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# Instructor Resources

# **The New Values-Based Safety**

# Using Behavioral Science to Improve Your Safety Culture

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[**ValuesBasedSafety.com**](https://abatechnologies.com/the-new-values-based-safety)

McSween, T. E., & Hockman, A. S. (2024). *The New Values-Based Safety:   
Using Behavioral Science to Improve Your Safety Culture.* KeyPress Publishing.

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Chapter #Chapter titleCorresponding Chapter #  
***The New Values-Based Safety* (2024) *The Values-Based Safety Process* (2003)**

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#### The New Values-Based Safety

## **Introduction** |Rethinking Behavior-Based Safety

Main Points

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|  | Behavior-based safety (BBS), the approach to safety that typically involves peer-to-peer observations and feedback designed to increase safe behaviors in the workplace, emerged as a proven tool for fostering a safe workplace. |
|  | In the early days of BBS, organizations, intrigued by the promise of improved safety, eagerly integrated it into their safety protocols, but rapid adoption led to several challenges: (1) the overselling of BBS and (2) shifting focus from environment to behavior. |
|  | Many leaders were sold on BBS even if it wasn’t the best fit for their workplace and company culture; its universal appeal overshadowed the fact that customizing BBS to the workplace is what makes it effective. |
|  | In their haste to implement BBS, leaders, practitioners, and consultants stressed employee behavior, rather than the work environment surrounding that behavior. |
|  | By focusing on employee behavior, they lost sight of a critical aspect of BBS: Behavior does not exist in a vacuum. If you wish to improve behavior, start with the environment. |
|  | Throughout this process, most organizations drifted away from the primary goal of using BBS: to foster a compassionate and caring work culture that looks out for everyone’s safety and well-being. |
|  | When executed properly, BBS produces safe workplaces with fewer injuries (see Alavosius & Burleigh, 2022; Spigener et al., 2022). |
|  | BBS encourages employees to actively communicate about safety issues, which fosters a culture of mutual respect and concern. |
|  | BBS is not just about peer-to-peer observations and coaching – it is a comprehensive, systems-based approach to safety that involves every level of an organization. |
|  | Leadership is the bedrock of a BBS initiative. If an organization is to create a safe culture and produce positive outcomes from it, leadership must consistently support safety. |
|  | In designing a BBS process, leaders must examine an organization’s values. The authors think values are so important that they consider those an integral part of a successful and sustainable peer-based safety observation and feedback process. They use the term Values-Based Safety (VBS) throughout the discussion of implementing a BBS process. |
|  | It is a VBS process when you formally ensure that your process is built on a defined set of values, such as openness and honesty, respect among colleagues, and concern for the safety and well-being of everyone. |
|  | The mission of this book is to help organizations rethink and redefine their approach to safety. |
|  | First, VBS and a values-based orientation to safety culture are introduced, then the following chapters are dedicated to the details of creating, implementing, and sustaining a VBS process. |
|  | The discussion and clarification of values in VBS helps ensure that your process creates a culture of caring and concern built on compassion and encouragement, rather than on discipline and enforcement. |

#### The New Values-Based Safety

## **Chapter 1** | Understanding the Role of Behavior in Safety

Main Points

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|  | Improving organizational safety is often a challenge, partly because of the excellent safety records of today’s businesses and industries. |
|  | While statistics on safety in today’s businesses and industries are positive, excellent safety records can create complacency among employees and leaders — employees shortcut safety procedures, managers emphasize productivity over safety, and organizations reduce the frequency of observation and feedback. |
|  | Behavior is heavily influenced by the events that immediately follow it. |
|  | When an organization experiences a serious incident, employees may temporarily perform their jobs more cautiously, but that often wears off if incidents remain low and the organization changes nothing else about the work environment. |
|  | Most companies embrace the following programs and initiatives to improve safety compliance:   1. informal feedback on an employee’s compliance with safety procedures, 2. safety meetings and training, 3. safety awards, and 4. safety audits. |
|  | Very few companies that focus on unsafe conditions alone achieve consistently high levels of compliance from employees, as consistently high levels of safety compliance require attention to behavior and conditions. |
|  | Early research from DuPont, a chemical company, suggested that safe behavior can prevent 80%–90% of worker injuries, while addressing unsafe conditions alone might prevent only 25%–30% of injuries. |
|  | In experimental studies and in practice, these key elements form a foundation for success:   1. implementing a behavioral observation and feedback process, 2. reviewing observation data, 3. setting improvement goals, and 4. recognizing employees for their improvements and attainment of goals. |
|  | Leadership often fails to anticipate the challenges of consistent application and does not put forth appropriate resources and support to make such approaches successful. |
|  | Krause et al. (1999) reported statistically significant reductions in injury for 73 companies, comparing their success to industry averages as a control; improvements steadily continued for 4 years following the start of a BBS implementation (see Figure 1.4). |
|  | DuPont was among the first to develop the following practices, among others:   1. layered safety audits, 2. safety audits focused on behavioral factors rather than environmental housekeeping ones (e.g., handrail height and permits), and 3. specific feedback techniques during audits. |
|  | The findings of DuPont’s study on lost-workday cases suggested that 96% of DuPont’s injuries resulted from unsafe acts rather than unsafe conditions (see Figure 1.5). |
|  | H. W. Heinrich’s 1929 research suggested that 88% of all injuries were the outcome of unsafe employee actions rather than unsafe work conditions (Heinrich, 1959). |
|  | DuPont’s findings helped the company refine its approach to safety, which evolved into its current-day Safety Training Observation Program (STOP). |
|  | STOP involves a process of layered safety audits in which each layer of management typically conducts a weekly safety audit, cascading them throughout the organization. |
|  | Over the past 40 years, the authors have analyzed injuries at hundreds of organizations to develop checklists that help prevent injuries. In most organizations, they found that behavior contributes to 86%–96% of all injuries (see Figure 1.7, which shows data for one company). |
|  | The authors’ behavioral perspective suggests that all behavior is a function of the environment in which it occurs. |
|  | Unsafe work behavior is the result of (1) the physical environment, (2) the social environment, and (3) workers’ experience within those environments. |
|  | Serious injuries and fatalities most often came from a combination of engaging in unsafe behaviors and being in unsafe conditions. |
|  | The purpose of the authors’ story about the 40-year-old coker unit at an oil refinery in Lake Charles, Louisiana was to show that breaking any one of the links in the chain of events could have prevented this serious incident from occurring. |
|  | DuPont’s emphasis on correcting unsafe acts, rather than fixing conditions alone, aligns with the lowest section of Heinrich’s safety triangle depicted in Figure 1.8. |
|  | Heinrich’s original safety triangle reporting the ratio of injuries was expanded to extend the concept of a ratio of events, as presented in Figure 1.9. |
|  | No fixed ratio applies to all organizations, but the model still has descriptive value (McSween & Moran, 2017). |
|  | While we do not know the ratio in any given organization and cannot predict one value from the others, the ratios help us understand the importance of addressing the bottom rows of the safety triangle. The safety triangle suggests that because most of the time employees do not get injured, unsafe acts are part of the problem. |
|  | When employees perform an unsafe act and are not injured, they become just a bit more complacent about the risk involved in the shortcuts they take. |
|  | Geller (1988) suggests that intervening on unsafe acts and conditions alone is a reactive approach, instead, Geller suggests a preventive method focused on increasing and maintaining safe acts. |
|  | In safety, we find that employees become complacent when they are neither rewarded for performing safe acts nor fear the risk of getting injured from performing unsafe acts. |
|  | In situations where the probability of getting injured is high, complacency is not a problem. |
|  | The low probability of events is too small to sustain a consistent level of safe work practices – each time employees shortcut a safety procedure and avoid injury, they lose a bit of the fear that typically motivates people to work safely. |
|  | Systematic desensitization is a technique used by psychologists to help people overcome phobias or irrational fears of flying, snakes, spiders, heights, and so forth. The process involves gradually exposing the person to the item or activity they fear. |
|  | The same desensitization process seems to occur in the natural environment and works against our efforts to promote safe work habits, but the BBS process is designed to offset that phenomenon. |
|  | To improve safety and fight complacency, many organizations establish safety initiatives that involve many employees in safety improvement. To execute this, teams of employees are formed that are then directed to find safety problems and develop solutions to address those problems. |
|  | Not only do employees have greater ownership within this approach, but they also have accountability for safety initiatives, which shifts the responsibilities from management to employees. This reduces the perceived threat of punishment found in mandated safety programs and results in a more positive work environment. |
|  | Team approaches have several problems:   1. teams often shift their priorities as they begin to feel safety is under control (see Figure 1.10), and 2. when attention drifts away from safety, safe behavior also drifts. |
|  | Teams can also struggle to design a process; they may spend inordinate amounts of time identifying safety problems and, in doing so, either generate suboptimal solutions or find new problems for other people to resolve. |
|  | Additional problems identified by teams usually result from a poorly designed team process that fails to achieve the following:   1. ongoing communication with management, 2. a structured process for selecting problems and developing solutions, and 3. a good understanding of how to deal with human performance issues. |
|  | Employee teams seldom know about or have skills in proven safety improvement methods, such as those in the behavioral research on safety improvement; without specific training in such methods, teams create systems and procedures that do not build sustainable, positive changes. |
|  | The experience from the authors suggests that the team approach to safety can achieve an incident rate in the range of 5 to 10 recordable incidents per 200,000 hours worked, for certain industries. |
|  | Organizations in which management pays frequent attention to safety and implements a traditional behavior-based safety process consistently achieve results better than 5 to 10 recordable incidents per 200,000 hours worked. |
|  | Current safety improvement efforts also suffer from a common set of problems:   1. employees may encounter severe consequences for reporting incidents, 2. safety awards are not related to on-the-job behavior, 3. management or staff make all the safety-related plans and decisions, and 4. organizations rely on punishment to reduce unsafe acts. |
|  | Organizations should look at steady rates of lost workdays as red flags representing people underreporting incidents, as the organization’s clean record does not align with injuries causing missed work. |
|  | Poorly designed awards programs and the threat of disciplinary action can jeopardize the integrity of systems designed to document such events. |
|  | The outcomes of court decisions in recent decades are one reason simplistic approaches, such as easy-to-implement incentive programs, continue. |
|  | Safety incentive systems that knowingly or inadvertently cause employees to hide incidents can increase a company’s liability when an employee is injured. They also increase an employee’s ability to successfully file a compensation claim well after the normal allotted time. |
|  | Companies already track injuries for regulatory purposes, so award systems based on group performance easily leverage that data. The problem with these approaches is that they base awards on outcome measures rather than on process measures and safe behaviors. |
|  | While the awards promote some awareness of safety, they do little to motivate employees to work safely in the future. |
|  | Manager-led programs result in employees relying on their managers to ensure safe practices occur rather than watching out for their coworkers’ safety. |
|  | The problem with a punishment-based approach is that the consequence (punishment) cannot be delivered until an unsafe act occurs. |
|  | Waiting for an unsafe act increases the risk of injury, however focusing on safe acts reduces the risk of injury. |
|  | We use punishment for a simple reason: it works and does so quickly. |
|  | The immediate payoff for the person using punishment increases the odds that they will use it in the future. |
|  | Using positive feedback results in future improvements, but it doesn’t have the same immediate impact. |
|  | Overusing punishment in the safety process has several disadvantages:   1. punishment must be severe enough to get the behavior to stop, 2. punishment is only effective if the punisher is present, 3. punishment often teaches the wrong lesson, 4. punishment damages relationships and suppresses people’s involvement in the safety process, 5. punishment runs contrary to the philosophy of quality improvement efforts, and 6. punishment is difficult to maintain. |
|  | If you wish to punish that behavior, the punishment must be severe enough to get it to stop and be applied consistently – if it’s not, the natural incentives will win every time. |
|  | Policies stating that employees must work safely to remain employed have two undesirable effects:   1. they discourage employees from reporting minor incidents and close calls, and 2. they discourage frank discussions about factors that contribute to injury. |
|  | For punishment to work, the punisher must be present when the behavior occurs. |
|  | With leaner management, organizations must encourage employees to self-manage and share responsibilities for all aspects of safety. |
|  | Punishment teaches people how to avoid being punished instead of how to perform what is desired. |
|  | People dislike those who routinely criticize or punish them. Supervisors who rely on punishment harm their relationships with employees – as a result, employees may respond with emotional behavior, such as counterattacks, avoiding the punisher, or getting even. |
|  | Managers, instead of relying on punishment, must create a work environment that encourages personal responsibility and minimizes blame. |
|  | In an environment motivated by fear, employees work because they have to, not because they want to. When people do something because of threats, nagging, or criticism, they seldom feel a sense of accomplishment or pride in the quality of work they produce. |
|  | Instead of punishment, organizations should learn other methods for promoting safe behavior. When people across the organization work together to promote safety, they are more likely to find ways to create safe environments for everyone. |
|  | While an overreliance on punishment is a serious problem, discipline does have a place in safety programs – whether it comes in the form of corrective feedback or more stringent disciplinary action, enacting punishment is appropriate for life-threatening situations. |
|  | The problem with Geller (1997) believing employees should only be disciplined if they intentionally break a safety rule is that the only way to know if a worker intentionally violated a safety policy is to ask them. |
|  | Every employee needs to know their company’s “rules of life” (rules that the company will always enforce) and understand that breaking any of those rules will result in disciplinary action. |
|  | When considering whether to punish or reward, keep these things in mind. Punishment produces immediate feedback, but when used excessively, it can degrade relationships and become ineffective over time. In comparison, rewards have less immediate effects than punishment, but they lead to positive relationships and real and lasting safety in the workplace. |
|  | Komaki, Sulzer-Azaroff, and their associates demonstrated and proved the effectiveness of using these components to improve safety:   1. a behavioral observation and feedback process, 2. formal review of observation data, 3. improvement goals, and 4. reinforcement for improvement and goal attainment. |
|  | Multiple studies have documented the long-term effectiveness of intervention packages that include behavioral observation, feedback, improvement goals, and reinforcement for those improvements. |
|  | After 40 years of research, Alavosius and Burleigh (2022) concluded in their book that surveys the application of behavioral psychology in organizations that BBS is an established and replicable technology. |
|  | A report by Spigener et al. (2022) showed similar results to those of Krause et al. (1999); across 88 organizations, all of them demonstrated statistically significant reductions in injuries (see Figure 1.11). |
|  | In a separate analysis, 76 sites with 5 years of safety culture survey data reported significant improvements in safety culture based on survey responses (see Figure 1.12). |
|  | After 6 years, organizations showed a full standard deviation improvement in overall survey scores (Figure 1.13 presents the categories of that survey). |
|  | Figure 1.13 shows baseline versus final scores for each category in the survey, with improvements shown on the last three safety-related items: 21% more employees reported that their organizations valued safety, 15% more employees were more likely to talk with their supervisor about safety issues, and 30% of employees were more likely to talk with other employees about safety issues – these data suggest that BBS contributes to significant changes in the culture of organizations that implement it successfully. |

