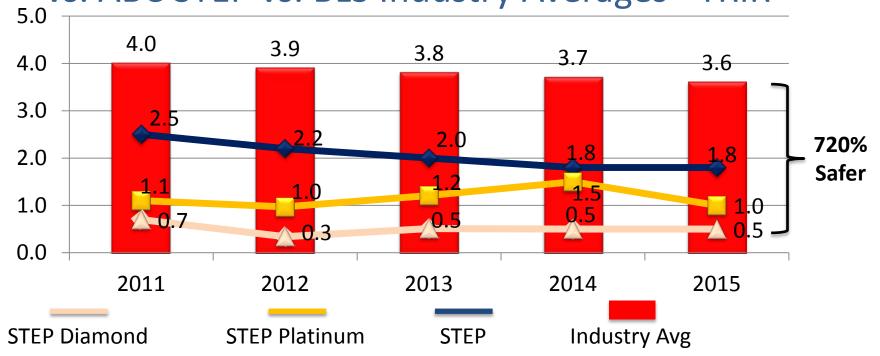
Definitions

- 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.
- 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.





Enables Companies to Benchmark Safety Performance vs. ABC STEP vs. BLS Industry Averages - TRIR







The Reality

 Every work day in the Construction Industry, statistics show on average ~3 people are fatally injured





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World Class Safety





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Cultural Transformation and Commitment to World Class Safety





Leadership Commitment to World Class Safety





Leadership is the authentic expression of who you are in such a way that creates the conditions for others to achieve.

Alan Medville **





Safety leadership is the authentic expression of who you are in such a way that creates the conditions for others all to achieve do their work without incident and go home safely every day.







Uncompromising Leaders

- Have courage
- Are comfortable being out in front while everyone else is behind them
- Take a stand when no one else will
- Get their energy from transforming and challenging the status quo





The Road Map to World Class Safety

World Class Safety System

Process Introduced and

Deployed













Cultural Transformation and Commitment to World Class Safety

Associated Builders
And Contractors. Inc.
Safety Academy

Leadership Commitment to World Class Safety







"Culture eats Strategy for breakfast!"

Peter Drucker





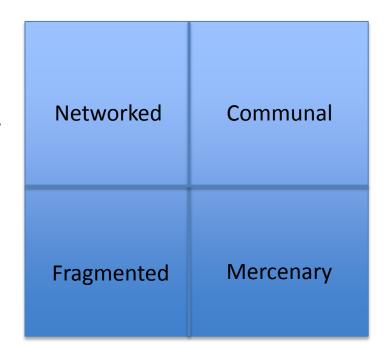
A Culture Where Everyone

- Believes all incidents are preventable
- Is unwilling to compromise someone's safety for
- Is in passionate pursuit of new ways (world class process) to be safer and eliminate incident





What is Culture? The Character of a Corporation



Solidarity

- Rob Goffee and Gareth Jones define
 - Solidarity as a measure of mutual interest and shared goals among members of a community (company, project)
 - Sociability as a measure of friendliness among members of a community (company, project)
- The delicate dance of "Managing Performance to Achieve Desired Results vs Maintaining Friendly Relationships"

Sociability





Cultural Transformation Action Matrix

Stages of Cultural Transformation

- Activate how does the organization initiate this cultural phase of the Road Map?
- Sustain how does the organization sustain a culture of uncompromised commitment to world class safety?

Key Elements which drive transformation

- Organization what drives an organization to initiate and sustain cultural transformation?
- Personal what drives an individual to initiate and sustain personal transformation?

Create the Conditions for Action

- Organizationally what actions can be taken which can initiate and sustain cultural transformation
- Individual How do those actions translate to personal transformation



Cultural Transformation Action Matrix



	Organizational	Individual	Create Condition for Action
Activate	 Dissatisfaction with the Current Performance "Cathartic Moment" Lose an employee Lose License to operate The Prize is Desirable and Future Compelling 	 Shares dissatisfaction with Company Direction "Cathartic Moment" Personal experience Emotional event – family/friend Life/job will be "awesome" and prosperous 	 Eliminate the conditions for innocent Ignorance Benchmarking - STEP Education and Training Conscious Cultural Migration – eg Mercenary Articulate the vision/future
Sustain	 Customer Requirements, Competition, Industry become a higher standard "Joey" - legends Feedback loop during journey on Road Map 	 Personal Setback Performance Management Moment "Joey" - legends Positive Wins and momentum 	 "Joey" – create the legend Align Performance Management/Recognition Share and integrate learnings from journey On Boarding/ Re-induction
	 Good and Bad 	Actual incident prevented	Actual Results Delivered



