



PICKSLYDE™
CONSULTING



21ST CENTURY BEHAVIOR-BASED SAFETY

.....
Using Science to Reduce Injuries,
Address Environmental Hazards,
and Improve Productivity

21st Century Behavior-Based Safety

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- Address Environmental Hazards,
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21st Century Behavior-Based Safety is a scientifically proven method for reducing incidents and injuries in the workplace. The application of behavior-based safety has been sharpened through scientific investigations for over thirty years with thousands of implementations worldwide in all industrial sectors. Safety engineers and behavioral scientists have learned a great deal about making behavior-based safety more efficient and effective over the decades. Because science is a systematic enterprise of building knowledge, behavioral scientists have accumulated a great deal of applicable information for creating stronger safety cultures by promoting safer actions, addressing environmental hazards, and improving productivity. Pickslyde Consulting's *21st Century Behavior-Based Safety* capitalizes on the latest findings, and creates solutions for accelerating safety outcomes in organizations.

The *21st Century Behavior-Based Safety* process will make a critical impact on the actions of workers at every level of the organization:

- **Front-line associates** act more safely and contribute to a stronger, more cooperative work community.
- **Supervisors** create a framework for clear and effective safety management while maintaining, and even enhancing productivity.
- **Leadership** develops a more robust safety climate while efficiently and economically accelerating the bottom line.



According to the OSHA website, "a good safety and health program can save \$4 to \$6 for every \$1 invested. That's because injuries and illnesses decline. Workers' compensation costs go down. Medical costs decrease. There are other, less quantifiable benefits as well - reduced absenteeism, lower turnover, higher productivity and increased morale."

– Occupational Safety and Health Administration, United States Department of Labor

All levels of an organization contribute to improving safety on the worksite, and the *21st Century Behavior-Based Safety* creates a collaborative effort between all associates. Science and commonsense clearly demonstrate that the most successful groups in any environment have effective cooperative skills. Whether you examine a small work crew, a medium-sized sports team, or a large multi-national corporation, significant achievements are accomplished with collaboration. Pickslyde's *21st Century Behavior-Based Safety* process highlights the necessary team approach to safety that will not only reduce incidents and injuries, but also have the potential to improve productivity, morale, and the safety culture.

The *21st Century Behavior-Based Safety* process customizes training for each unique worksite by capitalizing the six major components of the successful behavior-based safety process:

- Observation
- Reinforcement
- Feedback
- Leadership
- Measurement
- Commitment

▶ Observation

Reducing risk exposure through industrial hygiene and environmental change is a priority. Observing workers in action can assist with that crucial safety target.

The *21st Century Behavior-Based Safety* process is primarily concerned with observing employee actions for the purpose of understanding hazardous environmental exposures that need to be changed to increase safety on the jobsite. Industrial hygiene, environmental safety standards, and eliminating risk through engineering are critical components to safety, and observing the interaction between environmental factors and human factors significantly optimizes occupational safety. Pickslyde's approach will never become a "blame-the-worker" program because educated behavioral scientists understand that people's actions are a result of the surrounding situation. Everyone in the organization is a shareholder in the safety process, so everyone learns a customized method for observing fellow workers in the actions that have the potential for injuries and incidents. The observation method is simple, and made more powerful when paired with the delivery of positive feedback.



Endorsements

"I have been through a lot of safety training in my 22-year career and this really hits home."

– Ed Bahr, *Safety Director*,
Boise Inc., Alabama Operations

"I have heard Dr. D.J. Moran speak several times in the last year. I believe he is on the cutting edge of changing the way we work to increase worker's safe behaviors... I predict that in 15-20 years, we will be discussing Dr. Moran's work as a step change in improving behavior-based safety."

– Ron Truelove, *28-Year Environmental, Health, and Safety Professional*,
Environmental, Health, and Safety Manager for an Oil and Gas Company

▶ Feedback

The most effective way to increase safe behaviors is to provide immediate feedback. World-class organizations use positive feedback to improve key performance indicators.

Every successful coach and effective teacher utilizes positive feedback to accelerate the target performance of the people they are assisting. The *21st Century Behavior-Based Safety* process invites workers to become a coach and a teacher to their peers. When positive feedback for safety is given on a regular basis - especially when management and leadership support the process - the culture also becomes more positive, and incidents and injury rates decline.