#### The New Values-Based Safety

## **Chapter 2** | The Vision

Main Points

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|  | Poor leadership and poor company culture can undermine safety efforts, but when leadership is strong, it serves as a building block for employee engagement. |
|  | VBS leadership is important for all organizations that have potential hazards in the workplace. |
|  | For some organizations, leadership alone is sufficient to keep employees safe, but for other organizations, VBS leadership is a necessary prerequisite for the VBS process to thrive. |
|  | This chapter presents two hypothetical scenarios illustrating how an organization that includes VBS can positively influence employees. |
|  | Scenario one depicts safety leadership on its own, without using a full-blown behavior-based safety (BBS) process. This scenario describes the importance of VBS leadership; Big Tex Production isn’t implementing a full-blown BBS process, but the attention to safety from leadership promotes a culture that ensures safe outcomes. |
|  | Scenario two combines VBS leadership with a VBS process. The organization demonstrates strong safety leadership, but this time, it’s embedded in a VBS process with an observation and feedback system. |
|  | Adding observation and feedback allows greater involvement of employees; within this system, they have a say in how safety goes in their organization. |

#### The New Values-Based Safety

## **Chapter 3** | Safety Culture, Part 1: Assessment and Alignment

Main Points

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|  | A robust culture where leaders, managers, and employees act in alignment with established values and business objectives produces superior safety outcomes compared to companies without such a culture. |
|  | Recognizing the role culture plays in safety efforts is a first step toward enabling safety leaders and managers to design and implement programs that will produce a safer, more productive workplace. |
|  | Developing a culture involves (1) aligning formal and informal systems with company values and (2) aligning leadership practices with company values. |
|  | Formal systems are the written components of organizational operations that establish official procedures (such as appraisal systems and compensation). Informal systems refer to the social norms around how leaders and employees interact with one another and how those interactions guide behavior. |
|  | Aligning leadership behavior and formal/informal systems with organizational safety values will create a safe workplace for everyone within the organization. |
|  | Edward Hall’s (1976) iceberg analogy shows that people often associate culture with the surface-level items at the tip of the iceberg: language, cuisine, clothing, and overt behavior. Culture is more than that. It’s made up of values, beliefs, norms, and so forth. |
|  | People often associate the physical office, employee attire, pay, benefits, and perks with company culture, but these are only part of the equation and aren’t usually mentioned when someone is asked, “What’s it really like to work around here?” |
|  | Companies that have incident reporting systems, hazard communication practices, safety committees, emergency preparedness, and formal safety training are often believed to have a “safe culture.” These are formal systems that are necessary, but not sufficient for keeping people safe. |
|  | To create or adjust the vision of the organization, consider these key elements:   1. Purpose: Why does the organization exist?, 2. Mission: What does the organization do, for whom, and how?, 3. Vision: What does the organization want to achieve in the long term?, and 4. Values: How will the employees conduct themselves as they work, and how will they interact as a group? |
|  | Executives at the top help establish and maintain the purpose, mission, and vision; these statements describe the ideal state of what the company works toward. |
|  | Once the purpose, mission, and vision statements are set, values are defined to specify how employees ought to carry out their work. |
|  | Processes—or the steps for how people get work done—are created and aligned with the values so that processes never override values, and values are realized through effective processes. |
|  | Organizations that balance their approach to implementing and encouraging each of these elements are far more likely to create happy, healthy employees and desired business results. |
|  | Many leaders over- or under-emphasize certain elements of the diagram, which leads to an unsafe culture; some of those problems are overemphasizing results and/or process. |
|  | When executives overemphasize results, a company’s success hangs on the herculean effort of a few top managers and key employees. |
|  | The results-oriented company tends to blame its employees when desired results aren’t achieved, and blaming leads to a culture where people fear managers and distrust top leaders. |
|  | In process-oriented companies, managers look closely at the processes used to achieve results; managers use process improvement methods to clarify requirements, standardize procedures, and establish measures of key steps. |
|  | Process-oriented companies tend to achieve consistent execution of processes and establish continuous improvement of those processes, however, while these efforts address process problems, they do not repair poor employee-manager relationships that pervade organizations and negatively impact culture. |
|  | Problem-solving tools assume all company problems are a function of the system and try to resolve those problems by inadvertently adding complexity, bureaucracy, and paperwork; as a result, changes to process make work cumbersome and don’t solve the root behavioral or relationship problem. |
|  | In the authors’ experience, cultural problems arise when what the company says about its care for safety does not align with what leaders do in relationship to it. |
|  | The authors offer an analysis of the culture at Great Plains Railroad. The culture of this fictional railroad company was inadvertently created for its employees by not placing sufficient emphasis on safety relative to other outcomes. |
|  | In a dysfunctional culture, like that of Great Plains, employees are caught between speaking up about issues and losing their livelihoods. Until a company shifts its mentality from profit- or productivity-first to people-first, everyone’s safety is at risk. |
|  | We don’t know the purpose, mission, vision, and values of Great Plains Railroad, but we do know that the behavior of its leaders produced a culture that was not aligned with whatever formal elements had been established. |
|  | The following steps are recommended when your culture is underdeveloped or in need of revitalization:   1. learn about your company’s culture, 2. devise above-the-line items if they are missing, 3. develop an action plan for improving safety leadership, and 4. implement a VBS process. |
|  | While not all organizations need to have the peer-to-peer observation and coaching process that characterize the VBS process, all organizations should constantly strive to improve their safety leadership practices and create a strong safety culture. |
|  | The authors’ goal is to provide a simple yet practical framework for assessing key aspects of safety culture, those that enable organizations to identify improvement opportunities, focusing specifically on assessing factors that impact employees’ safety actions and their willingness to voice concerns about safety issues to supervisors and peers. |
|  | The first key area for assessment is assessing the organization’s formal, documented policies and systems related to safety:   1. safety statements and documentation, 2. safety metrics, 3. data review processes, and 4. performance and HR systems. |
|  | The second key area for assessment is assessing the organization’s informal culture and behaviors that impact safety:   1. leadership, 2. social contingencies, 3. stories, and 4. consequences. |
|  | The assessment consists of observations and interviews to gain information about multiple angles of the formal and informal safety systems. |
|  | Observations allow you to see what people do on the job and in meetings; you can compare your observations to what they describe when you interview them (see Table 3.1 for elements to look for when conducting observations). |
|  | Interviews and focus groups allow employees to open up about the strengths and challenges of the job and safety culture. While it’s necessary to tailor your questions to your organization, Table 3.2 provides sample questions to consider for interviews and focus groups. |
|  | Develop an initial list of questions to ask, then plan interviews and group discussions by selecting five to seven questions from that list, depending on the time available to conduct interviews. |
|  | To understand culture—and to improve it—you need to learn about how people behave and interact with one another. |
|  | Conduct observations and interviews across key groups:   1. safety committee members, 2. individual associates, 3. frontline supervisors, and 4. managers and executives. |
|  | Take the time to review all safety documents, including incident reports and close-call data (if available). |
|  | Some of the data collected can be quantified; quantifying the qualitative data allows you to summarize it for leadership, giving them a snapshot of employees’ perceptions and how they relate to the perceptions of managers and supervisors. |
|  | After you finish the assessment, you want to summarize your findings into a report that leaders can digest and that captures the current state of the safety culture. |
|  | Present your findings to leadership and open the discussion about the elements impacting safety culture in your organization; the team should regularly review progress and gather feedback, adapting their strategies as necessary, ensuring continuous improvement in safety culture and leadership. |
|  | Conducting periodic safety culture assessments is important for continuous improvement; these types of assessments bring insights from across the organization, so safety and leadership teams can prioritize their change activities to better address the organizational elements that have the greatest impact on safety culture through all levels of the organization. |
|  | In your assessment, you have discovered whether your company has established, relevant versions of the above-the-line items of purpose, a mission or vision statement, and a set of values. If the company does not have these elements established, they need to be created, and in other cases, these elements may need to be improved. |
|  | Purpose, mission, vision, and values should not be created in silos, but with the help and input of many members of the organization; the goal is for everyone to understand how their daily activities contribute to the company’s objectives and align with its purpose, mission, vision, and values. |
|  | A purpose statement outlines the fundamental reasons why an organization exists and how it benefits society. |
|  | A mission statement is a tactical declaration of an organization’s activities and intentions. It defines the audience for and scope of the organization’s products and services, and it answers the question, “what does the organization do, for whom, and how?” |
|  | A vision statement expresses the long-term aspirations of the company. It’s the statement that keeps employees engaged in working toward something bigger than their daily activities and annual goals. |
|  | A values statement defines the set of principles that a company uses to shape how people will get work done and how they will conduct themselves while doing the work. |
|  | The development or improvement of a company’s purpose, mission, vision, and values is not just a procedural task. It’s a fundamental step toward aligning the organization’s culture with its operational and safety goals. |
|  | Involving diverse members across the organization in this process ensures these elements resonate with and are relevant to everyone. |
|  | This inclusive approach, facilitated by a working group or committee, helps create a shared vision where every employee understands and contributes to the company’s objectives. |
|  | By aligning daily activities with the company’s foundational elements, organizations foster a stronger, more cohesive culture and lay the groundwork for effective safety programs and sustainable business success. |
|  | To foster a robust safety culture, organizations must align their formal systems, such as safety policies and procedures, with their informal culture, including leadership behaviors and social norms. This ensures that safety values are lived experiences within the organization, not just documents. |