STEP Category



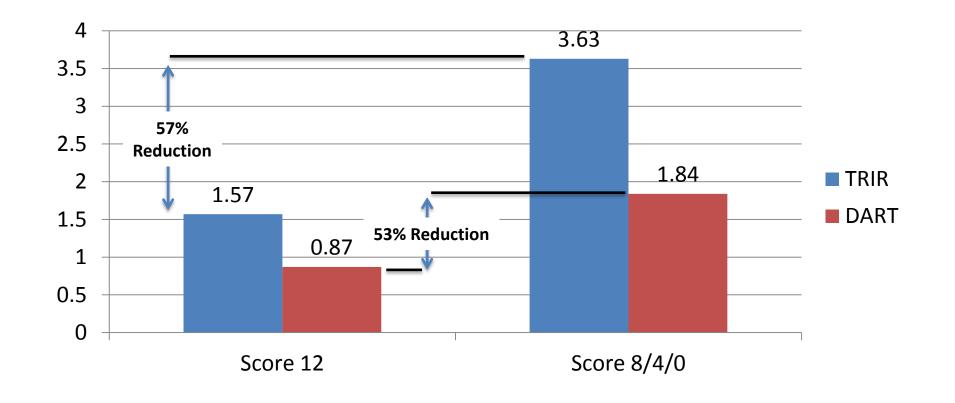
A. EMPLOYER INVOLVEMENT

A. EMPLOTER INVOLVEMENT							
12	8	4	0				
Owner/CEO directly and actively participates in safety program	Members of company management participate in	Employer wants and supports safety, but does not actively	Employer not involved in safety program and demonstrates little interest in it				
Instills personal accountability for safety throughout company Tracks and annually reviews goals/objectives	 Personal accountability for safety expected, but little or no recourse 	 Little personal accountability for safety – just "be safe." 	Safety left to site supervisory personnel to handle "as needed"				
for safety	• Has safety program goals/	• Provides limited funds for safety	No accountability for safety				
Solicits feedback on program and seeks ways to improve it	objectives, but does not track progress		Little or no funding for safety activities				
Commits reasonable resources (money, time, personnel, equipment, supplies, etc.) for program to achieve goals	Provides resources for safety						
Safety is a part of everyone's performance appraisals							
• Integrates safety into other facets of company operations							



Employer Involvement at highest levels (C Suite) – High Score vs. Low Scores







STEP Category



I. EMPLOYEE PARTICIPATION

9 6 3 0

- Opportunities for employee participation in safety program are clearly identified (e.g., safety surveys, hazard reporting, incident investigation, safety instruction, toolbox talks, policy development/ auditing, new hire mentoring, committees, job safety analysis development, pre-planning, etc.)
- Supervisory personnel are informed of these opportunities and trained on how to actively solicit employee involvement
- Participation opportunities explained to employees, along with expectation for active involvement
- Participation opportunities evaluated to ensure they are meaningful, necessary resources are available (time, money, staff, equipment, etc.) and potential barriers are identified and eliminated

- Opportunities for employees to participate in safety program exist, but are not specifically documented
- Supervisors provided limited training in soliciting employee participation, but nonetheless encourage involvement
- Employees may be aware of opportunities, but no specific participation expectations
- Limited focus on identifying and eliminating potential barriers to participation

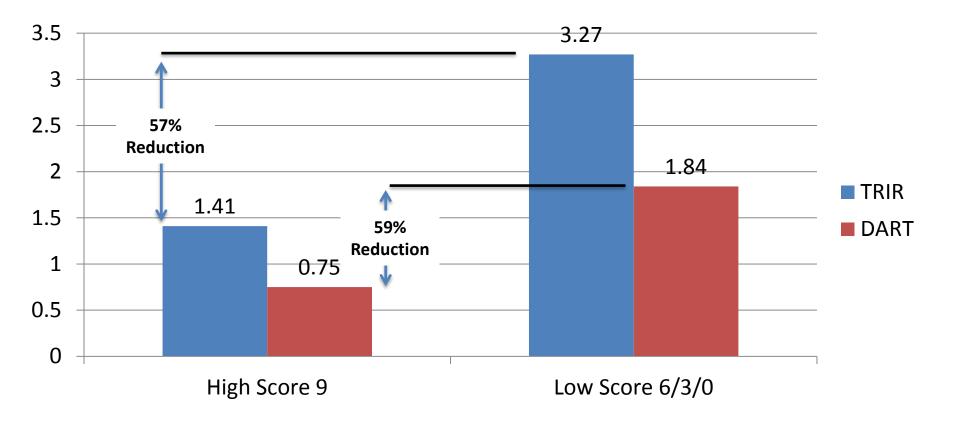
- Employees encouraged to participate in safety program, but no concerted efforts made to engage them
- Offers general communication outlet: "If you have any questions or concerns, speak with your foreman."
- Employee suggestion/comment process in place

 No opportunities for employees to participate in safety program



Employee Participation throughout the safety management system – High Score vs. Low Scores









Culture – the Leader Effect

"The Culture of any organization is shaped by the worst behavior the leader is willing to tolerate."