One of the tried-and true laws in behavioral science is The Law of Effect, and it is effectively applied to safety. The Law of Effect states "behavior is a function of consequences." If there are "good" consequences for engaging in a safe behavior, it will occur again with a high degree of probability. If there are "good" consequences for engaging in at-risk actions, they will happen with a greater frequency. The *21st Century Behavior-Based Safety* process aims to assess the consequences in the workplace that might problematically reward acting in an at-risk manner, and to flip the consequences so that behaving safely has the positive consequences. The quickest and most efficient way to initiate this law is by having trained observers give positive feedback to workers when they see that they are acting safely on the jobsite. Pickslyde provides the method on how to implement this process effectively, efficiently, and economically.

▶ Measurement

Organizations that define and observe key performance indicators, and record such measurements for review by the workforce, become quantifiably safer and more productive over time.

"If you can measure it, you can manage it" is deep-rooted business wisdom. When organizations collect data on important business variables, leaders have greater confidence in making decisions for improving the company's key performance indicators. Pickslyde Consulting understands OSHA guidelines require organizations to attend to "downstream measures" or "lagging indicators" related to injury rates. The problem with these passive metrics is they do not consider the activities influencing the results. *21st Century Behavior-Based Safety* focuses on the "upstream measures" the organization can actually influence. When companies learn to measure safe behaviors, and not just injuries, they can properly address industrial hygiene problems, environmental concerns, and retraining issues. Pickslyde's approach to proper worksite measurement will also lead to impactful interpersonal conversations between workers to change at-risk behaviors to safer and productive actions, and to change at-risk conditions to meet safer and compliant industrial standards.



NIOSH researchers published an article in "the National Safety Council's Journal of Safety Research, that recommended the use of BBS as part of a comprehensive approach to addressing psychological, social, organizational and engineering factors in the workplace."

– Safety + Health magazine, National Safety Council

▶ Reinforcement

Providing reinforcing consequences for behaving safely strongly influences the habits of the individual worker, and creates better morale and higher productivity in the group.

Reinforcement solidifies the safety improvements being made in the workplace. By providing appropriate positive consequences for safe actions in the workplace, people are more likely to continue acting safely on the job. Well-trained observers can give positive reinforcement to an individual worker, and well-managed organizations can create reinforcing group celebrations when the company meets attainable safety benchmarks. Pickslyde's approach is about reaching results one person at a time, but also incorporates reinforcing the entire organization when key performance indicators reach the measured target.

Clearly, there are many things that can influence a person's actions, but positive reinforcement is reliably the most powerful approach for influencing behavior. It is exceptionally rare that working professionals freely choose to perform an at-risk behavior; however "procedural drift" does occur. If there are ways to make a task easier, faster, more comfortable, or less expensive, sometimes those consequences increase the likelihood that a worker's behavior becomes at-risk. The *21st Century Behavior-Based Safety* process aims to flip those consequences. A safety culture can be constructed to ensure workers are getting positively reinforced for prioritizing safe behaviors. Harnessing the power of positive consequences has a motivating effect on the safety of the workers, and the skillfulness of managers.

▶ Leadership

All people can envision a safe and productive workplace, and most people desire a safe and productive workplace. However, vision and desire only translate into reality through solid leadership.

21st Century Behavior-Based Safety is built on a thirty-year foundation of scientific research. One repeatedly supported research conclusion shows that successful

behavior-based safety interventions have strong and involved leadership. Pickslyde's approach blends leadership training into the safety consultation to ensure the organizational improvements are maintained and even accelerated over time. Traditional behavior-based safety typically calls for "transactional leadership," meaning that leaders simply give rewards in exchange for labor or safer actions; however, *21st Century Behavior-Based Safety* has evolved past such an antiquated approach. The *21st Century Behavior-Based Safety* process invites commitment to "transformational leadership," meaning that managers and leaders have a true concern for employees and are visibly involved in the safety process. Pickslyde created a leadership training protocol based on dependable wisdom and cutting-edge research to help create a productive safety culture.

▶ Commitment

A commitment is action in the direction of what you care about, even in the presence of obstacles. The safest organizations ensure that workers, managers and leaders are fully committed to the value of safety.

"Safety commitment" is a general term used to describe an aspect of a person's work ethic or an organization's culture, and is related to how dedicated people are to working in a safe manner. The phrase "safety commitment" is seen in industry publications and in the scientific literature, and it is typically referred to as contributing factor to the success of a safety procedure or process. Despite its common use, the phrase has not actually been well-defined from an applied behavioral science perspective. Pickslyde Consulting is a leader in the field of building safety commitment. Our founder, Dr. D.J. Moran authored a book entitled *Building Safety Commitment*, and the applications from that publication are woven into every *21st Century Behavior-Based Safety* process.