#### The New Values-Based Safety

## **Chapter 4** | Safety Culture, Part 2: Safety Leadership

Main Points

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|  | A thriving safety culture requires strong leadership. |
|  | For an organization to implement and sustain a Values-Based Safety (VBS) process, the first step is to strengthen leadership’s role in safety. |
|  | Executives set forth a vision and the intended outcomes for their safety programs, while managers and supervisors are responsible for executing on that promise. |
|  | Leadership is separated into three roles: executive is a title reserved for leaders at the top of the organization (CEO, CFO, managing director, or a leader of a product area), a manager refers to middle management, or the people who bridge the gap between senior leaders and frontline employees, and a supervisor is the role that coordinates and oversees daily work. |
|  | The term “safety leadership” is used to describe a set of behaviors that leaders at every level of the organization must demonstrate. |
|  | Leadership demonstrates that they value safety in these ways:   1. attending meetings and visiting worksites, 2. talking about safety every day, 3. embedding safety into conversations on other topics (e.g., operations and finance), 4. considering safety in every decision: process changes, new opportunities, hiring, promotions, and employee performance reviews, 5. aligning safety with all other goals: productivity, sales, and financial, 6. seeking solutions instead of blame, and 7. humanizing employees. |
|  | Leadership interacts with their employees in ways that foster positive relationships, such as (1) holding conversations with different employee groups and asking positive questions, (2) following up and following through after conversations, (3) observing work firsthand to see the consequences of their decisions (e.g., equipment selection, processes, and expectations), (4) reinforcing safe behaviors and correcting unsafe or at-risk behaviors, (5) removing barriers for design team and steering committee members, (6) communicating that safety is part of the job, not an addition to it, and (7) soliciting feedback from direct reports and the larger work environment. |
|  | Consider these questions when reflecting on leadership behaviors:   1. How many of those behaviors do you demonstrate consistently?, 2. Do other executives, managers, and supervisors do the same?, and 3. What barriers prohibit you and your colleagues from engaging in those behaviors? |
|  | There are a few barriers that impede an ideal safety state within an organization:   1. measurement systems, 2. accountability systems, 3. inadequate monitoring and follow-up, and 4. managing with fear. |
|  | Organizations collect measures on production, cost, and quality of work, but sometimes, leadership overemphasizes these measures and sacrifices measures related to safety. |
|  | Measurement is linked to accountability, but when leaders de-emphasize behavioral measures of safety and hold employees accountable for other metrics (such as productivity and cost), safety often plummets. |
|  | Managers and supervisors who are hands-off in daily operations, except when something deviates from the norm, manage by exception. In safety, this describes the manager who only focuses on serious safety issues: major equipment malfunctions, injuries, or fatalities. |
|  | A closely related barrier to management by exception is simply not spending sufficient time monitoring safety practices and systems; managers either fail to observe work at all or go out to jobsites and spend time discussing topics other than safety. |
|  | Managers who motivate employees to work safely by using threats and fear tactics often produce negative outcomes, rather than improve safe behavior, employees learn when to act safely and when they can relax. |
|  | Safety is everyone’s job and should be incorporated into every level of the organization. |
|  | To reach alignment across the organization, three elements must work together: a leader’s personal commitment to safety, their demonstration of certain leadership behaviors, and an organizational system that allows for safety practices to occur. |
|  | Performing the following actions will help achieve organizational alignment:   1. model safe behaviors in daily work, 2. hold weekly safety reviews with direct reports, 3. valuate all decisions against the impact they have on safety, 4. learn the organization’s safety processes, 5. include safety expectations in performance reviews, and 6. ensure management systems facilitate (do not impede) safety. |
|  | Creating a formal values statement with that sentiment helps align everyone in the organization; using cascading meetings ensures leaders’ behaviors are aligned with and demonstrate support for the organization’s safety values. |
|  | There should be clear, ongoing messages about the importance of safety that should indicate what executives, managers, supervisors, and employees will do to create a safe workplace. When people do what they say they’re going to do, it builds say-do correspondence and trust. |
|  | “Actions speak louder than words” – this adage applies to safety culture, especially in companies where leaders have historically said one thing and done another (see Table 4.1 for a list of what leaders might say and do to strengthen their safety culture). |
|  | When starting a behavioral safety program, leaders commit resources to get it started and keep it running. A common mistake is underestimating how much time and money are required to build and maintain the program, but safety is not a one- time activity. Success only happens when leaders commit resources to safety for the long haul. |
|  | Expand new hire orientation to include on-the-job safety – leadership should do the following regarding new hires:   1. create a new employee orientation checklist that includes safety-related items, 2. standardize training materials (delivered online or in person using scripts or facilitation guides) to ensure every new hire has the same experience, 3. require new hires complete performance checkouts to demonstrate skill mastery, and 4. update the orientation to align with changes in process, work conditions, or business. |
|  | Create and use a safety leadership checklist. A leadership checklist includes critical behaviors the leader should do to improve the alignment of leadership practices and the organization’s value for safety (see Figure 4.2 for an example of what a safety checklist might look like). |
|  | Communication practices should reflect a value for openness and honesty; listening, soliciting input, communicating values, and sharing plans along with the rationale for changes all help align expectations throughout the organization. |
|  | Communicating the importance of safety through formal presentations and informal interactions keeps leadership and employees on the same page. These communications include sharing personal stories with an underlying safety message or making safety a standing agenda item at meetings. |
|  | Leadership can perform the following communication practices to help employees see the importance of safety:   1. discuss safety in meetings and presentations, 2. relate safety to organizational and personal values, 3. highlight safety as a priority in conversations, 4. ask employees for safety improvement ideas, 5. share personal experiences that have shaped safety perspective, and 6. recognize safe behaviors publicly. |
|  | For leadership to build trust with employees and gain their buy-in for safety improvement efforts, managers and supervisors must be visible in the organization; written or spoken communications are one way to send a clear message about safety. |
|  | Sometimes urgent issues require immediate attention between scheduled safety meetings; a safety alert system gets out an urgent message to leadership, which allows leaders to quickly learn about a problem and act to resolve it. |
|  | Building support involves getting help and input from shareholders; the best way to create ownership is through involvement in planning. |
|  | Leadership teams committed to sustaining a safety program are usually involved in the following actions:   1. allocating resources for safety committees and celebrations, 2. thanking employees for their participation in safety initiatives, 3. attending safety events and meetings, 4. requesting progress reports for safety initiatives, 5. providing assistance when barriers to participation arise, and 6. sharing success stories publicly. |
|  | The Safety Point of Contact within an organization promotes safety through what they say and do. They might also be charged with (1) training new observers to conduct safety observations and feedback, (2) conducting frequent behavioral safety observations and modeling how the process works for other employees, (3) ensuring behavioral safety observation forms are completed and submitted to the appropriate location, (4) reviewing injuries, close calls, and safety data in safety meetings with their team, (5) posting and updating safety improvement graphs, and (6) arranging recognition and celebration events with supervisors and the safety committee. |
|  | To make a Safety Point of Contact program productive, the steering committee should be in contact at least monthly with the point of contact to (1) listen to what’s happening in the field, (2) readjust or reemphasize priorities and action plans, (3) encourage the Safety Point of Contact to reinforce communications sent by leadership, and (4) gain feedback about the process and incorporate it into continuous improvement plans. |
|  | Studying and reviewing practices ensures that leaders become students of their business; they review and assess the effectiveness of their efforts to improve safety and to find new ways to achieve continuous improvement. |
|  | Leaders who continuously review safety data demonstrate their sustained commitment to safety, which contradicts the perception that safety is a short-term priority. The following actions send the message that safety is a long-term endeavor:   1. analyze safety performance metrics regularly, 2. conduct focus groups to gather employee perspectives, 3. review how safety outcomes were achieved, 4. meet with safety teams to discuss improvement plans, and 5. inquire about employees’ participation in safety initiatives. |
|  | Every leader is responsible for conducting safety observations and feedback sessions, observing work is the single most important activity that distinguishes effective leaders from mediocre ones. |
|  | Leaders should conduct safety walk-arounds, regardless of whether they are included in the VBS process. To maximize the productivity of safety walk-arounds, leaders should enter an observation with a clear objective, for example, finding areas that present the greatest risk of injury to employees. |
|  | Conducting safety walk-arounds and engaging employees in casual conversations are types of informal monitoring that help ensure identification and communication regarding safety issues and concerns. |
|  | By providing follow-up discussion on concerns, leaders can help ensure that safety committees establish deadlines that get safety problems addressed before a serious incident occurs. |
|  | When a manager or supervisor walks around, they should ask about employee performance, not just discuss incidents; asking effective questions can generate productive conversations about safety between leadership and employees. |
|  | Effective questions usually open with “what” or “how:”   1. how could leadership support you in lowering the number of incidents on your team?, 2. what obstacles are getting in the way of you conducting observations?, and 3. how could we get employees to consistently lift with their legs and not their backs? |
|  | Effective questioning encourages participants to generate solutions that will improve behavior or the outcome of their work. Employees feel that their leader is inviting them into a conversation and that they are part of the improvement (see Table 4.3 for sample questions for each level of leadership to ask of other leaders and employees). |
|  | When talking with someone who struggles to follow safety protocols, continue to use positive, effective questions. These questions quickly shift from what happened in the past to what can be achieved in the future. |
|  | Leaders play a critical role in formal reviews: assessments, audits, and incident report reviews. |
|  | Effective leaders manage the consequences, they use their feedback and comments to verbally recognize and reinforce success, they coach improvement to ensure all employees are consistently meeting safety requirements, and they are also fair and consistent in their efforts to enforce their organization’s disciplinary policies. |
|  | To shape and reinforce safety practices, leaders should do the following:   1. recognize safe practice improvements publicly, 2. request employee success stories for recognition, 3. deliver constructive feedback regarding safety behaviors, 4. participate visibly in local safety celebrations, 5. provide resources for small-scale safety recognitions, and 6. thank individual employees for their safety contributions. |
|  | Never forget to recognize and reward safety committee members. An emphasis is placed on the importance of celebrating employees’ adherence to the VBS process, but the people behind those efforts must also be rewarded. |
|  | One way to recognize steering committee members is by finding professional development opportunities for them. |
|  | An observation and feedback process allows leaders to reward and correct behavior in the moment, which reduces the need for discipline; effective observation prevents disciplinary issues and stops work conditions from deteriorating. |
|  | Every employee needs to perform safety-critical behaviors fluently to prevent serious injuries and fatalities and every employee has the same obligation to comply with established safety requirements. |
|  | A positive first step to improving safety is to improve foundational leadership skills and accountability by setting up cascading meetings with teams across the organization. |
|  | Executives, managers, and supervisors must have a strong grasp of safety concepts to lead the organization forward – provide training to leadership at the start of a safety improvement project and implement ongoing safety training to keep leadership up to date on skills. |
|  | Start with a meeting for the topmost leadership to discuss safety priorities, then carry (cascade) that information all the way down to frontline employees. |
|  | Assigning meeting groups, scheduling meeting times, making safety the first item on the agenda, reporting out and updating, developing action plans, and standardizing agenda templates are steps to take to start establishing a system of cascading meetings. |
|  | Supervisor-employee meetings should focus on identifying potential areas of injury and hazard exposure that arise on the job. Supervisors should use these meetings to prioritize activities that will minimize risk and control exposures. |
|  | Safety improvement efforts require continuous evaluation to determine their success and define areas for improvement; one improvement might include adjusting the frequency of meetings. |
|  | Cascading safety leadership meetings enhance task completion, drive progress, and fortify a safety-centric culture; meetings are the foundation for a systematic safety process. |
|  | During meetings, messages and policies are disseminated and employees are made aware of how their behavior contributes to the organization’s safety priorities and responsibilities (see Table 4.4 for a summary of these recommendations). |
|  | Active and visible support from executives, managers, and supervisors is critical for the longevity of safety improvement efforts. |
|  | Leaders should focus on two roles when building their organization’s safety culture:   1. show a personal commitment to safety through what they say and do, and 2. pay careful attention to safety improvement efforts without taking ownership away from employees. |
|  | When employees see their leadership in professional development activities, it reinforces the company’s commitment to safety; employees become collaborative and involved, which leads to better outcomes for the business. |