Steve Gruenert and Todd Whitaker





The Road Map to 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





Leading Indicators Used in the Safety Performance Report

- New-hire safety orientation length of time spent on safety awareness & education during orientation training for newly-hired employees
- Site-specific safety orientation safety orientations/briefings for employees that are specific to each jobsite and are separate from the safety portion of new-hire orientations
- Toolbox talks brief, single-topic training sessions (15-30 mins.) conducted on the jobsite for all employees





Leading Indicators Used in the Safety Performance Report

- Near miss/near-hit incidents that did not cause injury but, had circumstances or conditions been different, would have resulted in injuries/fatalities and/or an OSHA citation
- Site safety committee/Principals' Council a safety committee comprised of employees and management on each jobsite that regularly meets
- Substance abuse program a written substance abuse program/policy with provisions for drug/alcohol testing where permitted



New Hire Safety Orientation >



- Effective content results in lengthier orientations
- Introduction to the company's safety culture and core values by the President/CEO and/or senior leadership is imperative
 - Establishes the safety moral compass that the rest of an employee's training and development will follow throughout their career and reinforces senior leadership's commitment to safety as the core value upon which the company operates
- Companies that conduct an in-depth indoctrination of new-hire employees into the company's safety culture & systems/processes witness fewer incidents than companies that limit their new-hire orientations to basic safety & health compliance topics



STEP Category



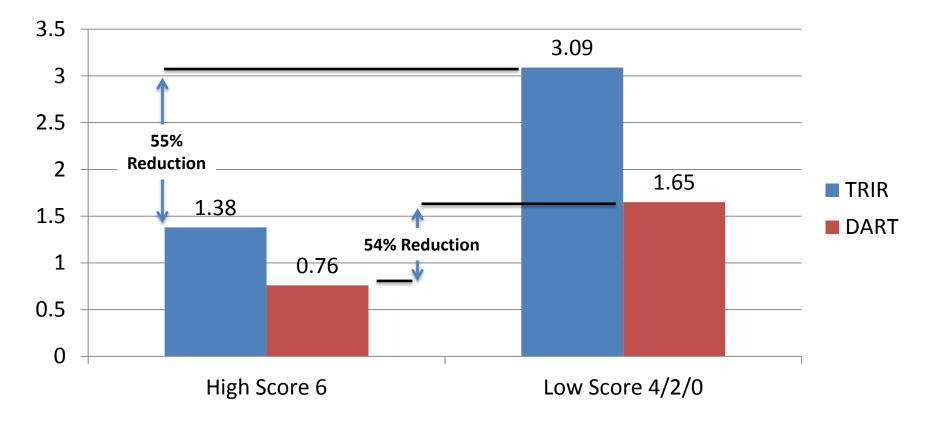
covered and employee signature

I. NEW EMPLOYEE ORIENTATION		0 /	
6	4	2	0
Documented orientation process in place for all new or transferred employees (who gets	Orientation is given to new employees; however, process has not been formalized (exact)	• Informal or on-the-job safety instruction is given to new hires	No orientation is given to new employees
orientation, when, how, by whom and topics to be covered)	process documented)	 No uniform process or list of topics to cover 	
Orientation topics include:	Orientation includes at a minimum:	No documentation is maintained	
 Explanation of employer safety commitment and expectations 	- PPE expectations		
- Safety responsibilities	- Key workplace safety rules that		
- PPE expectations	pertain to site and/or major job hazard exposures		
 Key workplace safety rules that pertain to site and/or major job hazard exposures 	- Hazard communication		
- Hazard communication	 Hazard, injury and emergency reporting procedures 		
 Hazard, injury and emergency reporting procedures 	Process may or may not involve safety mentors		
 Key safety skills demonstration (wearing harness, adjusting guards, PPE use, etc.) 	No new hire performance evaluation process		
New hires assigned a safety mentor until orientation process complete	Record of orientation, with employee signature, maintained		
New hire performance evaluation process established to give feedback to new hires on pre- determined frequency (30 days and 60 days)	,		
Records maintained showing dates, person(s) doing orientation, assigned mentor(s), topics			



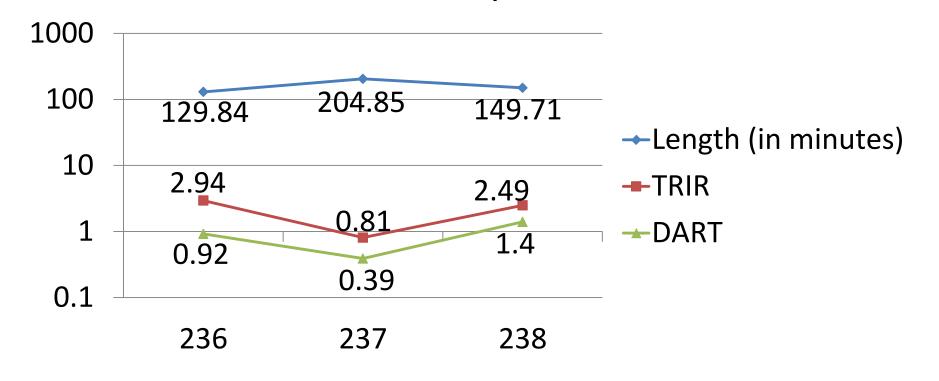
New Employee Orientation – High Score vs. Low Scores