Pickslyde integrates the best applications science has to offer to ensure that our client's investment in safety has a positive and lasting impact on the culture, OSHA's downstream measures, Pickslyde's upstream measures, and the bottom line.

Endorsements

"Dr. Moran's training... has dramatically changed our company. I believe that Dr. Moran has developed a concept and a teaching method that will revolutionize the construction industry."

– Steve Turner, *Founder & CEO,*
Corrosion Monitoring Services

"Dr. D.J. has clearly distinguished himself in the field of safety. Workers, managers, and leadership can all benefit through the practical application of Dr. Moran's safety training."

– Deb Smith, *Director of Quality and Training,*
The Horton Group

- The 21st Century
- Behavior-Based Safety
- Process

The *21st Century Behavior-Based Safety* process applies the principles of behavioral science with an ultimate aim to reduce risks in the environment and maintain a zero injury safety record. As with all effective organizational improvement implementations, Pickslyde's approach starts out with a thorough assessment of the workplace concerns. Focus groups, incident report review, and interviews with people from all levels of the organization help create a clearer picture on how to best reduce risk exposure for workers.

A Design Team – comprised of front-line workers, supervisors, and leaders – takes a closer look at the assessment results, and contributes their expertise to investigating the past injuries at the workplace. An incident analysis typically yields information about the specific at-risk behaviors and the at-risk conditions that were related to the injuries. This collaboration allows the organization to have a site-specific understanding of how to best manage safety at work in that department, rather than exclusively relying on overly generalized guidelines from uninvolved authorities.

After the assessment, the Design Team prioritizes fixing the unsafe concerns that were discovered during the incident analysis. Correcting all at-risk conditions takes primacy in the *21st Century Behavior-Based Safety* implementation. If unsafe conditions are discovered

during the incident analysis, all efforts are made to eliminate that risk. Pickslyde's safety professionals would not simply expect people to change their behavior or "work around" a problem that could be mitigated.

While addressing the at-risk conditions, the Design Team also assesses the at-risk behaviors affiliated with that worksite's recorded injuries, and creates a checklist of the proper replacement behaviors that should be the standard working procedures for that department or task. Trained observers use this checklist while briefly watching their peers or supervisees engaged in their work. After two to three minutes of observation, the observer gives positive feedback about the safe actions that were observed. This particular procedure leverages a lawful component of the behavioral sciences: positive reinforcement increases the likelihood of behavior in the future.

21st Century Behavior-Based Safety strives to maintain a positive focus on what workers are doing safely so they will be more likely to maintain that habit, rather than exclusively providing negative consequences when unsafe behavior is observed. Research suggests that when people are reinforced for acting a certain way, they continue to do that action under similar circumstances. Conversely, when people are punished for behaving a certain way, they do not stop doing that behavior; they simply stop behaving that way around the person who gave them the negative consequences. Unfortunately, many managers opt for using punishment instead of reinforcement in order to govern safe actions. *21st Century Behavior-Based Safety* aims to effectively alter those unhelpful contingencies.



Observation and feedback (O&F) is the heart-and-soul of the *21st Century Behavior-Based Safety* process. The three following key features of the O&F process ensure greater success and longevity of the implementation. Pickslyde's approach is:

- **Discipline-Free** – The Pickslyde process is not an audit used by authority figures aiming to nitpick and “catch” people doing something wrong, but rather reward people for “doing it right.” Proper oversight is still in place during *21st Century Behavior-Based Safety*, and significant infractions are managed appropriately, but the whole process aims to create a positive safety climate.
- **Anonymous** – During observations, the worker's name is not recorded. This creates a willingness for employees to participate in the safety implementation without fear of getting in trouble if they engaged in a safety infraction. Of course, each organization makes the choice if anonymity will fit their work environment, and Pickslyde collaborates to seek the best practice for each of our clients.
- **Short & Simple** – A single observation and feedback event takes approximately five minutes of the observer's time. A checklist is obtained and the observer watches a peer or a supervisee for less than three minutes. After the observation, the checklist is reviewed by both employees while pointing out the safe behaviors, and then only bringing up one unsafe behavior (if one was observed) for discussion. The observer thanks the observee, and then transfers the checklist to the Design Team so they can use the data for the next steps. This brief interaction can have a powerful effect on increasing safe behavior.