#### The New Values-Based Safety

## **Chapter 5** | Leadership Safety Improvement Projects

Main Points

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|  | Because serious-incident prevention is the most important leadership safety improvement project, organizations need a systematic management approach to ensure that actions critical to preventing serious incidents are accurately identified and diligently executed over the long term. |
|  | Performance management is a process that incorporates (1) employee involvement, (2) measurement of upstream performance indicators, (3) performance feedback, and (4) reinforcement contingent upon performance. |
|  | Performance management is the foundation for a proven management approach; leadership safety improvement projects have proven effective for achieving and sustaining serious-incident-free operations. |
|  | Success in preventing serious incidents over the long term is firmly linked to an organization’s capabilities for identifying the tasks critical to success, then successfully managing the many details involved in properly executing these tasks. |
|  | Success can best be achieved through application of a process model that merges proven performance management techniques with sound risk management practices. |
|  | These 8 process elements are essential for effectively maintaining workplace conditions and practices necessary to sustain incident-free operations:   1. build management commitment and leadership, 2. involve employees, 3. understand the risks, 4. identify critical work for controlling the risks, 5. establish performance standards, 6. maintain measurement and feedback systems, 7. reinforce and implement corrective action, and 8. improve and update the process 9. (see Figure 5.4 for a flowchart of a typical leadership safety improvement project). |
|  | Implementing a leadership safety improvement project is generally a management-driven improvement effort. |
|  | Management commitment and leadership are critical to overcoming barriers to success and for maintaining recognition of the leadership safety improvement project as a top priority throughout the organization. |
|  | Full employee involvement is essential to leveraging the organization’s limited resources, harnessing employee knowledge, and facilitating employee ownership of the safety process. |
|  | The full benefits of employee involvement can be achieved when, instead of simply participating, employees assume leadership roles in developing, implementing, maintaining, and improving the leadership safety improvement project. |
|  | Success in any endeavor requires knowledge of potential risks; without a thorough understanding of the risks, safety concerns and the need for risk prevention are, unfortunately, often recognized only after a serious incident has occurred. |
|  | In view of the nonroutine nature of serious incidents, the focus must be on what can happen rather than on what has happened in the past. |
|  | A systematic process involving all levels of the organization must be in place for identifying the risks that can lead to incidents that bring serious consequences for the organization. |
|  | Successfully managing serious safety risks involves proactive identification and execution of tasks that are critical to controlling risks. |
|  | An effective system must be established to ensure that all of the proper conditions and work practices are in place and maintained for supporting the diligent execution of this work over the long term. |
|  | The safety improvement model includes the identification of the critical tasks that an organization must focus on to successfully control major safety risks. |
|  | Performance standards must be based on careful research to provide detailed guidance while avoiding excessive requirements that will increase costs without delivering corresponding benefits in safety performance. |
|  | The leadership safety improvement model emphasizes the need to establish standards that are effective in both preventing incidents and fully utilizing resources. |
|  | Effective feedback systems must be established to communicate progress on key initiatives to the employees responsible for performing the work critical to success. |
|  | Establishing an effective feedback system allows time for proactive actions to be taken before an incident occurs, rather than reactive actions being carried out after damage has been done. |
|  | The leadership safety improvement model utilizes measurement and feedback systems as the basis for identifying appropriate reinforcement milestones and to provide early warning of a need for corrective actions. |
|  | The reinforcement and feedback elements of the leadership safety improvement project help ensure that outstanding performance is recognized, and early intervention is initiated when indicated. |
|  | Changes in equipment, facilities, personnel, and materials, among other factors, continually impact most organizations and the specific actions required to sustain safe operations. |
|  | The leadership safety improvement model recognizes the importance of ongoing changes within organizations and the need for a systematic approach to ensure that actions required for incident-free operations remain effective. |
|  | To reinforce excellent performance, pinpoint improvement needs, provide feedback, and call out corrective actions. Handwritten notes are often added to the charts posted in the work area. |
|  | When measurements indicate improvement opportunities, root causes are identified and proactive corrective actions are initiated. |
|  | Leadership safety improvement projects have provided major benefits for all stakeholders: employees and their families, managers, shareholders, customers, suppliers, regulatory agencies, and members of the public who live and work along the pipeline rights-of-way. |

#### The New Values-Based Safety

## **Chapter 6** | The Values-Based Safety Process

Main Points

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|  | Prioritizing safety leadership and design enables some companies to operate without harming employees or the environment. |
|  | Employee actions significantly influence their exposure to inherent hazards in certain sectors of organizations. |
|  | Implementing the Values-Based Safety (VBS) process can benefit organizations by cultivating a culture of mutual care and open communication about injury risks. |
|  | The VBS process is the behavior-based safety (BBS) process with the consideration of values; discussing personal and company values will help ensure a more successful process. |
|  | While designing a process that meets the needs of the organization, the team may want to find a name that fits the organization’s new process; this is useful for indicating that the new safety process is different from what was done in the past. |
|  | The key to a successful VBS process is getting the right teams together to plan the implementation. |
|  | The (VBS) process should be created in three successive iterations; preliminary planning, developing a detailed implementation plan, and then the implementation of process. |
|  | It is important to create a safety process that is ongoing and relatively stable; however, safety programs can be implemented within the VBS process. |
|  | The safety process provides ongoing measurement and evaluation. |
|  | The key elements of the VBS process are regular observations, data review and problem solving, safety meetings, and safety regulations and celebrations. |

#### The New Values-Based Safety

## **Chapter 7** | Safety Assessment

Main Points

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|  | A safety assessment is a formal study of your organization’s current level of safety performance and the practices that impact safety. |
|  | There are two purposes in conducting a safety assessment; the assessment will result in better recommendations, and it will help build support for initiating improvement efforts. |
|  | A decision should be made on who will conduct the safety assessment; either a team or an individual effort. |
|  | There are several objectives of a safety assessment**:** identify   1. existing efforts and develop a plan that builds on these efforts, 2. high-risk areas and activities, 3. training needs, and 4. potential design team members, 5. incorporate input from key personnel, and 6. build management support for implementation. |
|  | Before developing recommendations, identify the key elements of your organization’s current safety efforts, what was done in the past, and related improvement efforts. |
|  | Avoid creating an improvement effort that is at odds with other initiatives to maximize the support for the VBS process. |
|  | Incorporate input from key personnel to provide them with an opportunity to have input into the plans throughout the assessment process. |
|  | Identify high risk areas and activities within the organization through interviews and a review of the organization’s incident records. |
|  | During the assessment, training needs might be identified while conducting observations with employees, but your main focus should be on the supervisory personnel – a plan to address the deficiencies identified will come later. |
|  | To identify who should participate on the design team, nominations from employees should be casted. |
|  | Ideal candidates for the design team are employees who have demonstrated an interest in safety, are well respected by their coworkers, and are assertive about asking questions and stating their opinions. |
|  | The most important objective of the assessment is to create a management understanding of and support for the implementation plan. |
|  | The assessment report typically includes:   1. a summary of observations and findings; 2. the recommended team implementation process; 3. suggested design team participants; 4. preliminary plans for each stage of the project; 5. a detailed schedule and cost estimate. |
|  | The assessment report is the design document for implementation; recommendations in the report serve as a preliminary design and provide a starting point for the design team. |

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|  | The safety assessment generally consists of five steps:   1. review safety data, 2. conduct interviews, 3. observe safety meetings, safety audits, and safety practices in the work area, 4. analyze information and develop an improvement plan, and 5. make the final report and presentation. |
|  | Reviewing safety data should consist of reviewing safety reports that summarize incident data, review individual accident reports, and collect data on compensation costs and, if possible, costs of property damage from accidents. |
|  | While conducting interviews with managers, assess their interest in supporting additional enhancements to existing safety efforts. |
|  | Using a standard of comparison while conducting the assessment will assist with evaluating the information being collected and can give a starting point for planning possible enhancements to current safety efforts. |
|  | A survey of safety management practices will assist in assessing a large organization, however, a small initial round of interviews to broaden understanding of the kinds of issues to investigate might be necessary to write the survey. |
|  | You should observe several safety meetings and several safety audits in different areas within the organization. |
|  | Analyze the information collected so far by comparing the organization’s current safety management practices with those proven to be effective, then develop a plan for implementing changes to the safety process. |
|  | The primary outcome of the assessment may be a presentation or a formal report which typically would include an introduction and executive summary, the assessment methodology, the organization’s current process, and the recommendations from the design team. |
|  | At the end of the assessment, the final task is to explain to management how the organization can enhance its current safety efforts with the goal of getting an agreement from management to actively participate and support the design team’s improvement efforts. |

#### The New Values-Based Safety

## **Chapter 8** | Management Overview and Design Team Workshop

Main Points

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|  | Initiating the process in a carefully planned and well-organized manner that ensures a high level of understanding of the changes being proposed for managers and supervisors, those who will be participating on the design team, and other employees will help with the success of the process. |
|  | A management overview is an orientation for management and supervisory personnel that introduces the enhancements you plan to make to the organization’s safety improvement efforts. |
|  | Ensure that those in the orientation understand the basic elements of the VBS process and how they can have input into its final design. |
|  | There are several objectives of the management overview;   1. to provide an overview of the elements of the VBS process and why it is being implemented, 2. to ensure that line management knows how to support the implementation process at this stage, and 3. to let people know how to implement the process. |
|  | The design team workshop is an initial workshop that is similar to the management overview, but includes a formal training for those who will participate in the design team. |
|  | There are several objectives for the design team workshop;   1. to provide necessary skills to those who will participate in the design process, 2. to build better understanding and support from key managers and employees, and 3. to get initial input from participants as a basis for later development. |
|  | The behavioral safety workshop is typically 3 days long, with an agenda including safety basics, an overview of implementation, and behavior analysis in safety. |

#### The New Values-Based Safety

## **Chapter 9** | Final Design

Main Points

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|  | Over the long term, the safety process should be responsive to data and experience – the design group should ensure an observation process that gets modified on the basis of incidents and close calls. |
|  | The main goal in the final design is to complete the detailed plans for enhancing your organization’s process for managing safety in the work areas. |
|  | The specific objectives of the final design include creating a safety observation process, feedback procedures, safety awards, and having an involvement process. |
|  | A key element of the design team’s job is to clarify the responsibilities of steering committees both during and after the implementation. |
|  | The design team has various duties that include planning the responsibilities of management, operationally defining those responsibilities, and possibly plan its own responsibilities. |
|  | Two-day planning meetings are most effective. |
|  | The details, scope, and time required of the implementation plan will vary depending on the size and complexity of the organization. |
|  | You should evaluate training and implementation efforts at each stage so that you can refine the process throughout implementation. |
|  | Review various considerations before choosing whether you will be using a periodic planning meeting or marathon planning meeting implementation. |
|  | The time required for implementation will be a function of the size of the organization and whether the planning and implementation are concurrent or sequential. |
|  | The management team should provide the design team with an initial goal or purpose statement, then ensure that the design team develops its own initial goal or purpose statement in a manner that is consistent with the management team’s intent. |
|  | The management team is also responsible for changing organizational policies and procedures to better support the VBS process. |
|  | The management team will also be responsible for approving and sanctioning the design team’s recommendations. Once the management team approves the team’s plan, the design team proceeds with implementation. |
|  | Typical steps in designing a VBS are (1) establish a mission statement, values, and milestones schedule, (2) create the safety observation process, (3) develop feedback and involvement procedures, (4) develop recognition and celebration plans, (5) plan training and kickoff meetings, and (6) conduct a management review. |
|  | Employees seeing their ideas come to life is the natural consequence of participation in safety teams and committees. The resulting changes will help maintain participants’ interest in working on their safety teams and make recruiting future participants easier. |