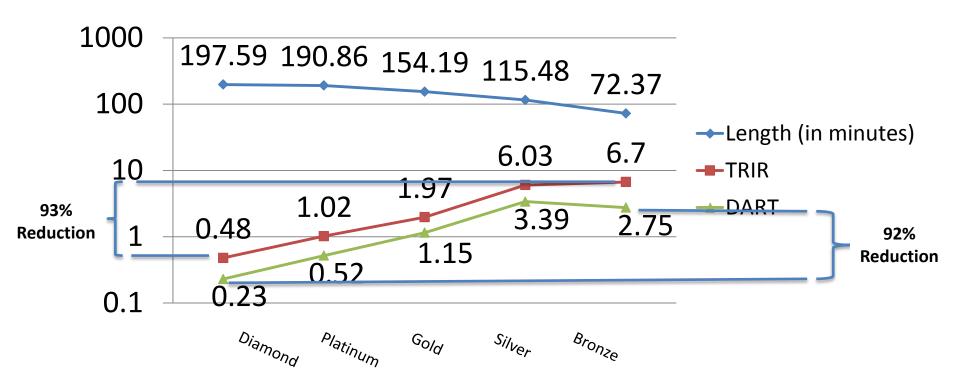
Average Length of Safety Portion of New-Hire Orientation – By NAICS Code





Average Length of Safety Portion of New-Hire Orientation – By STEP Level







Site Specific Orientations

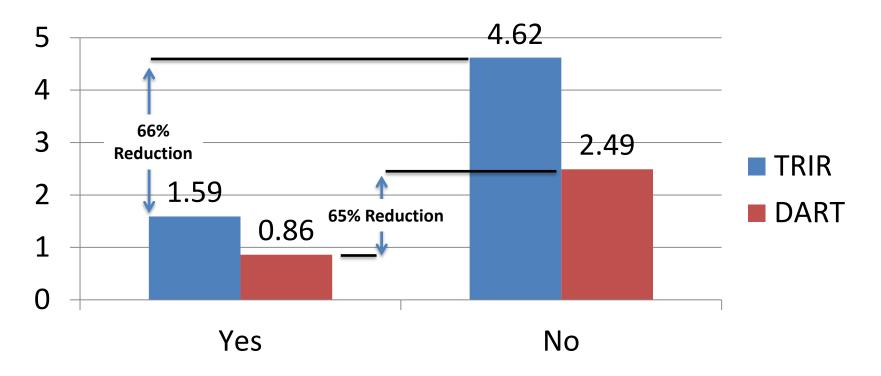


- Model site-specific orientations not only cover the policies and procedures specific to the jobsite, as well as site-specific hazards and operations, but also reinforce the company's safety vision and core value, such as the importance of stop-work authority, peer observations, etc.
- A significant number of NAICS 238 respondents not only conduct site-specific safety orientations for their employees, but prove that, to do so greatly reduces the company's TRIR
 - Goes against long-held belief that site-specific orientations cannot be conducted by specialty contractors because of frequency of movement



