Keys to a Successful Behavior-Based Safety Process
An old adage in quality improvement efforts was, “Do it right the first time.” That statement is particularly relevant when it comes to behavior-based safety. As a good friend of mine likes to say, “You never get a second chance to make a first impression.” This statement is also relevant because behavior-based safety is much harder the second time around. Once you lose credibility in this kind of effort, getting it back is very difficult.

This is an intermediate to advanced paper that assumes that you have a basic understanding of behavior-based safety (BBS), a process that involves employees in conducting safety observations within their organizations. Conducting observations is typically voluntary. The names of employees who are observed are not recorded. Peer observations are not used as the basis for disciplinary action. Employees get immediate feedback as part of the observation. If these basic safety program elements are new to you, or if you don’t agree with them, you need to get a better understanding of what behavior-based safety is all about.

Having said that, I’d like to talk about typical problem areas that companies struggle with when implementing a BBS process, particularly when they try to initiate the process on their own or without the assistance of knowledgeable outside assistance. These problem areas that I will address here include:

- Lack of logistics planning and preparation
- Generic or irrelevant checklists
- Inadequate training
- No systematic use of observation data for improvement planning
- Little or no reinforcement to support the process
- Poor leadership participation and support

I have observed these problems frequently enough to develop a well-defined set of keys to a successful process, each key addressing one of these common challenges.

Keys to a Successful Behavior-Based Safety Process
Many organizations have the mistaken belief that all BBS requires is to developing a checklist and training a group of employees how to conduct observations. This approach can create some benefits when the newly trained employees get excited about safety and begin conducting area safety observations. Unfortunately, such efforts are short-lived. In order to sustain observations, organizations first need to create a formal system or process to support observations. The system or process needs to include ensuring that the observation data gets summarized into useful information, that someone uses that information to promote safety improvement, that the information gets fed back to employees, and that the applicable safety committee or steering committee is actively managing the process. To this end, most organizations would be better served to invest the time to plan all of these logistical details about how the process should work prior to beginning observer training. Once the planning is completed, the organization can then train employees on the process to be used, not just the generic skills required for observations.

We further recommend that this planning be done by the employees who will be participating in the process, generally the steering committee or safety committee members. Such committees are typically made up of 8 to 15 participants, usually hourly employees along with a representative from safety, a representative from the organization’s leadership, and a representative from engineering. Getting this level of involvement from committee members ensures that they have an inside-out understanding of the process they created. They take pride in having created a safety improvement process and feel a high level of ownership for it. The only way we know to develop this kind of ownership is through meaningful involvement in planning the process.

With more than 20 years of proven results, QSE provides behavior-based safety systems that improve quality and safety.
To maximize the effectiveness of behavior-based safety, observation checklists should be specific to the kinds of risks experienced by employees working within the organization. All of the research studies used checklist specific to the tasks being performed by the employees. Generic checklists can be effective in increasing attention to safety, but the ideal is to increase the focus on behaviors that have contributed to past injuries, and not only within your facility but within each area in your facility. Checklists need to be created based on your experience, not the experience of other organizations with different processes, practices, and cultures. We encourage our clients to create checklists that list work practices in order of their contribution to injuries – that is, the practices that would have historically prevented the most injuries should be at the top of the checklists. This way the checklists become an integral part of your safety training and orientation. New employees who participate in observations are learning the behaviors that are most important in reducing their risk of injury.

Generally, organizations should try to identify “practices” rather than specific behaviors. Practices must be defined clearly enough that they can be reliably identified, but not have a level of detail that would result in a checklist for every procedure. “Working clear of the line of fire” is an example of a practice that would help employees avoid injury in many organizations. Behaviors that exemplify this practice would include not working in front of a pressure relief valve, not working under a platform with employees who might drop a tool, not working behind mobile equipment that could become engaged, or in an office environment, not standing in front of a door that someone might come bursting through. In comparison, defining every possible behavior that might make up “the line of fire” would be cumbersome.
The #3 Key to Success

Provide Observer Training for All Employees

Organizations that provide observer training to all employees typically experience greater safety improvements and fewer problems than those that train only a small group of observers. Employees who complete the observer training have a better understanding of the process and why their organization is adopting it. As a result they are more supportive and less resistant to the process as compared with employees that do not complete observer training. The training should include both the rationale for the process and the construction of the applicable checklists as well as actual practice in conducting observations and providing feedback on observations. Employees can practice observations either through the use of video scenarios and role-playing or by going out into the facility, conducting observations with feedback, then coming back into the classroom to debrief regarding the experience. Such training typically requires eight hours for each employee. As a general rule, 20 percent of the employees within an area should complete observer training before beginning observations in that area.