#### The New Values-Based Safety

## **Chapter 10** | Step 1: Establishing Mission, Values, and Milestone Targets

Main Points

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|  | Work with the design team to develop a goal or purpose statement. |
|  | The first meeting should include the team discussing, modifying, and approving both the purpose statement and the schedule for presentation to the management team. |
|  | A structured approach requires less time and provides a set of value statements and corresponding practices found to be just as effective in guiding the development and assessment of the new VBS process. |
|  | Organizations that want to develop a very personalized set of value statements with corresponding practices may still need an unstructured approach in guiding the development of the new VBS process. |
|  | The typical steps in defining organizational values are (1) brainstorm actions likely to impact the process, (2) pinpoint those practices, (3) sort these practices into “value” categories, (4) use values in designing your safety process, (5) discuss values during kickoff meetings and training, and (6) use values as criteria for evaluation. |
|  | Brainstorm a list of positive and negative actions that support or damage your efforts to implement a new safety improvement initiative. |
|  | Pinpoint all items on your list. |
|  | Pinpoints should be a description of a specific behavior that demonstrates support for the process and should be worded in a language that is meaningful to the employees who will see them. |
|  | There are 5 typical categories that design teams will place identified activities into: concern for the well-being of others, open and honest communication, personal leadership, teamwork and employee involvement, and continuous improvement. |
|  | Small groups will have to sort and refine (if necessary) their pinpointed practices into the corresponding value category first before combining with the whole group to again condense and combine items on the basis of importance to the success of your process. The ideal number is between 3-7 practices for each value. |
|  | Critical practices have been sorted into their appropriate value statement category when the team has achieved a consensus on 3-5 practices that are most critical to the success of the process in representing each value. |
|  | Values and critical practices should guide you in the many decisions that you will need to make in designing your process; some of your critical practices will specify roles and responsibilities for those who will be involved in the process. |
|  | Discuss your values and critical practices when you introduce your VBS process to employees; kickoff meetings are ideal times to communicate expectations to employees on their participation in the process. |
|  | Additional trainings might be used to help employees develop or refine the communication and leadership skills necessary for a successful safety process. |
|  | Values have two additional uses:   1. they provide a basis for safety teams to evaluate the quality of the new safety process once it is up and running and 2. they provide a basis for evaluating individual performance within an organization’s performance appraisal process. |
|  | Statements of values and practices provide a basis for reciprocal feedback and for evaluating actions and potential actions. |
|  | Steering committees can use identified values and practices as a basis for evaluating the quality and integrity of its safety improvement efforts. |
|  | The team will need to develop a milestone schedule for completing each stage of planning and implementation. |
|  | Regardless of your approach for scheduling meetings for planning the implementation of the VBS process, you will need to coordinate with management to ensure that they are available to participate in the design review(s). |

#### The New Values-Based Safety

## **Chapter 11** | Step 2: Creating the Safety Observation Process

Main Points

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|  | An effective observation process offers many advantages. The process (1) improves the safety practices of observers, (2) results in better hazards recognition, (3) provides feedback on the effectiveness of the safety process, (4) establishes a baseline for setting improvement targets, (5) provides practices in observing and discussing safety, (6) adds social consequences for safe work practices, and (7) provides a basis for forms of employee recognition. |
|  | The observation and feedback process is the most important element of the VBS process; it is critical that the design team creates a realistic observation process, complete with appropriate forms and guidelines, on the logistics of conducting observations within the organization. |
|  | There are 6 steps in the implementation of the observation process:   1. analyze past incidents and injuries, 2. develop a list of critical safe practices, 3. identify safe practices that prevent serious injuries, 4. draft and revise checklists, 5. develop the observation procedure, and 6. trial run the observation checklist and process. |
|  | During the analysis of past injuries, there are five objectives that will be important as the design team develops the observation process: identify   1. critical behaviors for observation checklist(s) based on both the frequency of their occurrence and their potential severity, 2. whether severe injuries most likely occur during routine or nonroutine operations, 3. department-specific behaviors for use on department-specific checklists, 4. specific examples to include in definitions, and 5. the time of day and days of the week that injuries are most likely to occur. |
|  | When analyzing past incidents and injuries, the design team members should review incident and close call records within the last 3-5 years to identify unsafe practices that caused or nearly caused incidents. |
|  | The design team should develop a list of critical safe practices by using the information gathered in the previous step to sort the categories and behaviors in the order of their contribution to injuries (see Figure 11.1 for a worksheet to analyze past injuries and incidents). |
|  | Lists of critical safe practices developed for each department will be compared to determine whether they share a common set of critical practices, or if each department is unique enough to warrant a separate observation checklist. |
|  | It is important to clearly define the desired safety practices in precise detail so that the different observers can agree on how to score a given situation. |
|  | Observation checklists should include safe practices, as a large part of the acceptance of safety programs comes from taking a positive approach versus the more traditional, but negative approach of looking for unsafe practices. |
|  | Before drafting the checklist, there should be a separate planning process to address the risk of serious incidents and fatalities in order to identify the behaviors critical to preventing those serious incidents and make preliminary plans for how the observations will be conducted. |
|  | To reduce and prevent serious incidents and fatalities, a hazard analysis by subject matter experts should be conducted while observing tasks determined to be high-risk. |
|  | Serious incident prevention can be integrated with the VBS process in several ways; the design team can include serious-incident prevention items on their normal VBS checklist, other organizations might have a separate category for behaviors critical to reducing the risk of serious incidents, or the design team can focus on regular observations of high-hazard tasks by leadership. |
|  | Best practice is to add definitions to the front of the checklist. This often requires reducing the number of checklist items; the design team can reduce potential redundancy by removing serious-incident prevention items from the front. |
|  | The first step in drafting and revising the checklist is to shorten the list of pinpointed items by considering the following criteria: importance to safety, frequency of occurrence, observability, and overlap with other items on the list. |
|  | Each checklist should reflect a single functional unit from the organizational structure to ensure that everyone participating in the safety meetings is clearly responsible for the data on it, making it more meaningful during safety discussions. |
|  | Several checklists might be needed depending on the size and complexity of the organization, but the goal is to keep the number of checklists as small as possible. |
|  | Observation checklist headings are for designating what data must be collected, recording the name of the employee conducting the observation, the employee’s department, where the observation is being conducted, and the date and time, and including other information that might be designated by the headings. |
|  | Language on the checklist should be consistent with the values identified by the design team to demonstrate and alignment of the process with those values and to support the terms that should be used in discussing the observations. |
|  | A general rule of thumb is to limit the number of critical practices included on the checklist to 12 to 15 or fewer, if possible. |
|  | The back of the checklist is used to provide observers with clear operational definitions of the safety practices being targeted on the checklist. These definitions should include a pinpointed description of the practices on the front with examples. |
|  | There are several alternative approaches to designing the observation checklist; organizations can opt for department-specific checklists (Figure 11.4), the organization can use a generic safe-behavior checklist (Figure 11.7), or the organization can use a point system to weight the importance of different safety practices (Figure 11.8). |
|  | Developing a good checklist is an empirical process that should change to meet the changing needs of the work environment, but it should remain stable for period of time long enough to document goal achievement. |
|  | There are many variables to consider when the design team is developing formal guidelines for conducting observations. Guidelines will be designed differently for each organization, depending on their needs and structure. |
|  | While the design team develops formal guidelines for conducting observations, they should consider these variables: who is conducting the observations, if being observed/ an observer is voluntary, what tasks will be observed that have the potential for serious incidents, if observations be announced, how often they will occur, and when they will be conducted. |
|  | The design team should also consider if observations will be conducted across or within departments, how to handle contract personnel, the procedures for when an observer sees the potential for a serious incident during a VBS observation, if employees will observe a single area, employee, or specific tasks, where observation checklists will be located, and how to submit them when developing formal guidelines for conducting observations. |
|  | The observation procedure should first determine who will conduct observations. Most organizations involve employees, while others start with managers and supervisors (see Table 11.4 for considerations for deciding who should conduct observations). |
|  | A dedicated small group of observers is often the most effective approach, ideally comprising 8%–12% of the total number of employees; in some cases, only the steering committee members serve as observers. |
|  | Participation in the design team is based on who will be taking on the responsibility of conducting observations. If observations will be a management responsibility, your design team members should primarily be managers and supervisors, but if observations are to be an employee responsibility, the design team should involve representative employees. |
|  | For most organizations using VBS, employee participation as an observer is typically voluntary, while managers, supervisors, and steering committee members are often required to conduct observations. Some organizations mandate observations as a job requirement, but this can increase the number of forms that are completed as a paperwork exercise without actual observation (see Table 11.4 for considerations when deciding who should conduct observations). |
|  | A voluntary approach is best for employees, while requiring participation from managers, supervisors, and steering committee members ensures leadership commitment to the process. This is because the focus shifts to encouraging quality observations, which is challenging but easier to measure than observation quality itself. It also helps identify complacency: If employees stop conducting observations, it signals a decline in safety awareness. |
|  | Being observed should generally be considered a job expectation in most organizations that implement VBS. |
|  | In organizations with low trust, a better option is to make being observed a job expectation but to allow employees to opt out of a particular observation, meaning an employee has the right to refuse a particular observation but not to refuse to allow observations altogether. Providing this option often helps overcome resistance to the observation process and is therefore appropriate for some organizations. |
|  | Organizations should consider whether safety observations should be announced in advance. This supports the values of openness and respect for employees, and it can be done informally, such as making eye contact, holding up a clipboard, and pointing at it prior to starting the observation. They can also be scheduled during safety meetings or at the start of work. |
|  | The frequency of safety observations should be based on the risk level of the business; high-risk industries with many employees may require daily observations, while most manufacturing and construction organizations should conduct them weekly. Current data suggests that observers should perform two observations per week (see Table 11.5 for guidelines on deciding appropriate frequency of observations). |
|  | Observers should generally decide when to conduct observations, but the timing should vary to prevent predictability; to maximize effectiveness, observations should be scheduled during high-risk periods, based on incident data. |
|  | Employees are usually most comfortable observing tasks within their own departments, making this the most effective and data-backed strategy. However, when observing unfamiliar or high-risk areas, observers should be accompanied by a knowledgeable supervisor, steering committee member, or experienced employee to ensure the observer's safety. This allows for better discussions of safety concerns and helps observers feel more comfortable when expanding their observations beyond their own work areas. |
|  | The best observation approach depends on the nature of your organization and the kind of incidents that your organization has experienced; incident analysis should guide the observation strategy, focusing on tasks or conditions where injuries are most likely to occur. |
|  | If the organization uses contractors, the design team should consider whether to involve them in safety observations. Options for doing so include the following:   1. work with contractors to establish an observation process unique to them, 2. involve contractors in the design team and in making observations, and 3. observe the contractors’ activities but do not involve them in conducting observations. |
|  | Planning the administrative aspects of observations is essential to ensure efficient data collection and support the feedback process; organizations should determine where employees can access blank checklists and how they will submit completed ones, such as through drop boxes, interoffice mail, or a database. |
|  | In a VBS observation, if an observer identifies a potential serious incident, the focus shifts to ensuring that preventive behaviors and barriers are in place; these factors may be included in the normal checklist or on the back. The design team has to be clear about the procedure so that it can be integrated into the observer training. |
|  | The design team identifies tasks that create exposure to the risks of serious incidents and includes them on the observation checklist (see Figure 11.5, which shows the back of the serious-incident prevention checklist); the design team develops procedures to ensure observations occur whenever employees are exposed to serious injury or fatality risks. |
|  | As a general rule, the process should include observers routinely providing immediate feedback as part of their observation, with the only exception to this rule being situations in which providing immediate feedback produces risk. |
|  | There is a three-step process to give feedback that works for both positive and corrective forms of feedback:   1. describe the behavior that was observed, 2. discuss the potential impact on the employee and their coworkers, and 3. listen to what the employee has to say (then, for corrective feedback, make a specific suggestion that pinpoints what they should be doing differently). |
|  | Observers should avoid two kinds of problems caused by (1) asking theoretical questions and (2) asking questions that start with “why.” |
|  | Organizations need to design their VBS process to meet their unique needs, as many issues and factors of the organization affect the final design. |
|  | The trial run of the observation checklist has three objectives:   1. to fine-tune the checklist and observation procedure to ensure ease of use, 2. to ensure the reliability of the observation procedure, and 3. to develop baseline date for each checklist. |
|  | The design team should present the observation process to management once they have completed the trial run and made final revisions to the checklist and the procedure. |
|  | The meeting with management is an opportunity for management to provide input to the safety process, safety team members to be recognized for their participation, and for the design team to obtain approval to implement the observation process. |