Site-Specific Orientations (Y/N) vs. TRIR & DART

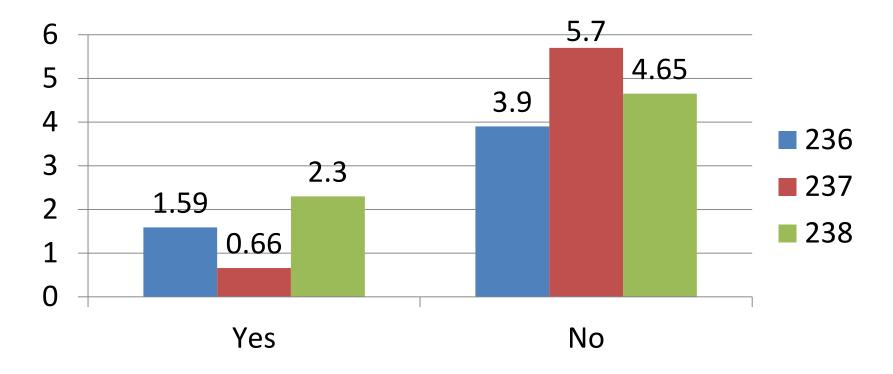






Site-Specific Orientations (Y/N) vs. TRIR – NAICS 236/237/238







Tool Box Talks

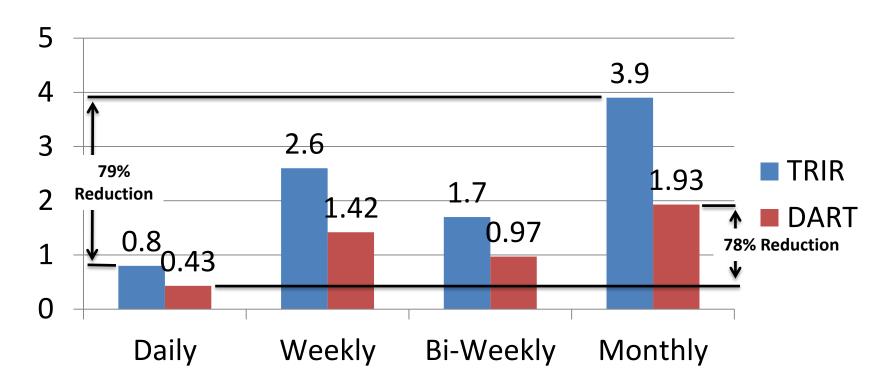


- The less frequent the training and, as a result, the fewer safety topics covered, the higher the TRIR & DART rates
- Frequent toolbox talks serve not only to educate the workforce on proper use of equipment/tools, identifying potential hazards/conditions, etc., but also to reinforce the company's safety culture and communications between field employees and management
- Toolbox talks can serve as a "reset button" on jobsites during the day, to help employees refocus and remain safe
- Pre-task plans when implemented prior to the start of all work is the desired best practice and most practical tool box talk



Frequency of Toolbox Talks / Pre-Task Plans vs. TRIR & DART

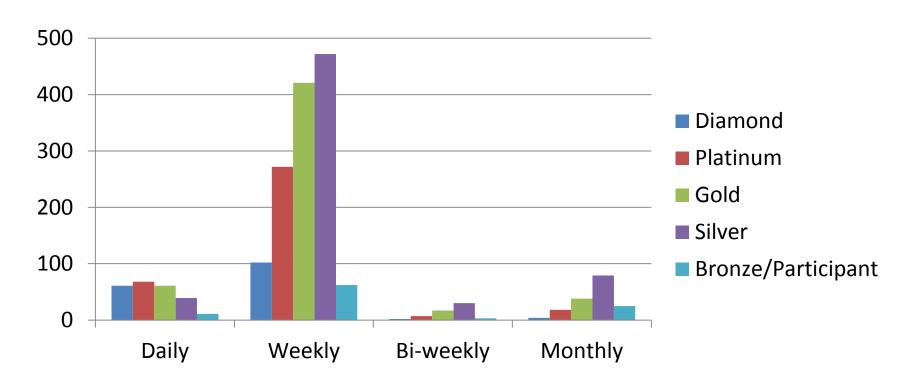






Frequency of Toolbox Talks by STEP Level







STEP Category

L. EMPLOYEE SAFETY TRAINING

· Based on annual safety training needs assessment, an agenda is developed and instituted (who needs what, when and who will train)

12

· Formal training topics include:

- Recognition and control of hazards specific to trade/work tasks (e.g., heavy equipment, lift operation, LOTO and arc flash, rigging. crane operation, confined space entry, temp traffic control, hot work, excavation safety, steel erection, blasting safety, noise, lead, asbestos, mold exposure, etc.)
- First-Aid/CPR/AFD
- OSHA topics (e.g., PPE, hazcom, electrical, scaffold, ladder/stairs, fire prevention and protection, tool safety, fall protection and prevention, etc.)
- Driver safety
- Environmental compliance
- Pertinent DOT compliance and CDL annual training
- · Conducted by competent/qualified safety instructors
- · Employee training comprehension and understanding is verified and documented (e.g., test, skills assessment, etc.)
- Records kept of all training date, attendees, topics covered and trainer

· Safety training needs are determined each year, but a formal assessment and training agenda are not necessarily used

· Formal training topics include:

- Recognition and control of hazards specific to trade/work tasks (e.g., heavy equipment, lift operation, LOTO and arc flash, rigging, crane operation, confined space entry, temp traffic control, hot work. excavation safety, steel erection, blasting safety, noise, lead, asbestos, mold exposure, etc.)
- First-Aid/CPR/AED
- OSHA topics (e.g., PPE, hazcom, electrical, scaffold, ladder/ stairs, fire prevention and protection, tool safety, fall protection and prevention, etc.)
- · Conducted by competent/qualified safety instructors
- Employees only retrained as required (OSHA) and when visibly lacking safety skills

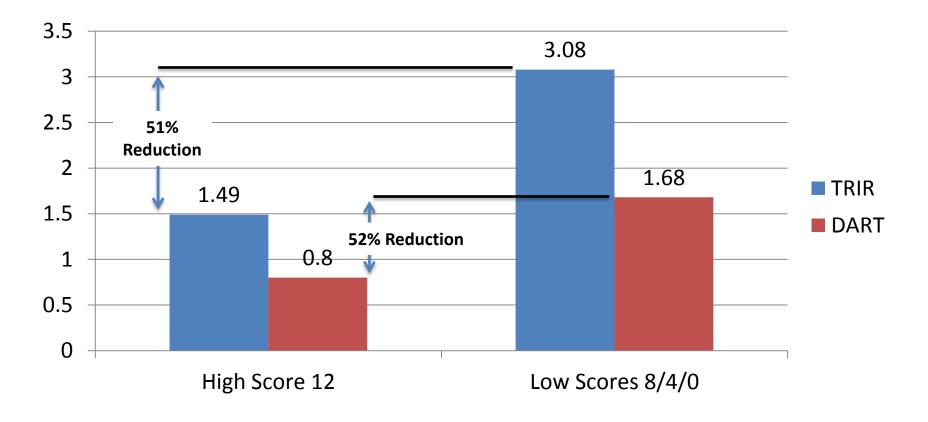
- · Informal or on-the-job safety training arranged as needed
- · No established training agenda
- Limited or no training documentation kept