In addition, the goal should be to involve all employees in conducting observations. Several studies have now demonstrated that employees who conduct behavior-based safety observations subsequently perform the safety practices on the checklist much more consistently than they did prior to participating in the observation process. Furthermore, practical experience shows that designating only a small group of employees as observers often creates an extra, sort of artificial hierarchy within the organization that often drives a wedge between the observers and other employees. The observers become “the police force” and their motivation often becomes gaining status or control rather than promoting safety. This result is in stark contrast to a behavior-based safety process that is inclusive and aims to create the voluntary involvement of everyone in safety improvement.
Organizations often struggle with sustaining participation in observations. Employees submit their completed observations, but then the data just seem to go off into a hole somewhere. They never see anyone doing something with the observation data. In these cases, employees invariably stop participating, after which the process grows stale and eventually dies.

Ensuring a lasting process requires that organizations establish a formal process for using the observation data to plan safety improvements. Typically the safety or steering committee reviews the observation data during monthly meetings. Ideally, they will create a Pareto diagram to help identify the safety practices that will have the most significant impact. The committee may select improvement targets based on frequency, consistency, or potential severity. After identifying the top improvement targets, the committee should further analyze the data to identify when and where the at-risk behaviors are most apt to occur. Based on this analysis, the committee should develop an action plan that addresses both behavioral and facility issues that contribute to the at-risk behaviors.

If called for, the action plan should change the physical facilities and the management systems (including training, procedures, and leadership practices) as well as the focus within the behavior-based safety process in ways that encourage and support the safe practices targeted for improvement. When the safety committee implements the action plan, particularly with regard to physical changes, it needs to ensure that the changes are communicated throughout the organization so that employees know the changes are being made on the basis of the observation data.

The safety committee is also typically responsible for communicating data from observations. They may do this by posting observation data on safety bulletin boards in work areas or by reviewing the data in safety meetings. Ideally, they will use graphs to visually communicate the observation data, often including the Pareto diagrams that show why they targeted specific behaviors for improvement and trend charts that will show the improvements achieved in target behaviors.

The #4 Key to Success

Use Observation Data to Improve Safety
The topic of safety awards has been hotly debated over the past couple of years. I believe they are important but that companies need to use them wisely. The big concern about safety awards is that they can have a chilling effect on employee willingness to report incidents and injuries. If employees do not report minor injuries, we may miss the opportunity to learn from incidents that could have been more significant. In addition, safety awards programs by themselves often provide very little motivation for working safely on the job. The typical award program is based on working some period of time without injury. Imagine two employees who work together basically doing the same job. One of the employees works safely day in and day out, following every safety procedure without compromise. The other employee is also a good employee, perhaps even a little more productive because he is willing now and then to shortcut a safety procedure now and then. Chances are that neither of these employees experience an injury and at the end of the year, we treat them both exactly the same in providing each one the same safety award even though they are different in the extent to which they work safely on the job. Finally, in interviews with employees, they routinely tell us such awards do not motivate them to work safely.

Still, we believe that recognizing safety milestones is important. On the other hand, leadership should not “dangle the carrot” a few months beforehand by making comments such as, “If you go three more months without a lost workday injury, we’ll serve a steak dinner for all employees.” The celebration should simply come after the achievement, without enticing employees in a way that might influence their reporting.

Recognition and celebrations are also important elements in supporting behavior-based safety efforts, particularly in maintaining long-term participation. The employee safety committee should monitor data from the process and provide recognition for individual contributions to safety and arrange celebrations of team successes. They should generally use recognition to support individuals conducting observations and quality observations, reporting near misses, and participating individually in other ways. Likewise, they should arrange for teams to celebrate improved participation, safety improvements, and achieving other team safety goals or targets. The safety committee needs to realize that recognition and celebrations are on-going programs and as such will need to be continually changed and tailored to the individuals being recognized. Generally, involving employees in these activities results in a much more effective recognition process than when these programs are planned only by management and supervisory personnel. The idea is to ensure that you have an on-going process to recognize employees who champion safety in order to create safety champions.