#### The New Values-Based Safety

## **Chapter 12** | Step 3: Designing Feedback and Involvement Procedures

Main Points

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|  | There are four tasks complete in order to implement an effective feedback and involvement process:   1. develop guidelines by using graphs, 2. plan reviews of safety process data, 3. develop guidelines for setting improvement goals, and 4. establish guidelines to rotate your observers. |
|  | Posting performance graphs has a significant positive impact on employee performance (Andrasik, 1980). |
|  | When developing guidelines for using graphs, it is important to consider the experience employees have had in the past with graphic data and/or management. If this experience has been positive, then post graphs in work areas and review the graphs weekly in safety meetings. |
|  | If employees have had a negative experience with graphic data and/or management, then don’t post the graphs and have the steering committee review graphs during their meetings, introducing those graphs to employee safety meetings only after employees are comfortable with the observation process. |
|  | Graphs that are posted should be easy enough to understand that an employee can glance at it when walking by and interpret it without breaking stride. |
|  | There are two rules of thumb when using data:   1. All managers and supervisors should be instructed not to respond in any way to a low percent safe or a safety index on graphs and to not put any pressure on employees to improve these numbers. 2. All managers and supervisors should be encouraged to make positive comments on good percent safe or safety index scores or improvements evidenced on such graphs. |
|  | The data must be reviewed by both the steering committee and in management meetings to get the maximum benefits from the observation process. |
|  | Managers and supervisors must provide daily feedback to employees for on-the-job safety to ensure the success of the VBS process, emphasizing safety on the job and maintaining scheduled observations. |
|  | The responsibility for setting the improvement target should be clearly assigned and communicated by the design team to ensure that the goals get set. |
|  | Establishing an improvement goal provides a positive source of motivation, helps build pride in the area’s safety efforts, helps reduce competition by providing a noncompetitive standard for comparison, gives the target team a standard for evaluating its performance, and members can compare their performance with their own goal rather than where they stand relative to other groups. |
|  | The steering committee must place a focus on ensuring the continuous availability of trained observers to maintain optimal safety conditions. |
|  | Members of the steering committee should offer thorough training and orientation for new observers to ensure they are proficient in both conducting the observations and delivering feedback to their fellow employees. |

#### The New Values-Based Safety

## **Chapter 13** | Step 4: Developing Recognition and Celebration Plans

Main Points

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|  | The safety awards process provides a way of celebrating successes and expressing appreciation for employees who work safely and those who make special contributions. |
|  | Safety awards should be awarded for safe behaviors on the job and for activities related to maintaining the safety process. |
|  | Safety awards should be significant enough to support compliance but not significant enough to generate false reporting of safety data. |
|  | When creating an internal marketing campaign to promote the safety effort with employees, consider using posters, announcements during safety meetings, articles in newsletters, and other methods of promoting and communicating the new process. |
|  | Be aware that many employees have had negative experiences with traditional awards programs that can create resistance when planning a safety awards and recognition program. |
|  | The administration of recognition and celebrations is as important, perhaps even more important, than the initial planning. |
|  | There are three basic options in designing effective safety incentives:   1. Create a safety awards process. 2. Support the safety process through an existing compensation and promotion process. 3. Provide incentive compensation based on the safety process. |
|  | Safety awards programs are most effective when managed locally with strong involvement, while incentive programs are more complex and typically require organization-wide administration and approval. |
|  | A less formal safety awards process focuses on personal recognition through appreciative feedback in meetings, thank-you notes, and public acknowledgments, supported by training to ensure effective implementation. |
|  | The steering committee should ensure observers receive meaningful recognition, such as personal appreciation, thank-you notes, or commendations, to sustain the observation process. |
|  | All awards should include a clear, pinpointed statement of what was done to earn the award and include a suitable statement of appreciation. |
|  | A simple safety awards program involves setting criteria and organizing recognition events that reward specific safety-promoting actions rather than just incident-free periods; these awards should be small enough to avoid influencing reporting and focus on short-term safety achievements. |
|  | The design team typically drafts the simple awards program, allowing the steering committee to adjust it to support the behavioral process as observations begin. |
|  | A fixed safety awards program with identical rewards should have a planned life cycle that maintains for a fixed time period before being replaced with a new program to maintain interest. |
|  | To create a more sustainable recognition process, the steering committee can develop a flexible awards system with a menu of options that can be more meaningful to individuals or teams. |
|  | Starting with a simple awards program, such as a catered meal for meeting safety targets, and gradually incorporating concurrent awards can lead to a more complex and engaging long-term recognition process. |
|  | The best safety awards programs use a tiered approach, recognizing various levels of contributions with appropriate awards, combining simple and concurrent awards into a single awards process, and incorporating personal recognition to encourage ongoing participation. |
|  | There are six tasks that must be completed in the designing of a tiered safety awards process:   1. Develop the criteria for different levels of performance, 2. identify potential awards and forms of recognition, 3. survey area personnel regarding their preferences, 4. finalize a menu of celebrations and awards for each level of performance, 5. plan the awards delivery process, and 6. present the safety awards plan to management. |
|  | Establish clear yet flexible criteria for recognizing both individual and team safety achievements, ensuring consistency while allowing adjustments if safety-related behaviors occur that deserve recognition. Begin by brainstorming key activities to recognize, then refine and categorize them into three to five levels of awards based on their impact. |
|  | Before establishing an awards system, develop a list of potential safety awards and ensure funding is allocated in the annual budget, keeping individual awards relatively small to maintain program integrity. |
|  | If the safety awards are overly valuable, they can negatively influence the process. |
|  | Brainstorm ideas with the design team and employees to ensure that awards express appreciation without influencing reporting or observation processes. |
|  | Creating an awards menu allows you to choose meaningful recognition for recipients, so it’s important to understand the significance of the awards to employee. This can be done by ranking potential awards with the design team or using a survey to gather input from employees (see Figure 13.5). |
|  | After receiving the surveys, summarize the data and create a prioritized list of awards based on employee preferences. The final list should categorize individual and group awards into tiers corresponding to the performance levels previously identified (see Figure 13.6). |
|  | Finalize a menu of awards and celebrations for each performance level, matching the criteria with appropriate awards to complete the safety awards and recognition process (see Figure 13.7 for an example). |
|  | The awards delivery program is critical for the success of the program. It is important to create a process to that is enjoyable and celebratory, making sure to highlight safety achievements in a way that engages everyone. |
|  | The key task is to suggest an awards process with criteria for recognition, allowing the steering committee to oversee and regularly review safety achievements. Management should be involved in delivering awards at the appropriate levels to ensure the process remains meaningful and credible. |
|  | The menu of awards should serve as a guide, allowing the steering committee to create additional meaningful awards not listed, with the ability to add new awards to the menu for future consideration. |
|  | Contests, recognition programs, and incentive compensation plans are some different ways to provide additional awards to employees, each composed of different features to best fit an organization (see Table 13.4). |
|  | Lotteries can effectively deliver safety awards through the delivery of a fun celebration for everyone with many small awards alongside a main award, especially during a safety awareness day. Lotteries are also effective in conjunction with token systems, where observers distribute tokens to employees as part of the observation process. |
|  | Present the safety awards plan to management for input on and approval of the criteria, awards, delivery plans, and budget. When planning the budget, make assumptions about how many individuals and teams will earn recognition to estimate costs, ensuring to slightly overestimate the budget to avoid shortfalls. |
|  | Once the safety awards plan is approved, the steering committee must administer the recognition and celebration plans within the budget constraints. |
|  | An engaged steering committee is essential for the success of a Values-Based Safety (VBS) process, similar to the role of a safety committee in non-BBS organizations. |
|  | Organizations should recognize the contributions of steering committee members to encourage continued participation and commitment, such as through acknowledgment, appreciation, and most effectively, professional development opportunities. |
|  | Providing access to safety conferences helps steering committee members gain fresh perspective and ideas, benefits their professional growth, and enhances the overall effectiveness and adaptability of the VBS process. |
|  | Recognizing hazards and providing constructive feedback are essential skills for frontline supervisors, and organizations should consider the effectiveness of supervisors as potential safety observers when making decisions. |
|  | The observation process aids organizations in assessing safety observation and feedback skills and the observer’s relationship skills outside of the observation process. Most organizations should consider making this process a formal part of the supervisor development process. |
|  | Tying compensation to safety performance (i.e., through safety maintenance goals and safety performance evaluations) can help maintain an efficient safety management process, with the assessment process providing balanced evaluations of procedural and outcome metrics. |
|  | Effective safety incentive compensation typically includes three elements:   1. financial incentives based on measured safety outcomes that reflect economically on the company’s success, 2. recognition and feedback that support maintaining the VBS process and employees’ compliance with safety procedures, and 3. severe penalties, including loss of employment, for falsely reporting incident or observation data. |
|  | An incentive compensation plan should be based on outcome measures, such as total workers’ compensation claims, recordable injuries, or lost-workday cases to effectively track safety performance. |
|  | Using total workers' compensation claims as a basis for an incentive bonus can be an effective measure because it is easy to understand for both managers and employees and directly impacts company profitability. |
|  | Benefits of using total workers’ compensation claims are that it does not directly discourage reporting incidents and it encourages managers to be proactive in managing an injured employee’s return to work. |
|  | Challenges of using total workers’ compensation include the delayed availability of data and the long-term nature of some costs, making it useful to calculate bonuses based on a 12-month moving average (though this may still not fully capture the costs associated with a serious incident). |
|  | OSHA-recordable cases should not be used as the sole basis for incentive bonuses due to the difficulty of ensuring the integrity of injury reporting, but they can be included as part of a broader set of criteria. |
|  | The best approach for creating a safety bonus is probably to use an index that combines and weights several measures because it balances the emphasis on process and outcomes, and recordable injuries can be included but given a small enough weight that the integrity of reporting is easier to maintain. |
|  | There are general guidelines and considerations for the recognition, observation, and evaluation of employees to support appropriate motivation for the VBS process (see Table 13.5). |
|  | The steering committee ensures VBS remains a positive process through voluntary employee participation and positive reinforcement, primarily in the form of individual recognition and team celebrations. |
|  | Effective recognition and celebrations are based on achieving a goal or meeting a criterion, not on the passage of time. |
|  | Recognition and celebrations may occur frequently or infrequently, depending on when the established goal or criterion has been met. |
|  | Recognition is earned by performing desired behaviors to meet a specified criterion (e.g., completing 10 observations), and celebrations are earned by achieving specified goals (e.g., 100% proper lifting). However, both are determined objectively, not judged subjectively. |
|  | Recognition and celebrations are win-win propositions. Everyone can earn recognition by meeting the specified criterion, and everyone in the group can celebrate when a goal is achieved. |
|  | Recognitions and celebrations may be unannounced or “planned spontaneous.” The steering committee decides in advance what will be recognized during a specified reporting period and looks for opportunities to reinforce such individual performances as conducting an observation, completing a quality observation, doing more observations than those scheduled, observing a specific department or task, and the like. |
|  | Both individual recognition and organization celebrations can be formal (i.e., placing letters of commendation in an employee’s personnel file; making positive comments on a performance appraisal; increasing compensation by means of a bonus or raise; arranging choice assignments to certain locations, on projects, or in departments; or even granting a promotion) or informal (i.e., individual thanks and commendation in private, public acknowledgment, a letter to the employee’s family, or posters on bulletin boards that recognize an employee or employees). |
|  | Social or personal (i.e., nonmaterial) recognition is best for avoiding common employee concerns, such as an awarded material item is less valuable than awards given to others, the value of an awarded item is not equal to the value of the performance, some employees have received more recognition than they deserve while others have received less, some employees perform the desired behavior only to receive material items, or an awarded item is not meaningful to the individual. |
|  | Celebrations are most effective when (1) they bring everyone together in one place at one time for food and refreshments, (2) they pinpoint the reason for the celebration, they include a discussion of the goal and how it was met, followed by setting the next goal, (3) they recognize individuals during the celebration who contributed to meeting the goal, (4) they involve others who are significant to the person you want to recognize, such as respected leaders who make the awards meaningful by offering sincere comments of recognition, well-liked employees who tell their story of involvement in the safety process, or family members who describe the value of a safe practice, and (5) everyone is invited to a celebration, not only those who contributed to achieving the goal. |
|  | Customize recognition to the employee receiving it by asking these questions:   1. “Would this employee prefer to receive recognition from a steering committee member, teammate or colleague, supervisor or manager, organization manager, safety professional, or someone completely different?,” 2. “Would this employee prefer private or public recognition?,” and 3. “What small token might signify recognition and remind this employee (and others) of the recognized behavior?” |