• No formal safety training provided



Annual and On-going Employee Safety Training – High Score vs. Low Scores







Near Miss/Near Hit

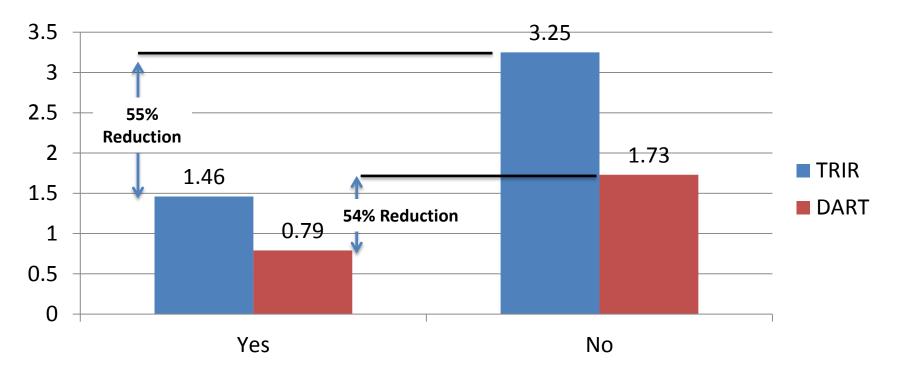


- Near miss tracking is the quintessential leading indicator—it records observations of situations that could have potentially been catastrophic but did not result in disrupted or lost lives
- Still, there is no industry-wide recognized definition for the term "near miss"
- Near miss reporting is only the first step—employees and management must be trained not only on how to investigate the root causes of near misses, but also how to interpret results and implement positive changes
- Enhance means and methods from learnings is ultimately the desired action



Track and Learn from Near Misses (Yes/No) vs. TRIR & DART



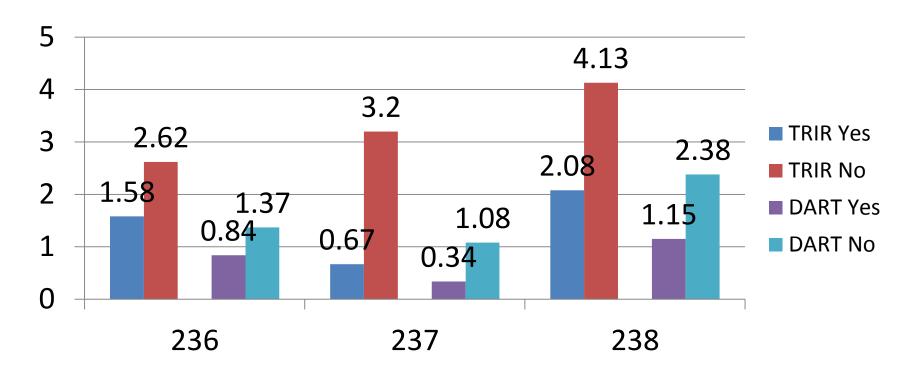


Tot. respondents=1104 Y/507 N



Track Near Misses (Y/N) by NAICS Code vs. TRIR & DART









Site Safety Committees

- Companies who are part of the information- and idea-sharing that takes place during these meetings have fewer incidents.
- Ideally, site safety committees meet on at least a weekly basis, are made up of employees selected by their peers or are volunteers, include representation from all subcontractors present on-site, and serve as information-sharing forums where safety concerns can be raised and corrected, as well as coordination of work to minimize hazard exposure.
- Those who participate in weekly jobsite safety inspections looking for and correcting unsafe work conditions immediately (promptly if appropriate) can be very effective
- Site safety committees/Principal's Councils should serve as communications hubs whose goal is to enhance jobsite safety for all personnel.