Use Recognition and Celebrations to Support Safety Efforts

The #5 Key to Success
Our belief is that everyone should be involved in the behavior-based safety process. Otherwise, behavior-based safety efforts too often contribute to divisions between management and employees. We want to create a process that pulls people together, not one that drives a wedge between persons at different levels of the organization. With this in mind, when designing a behavior-based safety process, the design team should carefully plan the roles and responsibilities of all employees, particularly managers and supervisors. Leaders clearly understand their roles as well as know how to support the process as the design team intended.

Furthermore, research shows the benefit of involving supervisors in conducting observations. When managers and supervisors participate in conducting safety observations, a greater percentage of employees also participate in safety observations. Personally conducting observations places leaders in the role of walking the talk when they encourage employees to participate in safety observations. Otherwise, the message is very clear, “Do as I say, not as I do.”
Some Final Suggestions

One of the key concepts of this paper is that behavior-based safety is about creating a system, not simply training a group of observers. It is not about changing people or carrots and sticks or Band-Aids, but rather creating a formal process that encourages everyone to get involved in safety improvement. Here are some additional suggestions:

**Suggestion 1:**

Don’t use a cookbook approach. This article provides a set of guidelines, but your success depends on your ability to plan the application of these ideas in the context of your organization’s culture. This suggestion pertains to the approach described in this article as well as to comparable approaches from various consulting organizations around the country. Don’t simply buy a package. Make sure you use the approach’s key elements to develop a system that meets the needs of your organization. On the other hand, don’t be too quick to discard key elements just because they are difficult to implement or maintain in your organization.

**Suggestion 2:**

Plan and clearly define management’s role. The observation process requires time and a great deal of effort. It will require active support from all levels of management. Pay special attention to the suggestions for involving management and defining management’s role in the process. Management’s role will be the critical factor in both the long-term success of your observation process as well as the day-to-day elements of your safety improvement process.

**Suggestion 3:**

Maximize participation in the final design. The only way to create ownership is through meaningful involvement in the design process. This process requires a high level of involvement and has several options for ways to involve people. Don’t make the mistake of designing a safety process in a vacuum and then trying to implement the program by mandate. Involve people in the design at each stage. Then have those who assist with the design take it back to their work areas and get input and suggestions from their colleagues.
Suggestion 4:
Create a different checklist for each area. The research studies all used checklists of specific safe behaviors that were job- and area-specific. Unless you are in a small facility, do not try to develop a generic checklist that works for all areas. Maintenance has different safety requirements than a laboratory, for example, and their checklists need to look and be different. To maximize the value of the checklists, they should be explicit enough to address the specific safe practices of different job functions.

Suggestion 5:
Don’t create a bureaucracy around the data. The value of this process is in getting everyone to pay attention to on-the-job safety, not in creating a paper storm. Build informal systems of accountability based on the observable parts of the system. Don’t create an elaborate system of paper reports. Do pay attention to the safety process during informal contact with individuals in the work areas and during formal meetings at each level of the organization.

Suggestion 6:
Use classroom training only when needed. Place emphasis on designing a training process that satisfies your needs, not putting all employees through observer training. Provide enough training to create the understanding that people need to support the process. Also, don’t think of training as strictly a classroom process. When training observers, for example, an on-the-job mentoring process is often more effective. Use training only when it is appropriate, and select an appropriate process for delivering the training that’s needed.

Suggestion 7:
Persevere. Don’t quit – ever! False starts characterize the implementation of any significant new process. Implementation is often two steps forward and one step back. The key to success is continuous improvement. Learn from each of your steps so that you can do it better the next time. Just keep fine-tuning your process until you achieve zero accidents. Then strive to maintain that level of safety excellence.
About the Author

Terry McSween, Ph.D. is CEO of Quality Safety Edge (QSE). In 1990, Terry founded QSE, a company that specializes in the application of behavioral technology to create employee-driven safety and quality improvement efforts.