#### The New Values-Based Safety

## **Chapter 14** | Step 5: Planning Training and Kickoff Meetings

Main Points

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|  | Once recognition and celebrations are planned, the next step is to introduce the process to employees, train observers, and implement other necessary training for success. |
|  | A kickoff meeting is typically needed, especially for larger sites, and observer training should occur before launching the process. Whether online or in-person, new observers should receive coaching from experienced members, such as steering committee members. |
|  | The general guideline is to train roughly 10%-20% of your employees to conduct observations. However the goal should be to have an observer in each area, or one on each crew of 10 employees. |
|  | Previous recommendations were to require all employees to complete observer training, regardless of their willingness to volunteer to help ensure that employees are making informed decisions regarding what they are signing up for or opting out on. |
|  | A typical agenda for the observer-training workshop is comprised of three objectives, an overview and introduction, observation skills and practice, and feedback skills and practice. |
|  | Kickoff meetings to introduce employees to VBS should be conducted when there is an inability to train all employees in your facility in a fairly short time. |
|  | Design team members should participate in as many kickoff meetings as possible to enable employees to ask questions of those who designed the process. |
|  | A typical agenda for kickoff meetings to introduce the observation system to employees includes the background on how the team came into being, objectives of the observation system, the process for developing the observation system, the observation procedure, what management’s role is, the next steps, and time for questions and discussion. |
|  | A well-developed formal training process for steering committee members will need to be developed if the design team is planning for VBS to be initiated by the committee; the primary purpose of this training it to teach steering committee members to implement and support VBS. |
|  | Training options that balance effectiveness with minimal cost and disruption to the workplace include individual coaching, mentors, seminars or workshops, and videos or slides. |
|  | There are job-specific skills that employees, such as management, steering committee members, observers, steering committee members and observers, and employees who conduct specific job tasks, will need to have in order to support the VBS process (see Table 14.1). |

#### The New Values-Based Safety

## **Chapter 15** | Step 6: Conducting Management Review

Main Points

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|  | The design team should present the Values-Based Safety (VBS) process to management for its input and review once the planning has been completed. |
|  | The presentation meeting is an opportunity for management to provide input for the safety process, approve implementation of the new process, commit to personal involvement in the process, approve the budget for recognition and celebrations, and provide recognition of the efforts of the design team. |
|  | Receiving management’s input and suggestions for the observation system will help ensure that management will support implementation efforts and it can provide an opportunity to make certain that management understands each component of the process. |
|  | A typical agenda for a presentation to management should include the purpose statement, an introduction and overview of the design team and its process, content about the observation checklist, data and analysis, rollout plans, a conclusion, and more. |
|  | All design team members should participate in the presentation; some will be nervous having to speak in a formal presentation so consider having a dry run so team members can practice. |
|  | Effective management presentations involve enthusiasm and sincerity. They do not have to be a polished professional presentation to earn the support of management. |
|  | The role of management should be to understand the process and support the design team members in their participation in planning the VBS process. |
|  | The presentation meeting should be positive and supportive of the design team’s enthusiasm, while still being able to voice any concerns that the management team might have. |

#### The New Values-Based Safety

## **Chapter 16** | Implementing the Values-Based Safety Process

Main Points

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|  | The steering committee is responsible for the implementation of the VBS process. This process will provide the team with the opportunity to change the checklist to meet particular needs of each area or site. |
|  | The first step in initiating the VBS process is to train new steering committee members on the roles for the process owner, the steering committee, and management, but only if your steering committee includes employees who were not on the design team. |
|  | A member of the steering committee should be established as the process owner (also known as behavioral safety coordinator) before implementation is ready to begin. |
|  | The primary responsibility of the behavioral safety coordinator is to ensure that the steering committee implements and maintains the VBS process. |
|  | The purpose of the employee safety coordinator is to champion the process and be the point of contact for the steering committee in areas that do not have steering committee representation. |
|  | The responsibilities of the steering committee include to (1) begin safety observations, (2) ensure employees are trained to conduct observations, (3) use observations data to drive improvement, (4) develop plans for individual recognition and group celebrations, and (5) administer and deliver safety awards. |
|  | Start observations early in the VBS process, as they are essential, while the steering committee simultaneously gathers input, refines vision and values, and reviews safety data. |
|  | The steps to beginning observations includes the following:   1. Revise the safety observation checklist to meet area needs, 2. plan the kickoff meeting, 3. conduct the kickoff meeting, and 4. begin conducting observations and provide feedback. |
|  | The steering committee must recruit and train observers quickly, track training progress, ensure adequate coverage across all areas, and collaborate with management to support and improve participation. |
|  | The steps for using observation data to drive improvement include the following:   1. Post the graphs of safety data, 2. begin reviewing the observation data in safety meetings, 3. set improvement goals, and 4. develop and implement action plans. |
|  | The steering committee should plan and implement individual recognition and group celebrations based on the design team’s guidelines, ensuring they are meaningful and tailored to each work area while maintaining firm boundaries to prevent elimination. |
|  | Depending on the site, recognition efforts may be managed by site leadership, a safety committee, or a dedicated awards committee. |
|  | A successful safety awards program ensures that rewards are meaningful and significant by using the awards menu as a guide while allowing flexibility to match individual preferences. |
|  | An effective delivery will make recognition successful; a poor delivery will make the recognition seem insincere and will therefore be ineffective. However, the more personal the recognition and celebration is, the more meaningful it will be. |
|  | Management has four responsibilities to support the implementation efforts of the steering committee:   1. to discuss its vision of safety within the organization, 2. to discuss its expectations for implementing the VBS process, 3. to participate in training on the observation process, and 4. to model observation and feedback practices. |
|  | Management should communicate their commitment to safety by discussing the formal safety vision/mission statements or their personal dedication to ensure the employees understand the organization's safety priorities. |
|  | Management should clearly communicate expectations for all managers and supervisors within the VBS implementation, including timelines, the personal involvement expected of line management, and any other expectations regarding the VBS process, while fostering two-way discussions on training, progress, and participation. |
|  | Management should participate in VBS process training to demonstrate commitment and ensure they acquire the skills to conduct observations and support the process. |
|  | If the design team has created a process that involves managers in the observation process, upper management should model participation in the VBS process by conducting safety observations alongside managers from the work area, providing feedback on both safe practices and conditions that cause concern. |

#### The New Values-Based Safety

## **Chapter 17** |Maintaining the Values-Based Safety Process

Main Points

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|  | The primary objective of the steering committee is to ensure the integrity of the VBS process by paying special attention to ensuring that the observation process is functioning properly. |
|  | All steering committee members should model practices that are aligned with the stated values and be supportive of the process, including the following: listening to and understanding the concerns of others regarding the safety process, soliciting suggestions for improving the process, answering questions about the VBS process, and providing feedback to other team members and employees on conducting observations, safety practices, and the alignment of behavior with values. |
|  | Modeling the kind of behavior expected of all employees, such as providing feedback to others on both daily work practices and participation in the safety observation process is particularly important because you want employees to understand that they should be using their feedback and observation skills all the time, not just during scheduled safety observations. |
|  | The steering committee needs to pay special attention to the observation process, including reminding people to conduct their observations and, in particular, providing appreciative feedback to employees who have completed their observations. |
|  | The steering committee has two basic weekly responsibilities: the observation process and weekly safety meetings. |
|  | The steering committee must complete these weekly tasks in order to complete the observation process and safety meetings:   1. Develop a schedule for observers, 2. conduct observations. 3. plan discussions for safety meetings that include a review of the past week’s observation sheets, identifying the week’s strengths and areas of concern, calculating and graphing the percentage of target safe behaviors, graphing the number of observations and percentage of employees participating in observations, and 4. conduct weekly safety meetings that include a discussion of the previous week’s observation data (strengths and concerns), recognition of individual contributions, creation of celebrations of an area’s successes, and establishment of improvement targets with employees. |
|  | During observer training, the steering committee will need to complete the following tasks:   1. Encourage newly trained employees to conduct observations, and 2. schedule new observers, then explain how to complete observation forms and deliver feedback, conduct a joint observation, showing the observation and feedback process, and conduct a joint observation, observing and coaching the employee’s observations and feedback. |
|  | Conduct a monthly steering committee meeting to evaluate the effectiveness of the VBS process by reviewing the percentage of observation completion rates, the accuracy of reporting, how often all employees are observed, the effectiveness of recognition efforts, and how well the feedback practices are functioning. |
|  | The steering committee should also provide an ongoing evaluation of the quality and integrity of its safety improvement efforts (see Figure 17.1 for questions to consider when evaluating a VBS process). |
|  | The steering committee will have responsibilities that expand reoccur daily, weekly, at weekly safety meetings, during steering committee meetings, and during planning for the involvement of other employees in the observation process (see Table 17.1 for more information on the steering committee’s ongoing responsibilities). |
|  | There are 5 identified common problems found during evaluations that include the number/percentage of observations being below target, data suggesting safety is decreasing, data is suggesting safety is increasing, a few employees are negative about the VBS process, and most employees are negative about the VBS process (see Table 17.2 for more information on suggestions from the author on how the steering committee should solve these issues). |
|  | After completing the design and implementation, the design team may evolve into an ongoing team of employees with responsibility for ensuring the maintenance and continued refinement of the VBS process, known as steering committee. |
|  | Rotating new employees onto the steering committee broadens employee participation in the process. |
|  | The steering committee has four primary responsibilities that may be assigned to subcommittees:   1. Analyze and problem-solve safety data, 2. communicate relevant safety information, 3. address employee concerns, and 4. coordinate recognition. |
|  | The steering committee should analyze safety data to include an identification of trends and a Pareto analysis of both the observation data and the data on injury rates. |
|  | A Pareto diagram helps the steering committee visually identify and focus on the most prevalent safety issues within a specific area by visually ranking issues from most to least frequent, highlighting at-risk behaviors and assessing their severity. This facilitates critical discussions on safety observations, guiding the steering committee in effective, data-based decision-making. |
|  | The steering committee often publishes company-wide data showing correlations between observation categories and incidents that resulted in injury, showing a clear correlation between unsafe practices and injury incidents (see Table 17.3 for sample statistics comparing observation data with causes of incidents). |
|  | The steering committee often shares relevant safety information with employees through newsletters or bulletin boards, including statistical analysis in tabular and graphical form, discussion topics, and training materials for safety meetings to support the VBS process. |
|  | The steering committee evaluates and responds to employee concerns about the VBS process and other safety-related issues, usually gathering input from observations and safety meetings, with the help of the employee safety coordinator ensuring that concerns are passed along to the steering committee for a response. |
|  | The steering committee might be responsible for planning and coordinating individual recognition and area celebrations; the committee may nominate individuals for recognition, evaluate nominations for recognition and ensuring consistent recognition for safety contributions across the organization. |
|  | Maintaining the observation process and other elements of the VBS process requires an ongoing effort from management and the steering committee. Keeping the process alive requires sustained attention to the observations, use of the data, and recognition (see Table 17.4 for guidelines on management’s responsibilities to ensure effective maintenance of the VBS process). |