STEP Category



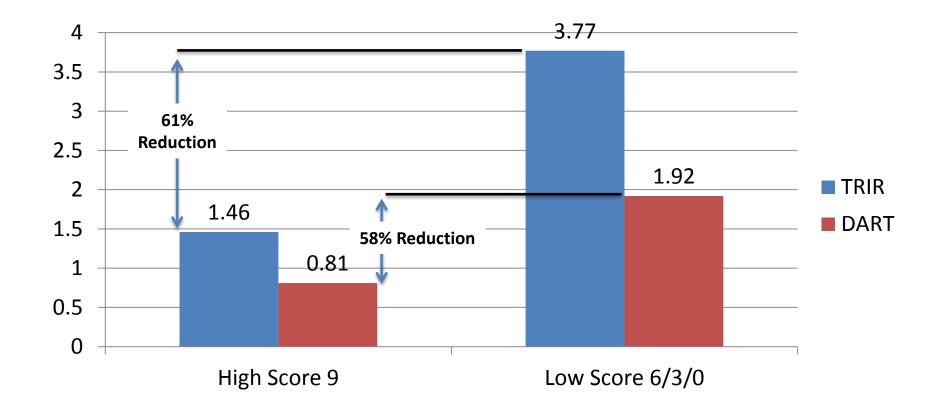
N. INSPECTIONS

N. INSPECTIONS			
9	6	3	0
Weekly jobsite inspections are made by site supervisor Inspection documented, along with assignment of responsibility and expected completion date Potentially serious safety issues corrected immediately Less serious safety issues corrected promptly Follow-up process to confirm action taken and that it is producing expected results	Monthly jobsite inspections are made by site supervisor or an employer representative Inspection documented, along with assignment of responsibility and expected completion date Potentially serious safety issues corrected immediately Less serious safety issues corrected promptly	 Informal jobsite inspections (walk-through) are made by site supervisor No documentation or follow-up Safety issues corrected ASAP 	• No inspections conducted



Frequent Inspections, Corrections and Learnings – High Score vs. Low Scores







Substance Abuse Programs



- According to multiple studies, 1/3 of all incidents are drug and alcohol abuse related
- Companies with substance abuse programs in place dramatically outperform those without an implemented program in both lagging indicator performance metrics.
- Substance abuse testing can be an effective method of incident prevention if used properly
- Take the pledge <u>www.drugfreeconstruction.org</u>





STEP Category



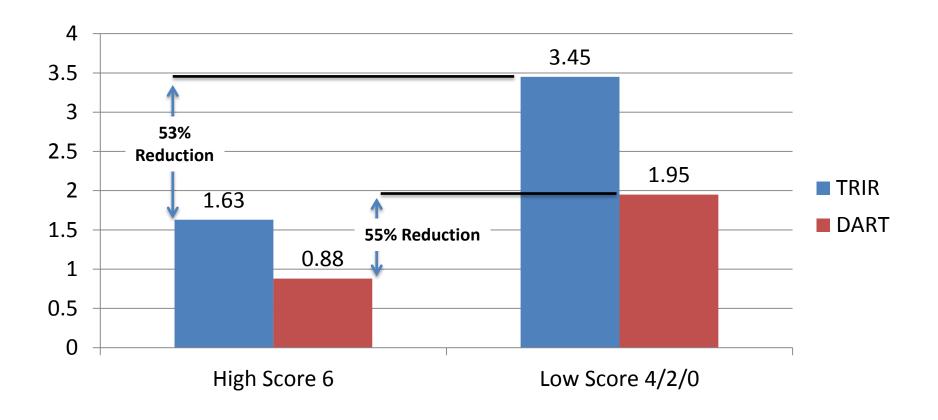
S SUBSTANCE ABUSE PROGRAM

6	4	2	0
Employee safety policy contains strict rules regarding drug and alcohol use	Company has substance abuse verbiage in employee safety policy	Company has substance abuse verbiage in safety manual	Company has no policy regarding workplace substance abuse
 Drug/alcohol testing for pre-hire, post accident and reasonable suspicion Policy actively enforced Supervisory personnel trained in workplace substance abuse Employee substance abuse prevention education initiatives offered Company has an employee assistance program Company keeps counseling and testing records 	 No drug/alcohol testing, or it's "for cause" only Company makes effort to enforce policy Supervisors are trained in hazards of drugs and alcohol on the job 	No drug/alcohol testing Company makes no or little effort to enforce policy	



Substance Abuse Program – High Score vs. Low Scores









The Road Map to World Class Safety







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Cultural Transformation and Commitment to World Class Safety



Safety



Leadership Commitment to World Class Safety





World Class Process Effect on Safety Performance

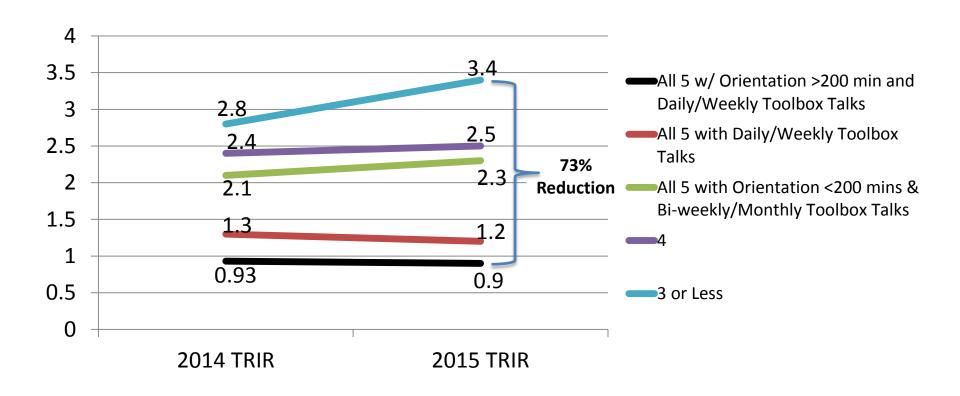
Those Companies who Deploy	Those Companies who Deploy	Reduce R	ates By
V	S.	DART	TRIR
New Hire Orientation > 195 min	New Hire Orientation < 75 min	92%	93%
Site Specific Orientations	No Site Specific Orientations	65%	64%
Daily Tool Box Talks	Monthly Tool Box Talks	78%	79%
Daily Tool Box Talks	Weekly Tool Box Talks	70%	69%
Track Near Misses	Do not Track Near Misses	54%	55%
Site Safety Committees	No Site Safety Committees	55%	55%
Substance Abuse Program	No Substance Abuse Program	80%	70%