The discipline-free, anonymous, short and simple O&F process is done in a friendly manner, and when the observer is finished giving feedback, the observer then listens to the observee explain why an unsafe behavior occurred. This data can be used to train others to avoid such unsafe actions in the future, or fix the conditions that influence that person's unsafe actions.

After the observer puts the checklist in the drop box, the Design Team collects the O&F checklists to begin two important functions: benchmark rewards and action plans.

- **Benchmark rewards:** The O&F checklist data can be aggregated to calculate how many behaviors are being observed, and how many of them were safe or unsafe. Each checklist has several behaviors, and a database is kept giving a sense of which at-risk behaviors need the most attention and training. When the workgroup meets a certain safety criterion, they are rewarded for surpassing that benchmark. The Design Team attempts to set a benchmark and a celebration event at least once a month. This procedure capitalizes on the power of

positive reinforcement. When good consequences are given after workers surpass the benchmarks of key performance indicators, organizations discover that workers not only have increased morale but accelerated performance, as well.

- **Action plans:** Since the O&F process leads to conversations between the worker and the observer, oftentimes workers give their perspectives on what influenced their own unsafe behaviors. This dialogue is communicated to the Design Team who develops an action plan for fixing the problem. Because the Design Team meets on a regular basis, they can collaborate to create solutions for the at-risk conditions present in the worksite. Creating a regular, organized process for recording and addressing safety concerns is another added benefit of the *21st Century Behavior-Based Safety* process.

After Pickslyde's approach is rolled-out in the worksite, the culture begins to change. Peer-to-peer O&F conversations occur more fluidly and increase safety awareness. In addition, when a person regularly performs observations on other workers, that person is then prone to be influenced by the “teacher effect.” In other words, the more you are observing safe behaviors, the more likely it will influence you to act safely. Because people are giving feedback to others, they begin to correct their own behavior more readily. The Design Team communicates to the workgroup about how well they are doing with certain measures, and what needs to be changed. They also let all the workers know the next benchmark and what incentives are available if the criterion is surpassed. Group celebrations reinforce workers for acting safely, and create a more interactive safety climate. Safety becomes a positive, community-based effort, rather than a burdensome task for each individual to bear.

The *21st Century Behavior-Based Safety* process is a successful framework for organizations aiming to improve safety, and the results are clear:

- In a survey of 73 different behavior-based safety applications, there was a 20-25% year-after-year decrease in injuries during the first five years of the implementation.
- Another literature review demonstrated that 32 out of 33 behavior-based safety applications investigations resulted in significant reductions of incident rates.
- Other studies and anecdotal data strongly suggest that behavior-based safety applications increase safety behaviors and decrease injuries in a cost efficient manner.
- OSHA has even stated: “Studies have shown a \$4 to \$6 return for every dollar invested in safety & health.”

Driving Down Incidents, Injuries, and Costs



Twenty-first Century organizations struggling with workplace safety issues will benefit from implementing the *21st Century Behavior-Based Safety* process. Pickslyde's process leads to driving down incidents, injuries, and costs. The *21st Century Behavior-Based Safety* approach uses only the latest, cutting-edge behavioral science research in order to create a custom-made implementation for organizations aiming for zero injuries and a world-class safety culture.

Current & Previous Clients

Our founder, Dr. D.J. Moran, has brought the principles and applications of behavioral science to workplaces in all 50 of the United States, to six continents, and many industrial sectors.

Energy

Saudi Arabia Basic Industries Corporation
Kuwait Oil Company
Marathon Petroleum Corporation
Devon Energy
First Energy Nuclear Power Plant
Wisconsin Public Service Corporation
Dubai Electricity and Water Authority

Manufacturing

Qatar Steel
Embraco
Boise Paper
Moen Faucets
Cardinal Glass
Waukesha-Pearce Industries

Food Service & Production

McDonald's
Archer Daniels Midland

Corrections & Law Enforcement

Iowa Department of Corrections

Insurance Companies

The Graham Company
Parthenon Insurance
The Horton Group

Construction

Corrosion Monitoring Services

Agriculture

Central Valley Ag

Non-Governmental Organization

Commit + ACT in Sierra Leone

Healthcare

University of Iowa Hospitals and Clinics
AFSCME Employee Assistance Program
IlliniCare
Clearbrook
Child & Family Services Department
United Cerebral Palsy
Shafallah Center of Doha, Qatar



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