Terry is the developer of Values-Based Safety™, which creates ownership for organizational change through local-level employee involvement in the safety design process.

Considered one of the world’s leading authorities in behavior-based safety, Terry has 30-plus years of experience consulting in educational, institutional, and business settings. He is the recipient of local and national awards for his work in behavioral safety and is actively involved with a number of business and professional organizations including the Board of Trustees for the Cambridge Center for Behavioral Studies, the Association for Behavior Analysis, the American Society for Safety Engineers, and the Texas Association for Behavior Analysis.

A speaker at safety conferences worldwide, Terry also founded the annual Behavioral Safety Now Conference (BSN). He has published over 100 articles and authored the seminal book on behavior-based safety: The Values-Based Safety Process: Improving Your Safety Culture with Behavior-Based Safety.

He received his doctorate from Western Michigan University.

The role that management and supervision play in supporting behavioral safety should ultimately be tailored to the unique needs of each organization and its safety process. As with the other elements of behavioral safety, one size simply does not fit all. —Terry McSween
Who is Quality Safety Edge?

Global Leader in Customized Solutions

Quality Safety Edge (QSE) offers a value proposition that other performance improvement companies cannot. Their team of experienced consultants work collaboratively with you to design customized performance improvement system that integrate into your organization’s unique operational environment and culture.

The QSE team of experienced consultants are experts in applying behavioral technology from a systems perspective – ensuring key behaviors at all organizational levels are occurring consistently. Their systems are designed using proven behavioral technology to engage employees, develop leaders, and create cultures which align with your goals. QSE consultants work with you to clearly define your goals and the critical activities at each level of your organization needed to achieve those goals. The QSE/client team then creates systems to ensure these critical performances are occurring consistently. OSE’s customized solutions are built for sustainability.

The Quality Safety Edge team of consultants has been recognized globally for their integrity and commitment to collaborative partnerships with their clients, particularly for their proprietary behavior-based safety process, Values-Based Safety. With thousands of implementations worldwide, in almost every type and size of business and industry, QSE consultants are known for the depth and breadth of their problem-solving skills and their ability to create customized, sustainable safety and performance improvement solutions adapted to significant differences in management style and social structures throughout the world.

Customized Solutions to Meet Your Goals

- **Assessments**
  - Safety Culture System Assessment
  - BBS Readiness Assessment
  - BBS Health Check

- **Behavior-Based Safety**
  - Values-Based Safety®
  - BBS Essentials®
  - Safety Observation and Conversation Train-the-Trainer
  - Managing Your BBS Process Training
  - BBS Reboot

- **Leadership Development**

- **Serious Incident PreventionSM**
  - Serious Incident PreventionSM for Senior Leadership
  - Serious Incident PreventionSM for Frontline Leadership

- **Hazard Recognition**

- **Observation Data Management**
  - Data Management Services
  - Safety Action Planning Workshop

- **Behavioral Quality Improvement™**

- **Speakers**
International Reach

A global economy is no longer a future vision, but a reality and a necessity. However, doing business internationally requires much more than mutual commerce; it requires in-depth customer knowledge. With 30 years’ experience, Quality Safety Edge has developed customized solutions for clients in 27 countries.

Not only is QSE’s ability to work with different cultures and languages a key factor in our clients’ decisions in choosing us to help them meet their goals, but our clients are delighted that we customize our solutions to their local culture, business, and industry. In short, we come in as partners. We work collaboratively with our clients to customize solutions around your management style, your company culture, and your unique goals.

Industries We Have Worked In

- Construction
- Chemical Process plants
- Defense Contractors
- Electric Utilities (including generation and T&D)
- Heavy Equipment
- Maintenance
- Manufacturing
- Oil & Gas Production and Exploration
- Oil & Gas Pipelines
- Refining
- Warehousing & Distribution
- Health Care
- And many others!

The Mining Group

Quality Safety Edge’s Mining Group has many years of experience implementing behavioral solutions in diverse mining operations. From the Arctic to the tip of Peru, our consultants have created award-winning safety cultures across the globe.

Many of our consultants are natives of South and Central America and are fluent in Spanish, Portuguese, and English. Their diverse experience provides them with insights into many types of mining operations, the culture of the countries in which they are located, and a deep understanding of the people who do the work.