Results published in 2016 ABC Annual Safety Performance Report



Use of Leading Indicators vs. TRIR









World Class Process Effect on Safety Performance

Those Companies who Deploy	Those Companies who	% Safer	
V	S. Deploy	DART	TRIR
New Hire Orientation > 195 min	New Hire Orientation < 75 min	1195%	1396%
Site Specific Orientations	No Site Specific Orientations	290%	291%
Daily Tool Box Talks	Monthly Tool Box Talks	449%	489%
Daily Tool Box Talks	Weekly Tool Box Talks	330%	325%
Track Near Misses	Do not Track Near Misses	219%	223%
Site Safety Committees	No Site Safety Committees	221%	224%
Substance Abuse Program	No Substance Abuse Program	489%	339%
All the World Class Process	3 World Class Processes		378%

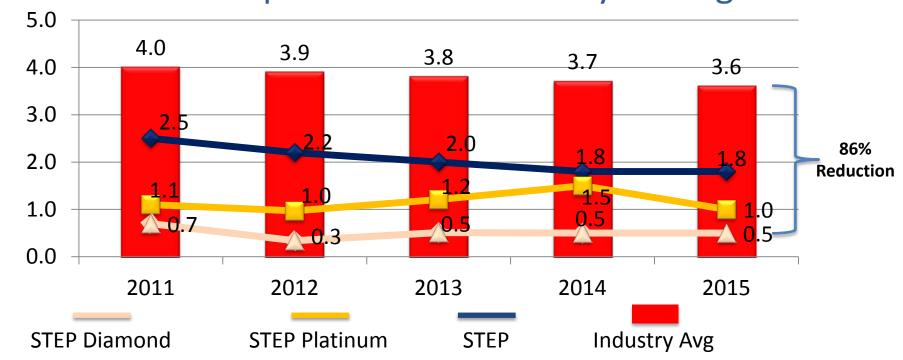
Results published in 2016 ABC Annual Safety Performance Report





Safety Performance

ABC STEP Participants vs. BLS Industry Averages - TRIR







% Comparison 2015 STEP vs BLS - TRIR

Step Level	Reduce Rates BLS AVG by	% Safer than BLS AVG
STEP Participant AVG	53%	212%
STEP Platinum AVG	71%	360%
STEP Diamond AVG	86%	720%

In other words... If your company currently performs at BLS averages in Safety and you as a leader

- commit to taking the STEP journey,
- transform your culture, deploy world class process and
- become STEP Diamond ...

you can reduce your TRIR by 86% and be 720% better than the Industry Average Safety Performance per BLS





This is great progress but...

We won't relax until...





The Future of STEP and the Safety Performance Report

- Drive the construction industry towards safety cultures where eliminating the hazard before it becomes an incident is the expectation, not the desire
- Increase the data-gathering potential within the owner/GC/CM community
- Adding new leading indicator questions and deeper dives into existing data to identify trends on a micro scale
 - By state/region, # of employees, work type, % of work self-performed, etc.
- Promote STEP and the Safety Performance Report throughout the Industry
 - EG ABC Users Summit, CURT, Construction Executive, ABC Chapter Events





The Future of STEP and the Safety Performance Report

- Use STEP levels as a safety pre-qualification tool
 - Evolving STEP to ask questions tailored to owner/user-influenced criteria
- Continue to promote and conduct the ABC Safety Academy
 - A comprehensive course on The Roadmap to World Class Safety
 - Helps our members lay out a multi-year plan get to World Class
 - Can be presented in modules
 - Micro modules on Leading and Lagging Indicators
- Promote www.drugfreeconstruction.org
 - Take the Pledge Today







Additional Acknowledgments

- ABC Annual STEP Safety Performance Report Published 2015, 2016
- ABC Safety Training and Evaluation Process (STEP) Program
- Alan Medville Medville Consulting
- Bureau of Labor and Statistics
- CNA
- Construction Coalition for a Drug and Alcohol Free Workplace
- DuPont Safety Services
- Grant Ackerman Faculty at Columbia School of Business Executive Education
- Jack Welch Winning
- JMJ Uncompromising Leadership
- Kotter's 8 Step Change Model
- Lend Lease Corp
- Peter Drucker Author and Leadership Guru
- Rapport Safety Leadership
- Steve Gruenert- Department Chair of the Educational Leadership department at Indiana State University
- Todd Whitaker professor of educational leadership at Indiana State University.
- The Character of a Corporation Rob Goffee and Gareth Jones





Questions?

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