#### The New Values-Based Safety

## **Chapter 18** | Some Final Suggestions on Implementation

Main Points

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|  | Don’t use the cookbook approach; make sure to use key elements of the approach to develop a system that meets the needs of the organization. |
|  | Plan and clearly define management’s role; it will be a critical factor in both the long-term success of the observation process and the day-to-day elements of the safety improvement process. |
|  | Maximize participation in the final design to create ownership in the process. |
|  | Create different checklists for each area so that they are explicit enough to address the specific safe practices of different jobs. |
|  | Build informal systems of accountability based on the observable parts of the system instead of creating a bureaucracy around the data. |
|  | An emphasis should be placed on designing a training process that provides enough training to develop the level of understanding people need to support that process. |
|  | Persevere: Learn from each step and continue to refine the process until zero incidents is achieved and then strive to maintain that level of safety excellence. |

#### The New Values-Based Safety

## **Chapter 19** | Special Topics: The Self-Observation Process

Main Points

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|  | A self-observation process is particularly appropriate when employees work in isolation or in remote crews of three or fewer and when employees are extremely resistant to the idea of peer observations. |
|  | Observers do not need to be trained to provide feedback to their coworkers and they do not need to develop skills in how to handle resistance to the observation process within self-observations. |
|  | Three questions are addressed in the self-observation process and correspond to the stages of implementation. |
|  | The first question involves either the individual worker or the crew members listing the actions that must be engaged in to do the job safely. This list of behaviors becomes the detailed personal index of safe behaviors. |
|  | Once the index is constructed, employees will identify a sampling method of self-observation they can use to measure their performance against the index daily. |
|  | A common concern of a self-scoring assessments is that employees may cheat on their score, but through this assessment, employees become more conscious of their safety practices and, as a result, can begin to work on improving their safe work habits. |
|  | The main obstacle in the sampling process is not the time it takes to do a self-observation, but determining how to trigger samplings at remote work sites for isolated workers. |
|  | Focusing on using external forms of acknowledgement along with implementing the celebrations for improvement and participation are critical in maintaining the self-observation process. |
|  | The role of a safety representative is to trigger the samplings of self-observations, calculate and post the daily scores, and deliver individual and team reinforcement for participation and improvements in performance. |
|  | Each worker or crew member creates a list of desired safety actions by analyzing past safety data on injuries, accidents, and close calls to determine what behaviors they need to engage in to perform the job 100% safely. |
|  | After all workers have listed the safe behaviors that they believe will be the most valuable for improving their safety, the behaviors are entered into an index of items, each followed by columns for checking “yes,” “no,” or “N/A.” These will be filled out by workers when sampling is triggered for self-observation. |
|  | A key element in the sampling process is triggering the observation at random moments to get the most accurate picture of a worker’s safety habits; the more samples taken, the more accurate and complete the picture. |
|  | General guidelines for self-observations is three to four samplings a week for the first 2 months of implementation and an average of two samplings a week after the baseline has been posted. |
|  | Once the safety representative has calculated the percentage of safe performance for that day by collecting all of the responses from all of the indexes, the data should be posted in the respective group’s or crew’s work area for review and kept up to date. |
|  | The safety representative incorporates a discussion of trends in the current data, analyzes behaviors that are getting many “no” responses, and helps determine when changes or new behavior items should be incorporated into the index. |
|  | The safety representative provides positive reinforcement to individual workers for engaging in self-observations and contributing to the group improvement in safety scores. |

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|  | The success of the safety representative’s reinforcement attempts largely depends on their ability to customize social and tangible reinforcement to the workers. |
|  | While a self-observation approach often does not require the safety representatives or steering committee to do complex problem solving with the observation data, their use of observation data as the basis for reinforcement is even more critical in a self-observation process. |

#### The New Values-Based Safety

## **Chapter 20** | Special Topics: The Steering Committee

Main Points

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|  | In the VBS process, the initial employee-led design team typically becomes into the steering committee after all employees are trained as observers and the process has been kicked off. |
|  | Since an effective steering committee has 5–8 members, while design teams can have 8–12, a method for reducing team size is necessary; as groups larger than 12 become less effective, the total should not exceed 15. |
|  | In a large, task-diverse, or geographically dispersed organizations, a central design team creates a template VBS process, and each area or group of areas form their own steering committees after kickoff; these steering committees will recruit additional members, customize the template for their area, and manage their VBS process as a separate process. |
|  | Steering committee team members' terms should be staggered so that no more than two new members start at the same time. |
|  | New steering committee members share the characteristics of the original design team members: nominated for serving on the committee by their peers because they are respected, and natural leaders who are interested in safety issues and willing and available to devote several hours per month (often on their own time) to work on the process. |
|  | Steering committee members should undertake training to learn how to do the following: (1) Identify, encourage, and reinforce safe work behaviors and practices by all employees and management that support the process, (2) present safety data to other employees in meetings as feedback and lead employees in setting goals and choosing celebrations, (3) assess whether the process is remaining true to the values identified by the design team and to the behavioral principles on which its success depends and, if it is not, raise their concerns to other committee members, and (4) make effective use of time and resources in committee meetings. |
|  | Skills are initially taught in a two-day workshop followed by review and feedback during subsequent steering committee meetings. |
|  | Organizations with multiple steering committees benefit from regular meetings to share best practices and problem-solving techniques, and many committees receive continuing education and recognition through safety conferences and seminars. |
|  | Steering committees play a vital role in the success of the VBS process; they are responsible for managing and improving outcome data, observation data, and process data. |
|  | The steering committee monitors the VBS process data results to ensure that the process is achieving this ultimate goal and uses this information to improve the process. |
|  | If an incident occurs, the steering committee pinpoints the safe behavior that could have prevented it or lessened the severity of the incident. |
|  | If the practice is on the checklist, the steering committee determines if the frequency and severity of incidents related to this practice have been decreasing over time. |
|  | If the practice that could have prevented or reduced the security of the incident is not on the checklist, does it occur frequently enough or is the risk high enough that it should be added? |
|  | If the behavior is on the checklist, the steering committee should consider whether the task that was being performed when the incident occurred was one that is routinely observed; but if it is not routinely observed, the steering committee needs to develop plans to increase the frequency of observations of this particular task. |
|  | When targeting a typical at-risk behavior from a VBS checklist, the steering committee may plan to simply increase the feedback on that behavior. However, this is not appropriate for tasks with the risk of more serious incidents. |
|  | The analysis of at-risk behaviors for serious incidents and hazards should be addressed through engineering the hazards out of the workplace or, when that is not possible, adding additional layers of protection that address the systems issues. |
|  | Interventions to address lost-workday incidents, the associated hazards that create risk of serious incidents, and behaviors that expose employees to the risk of serious incidents may require guarding or other equipment upgrades that reduce the hazards or help support safe behavior. |
|  | As a final fail-safe, the leadership team should review the analysis, planning, and implementation of actions taken to address serious incident precursors. |
|  | When the process is functioning as designed, employee safety should improve, with the percentage of safe behaviors increasing due to more observations and feedback. |
|  | Work practices that have reached 95%–100% safe need to remain at that level for an extended period (generally a year) to ensure that the improvement is not the result of natural variations over time. |
|  | The steering committee reviews observation data to ensure that the process achieves the desired outcomes including the percent safe on each checklist practice, the percent safe on practices targeted by improvement projects increasing, and the safe practices remaining near 100% for a year or more. |
|  | The VBS process has two main components, guided by five core principles to ensure the integrity and effectiveness of the VBS process. |
|  | Component 1 focuses on employee involvement, emphasizing that the more employees are observed and receive feedback, the more likely they are to improve their safety behavior; high-quality observations and feedback exchanges are essential. |
|  | Component 2 centers on data analysis and improvement projects, where the steering committee uses observation data to conduct timely analyses and develop and implement action plans to target improvement. |
|  | The Chair of the steering committee sets the agenda, chairs meetings, tracks attendance, and organizes logistics. |
|  | The Data Coordinator of the steering committee collects and provides observation checklists, data tables, and graphs; arranges for additional information, if necessary, for analysis. |
|  | The Incident Coordinator of the steering committee collects incident documents and arranges for additional information to be collected if necessary for analysis. |
|  | The Improvement Project Coordinator of the steering committee tracks action items on improvement projects. |
|  | The Recognition and Celebration Coordinator of the steering committee plans celebrations with management when goals are met and schedules individual employee recognition by steering committee members, supervisors, coworkers, or others, as designated. |
|  | The Scribe of the steering committee records decisions and publishes the minutes. |
|  | Each member can also function as an area representative for their department or team and they may do the following: (1) Post area feedback graphs, tables, and lists on bulletin boards in their area, (2) personally encourage participation by their fellow employees, (3) deliver or arrange recognition as planned by the recognition and celebration coordinator, (4) report on the VBS process to area supervisors and managers, and (5) discuss the process, provide area feedback, and lead fellow employees in setting new goals at area meetings. |
|  | The steering committee should routinely ask the questions surrounding employee improvement, data analysis and improvement, and improvement projects on target practices to assess how well they are doing and help identify areas that may need attention. |

#### The New Values-Based Safety

## **Chapter 21** | Advanced Topics: Behavioral Basics

Main Points

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|  | A basic understanding of the theory that underlies behavioral technology will be useful as you develop your implementation plans, problem-solve and refine your efforts, and analyze incidents to plan preventive measures. |
|  | First, specify the desired behavior, then analyze the situational and historical events that support that behavior. |
|  | Behavior is anything a person does or says. Things like personality, attitude, or intelligence are not behavior: These are labels or abstractions that we often use to describe someone’s behavior in some specific way. |
|  | The behavioral approach focuses on workplace behavior rather than attitudes, as observing how employees behave and what they say can help us infer about their attitude. |
|  | Changing safety habits can lead to improved safety attitudes, especially as their colleagues also adopt better safety habits. |
|  | When behaviors change, changes in attitude and culture will follow. |
|  | Pinpointing involves describing behavior in clear, observable terms without labels or interpretations, ensuring objective and specific observations. |
|  | The first step in designing a VBS process is pinpointing a list of behaviors critical to safety without the use of labels or explanations of behavior. Complex safety practices must be broken into components and defined in precise detail (see Figure 21.1 for examples of common labels, pinpointed behaviors, and results). |
|  | Pinpointing is often a two-step process:   1. Pinpoint the problem, undesirable behavior (i.e., an unsafe act), or undesirable result of the behavior (i.e., an unsafe condition), and 2. pinpoint the desired behavior, what you want employees to do (i.e., a safe act), or the desirable result of the behavior (i.e., a safe condition). |
|  | Identifying desired behavior helps focus on the positive and plan ways to encourage and support the desired behavior. While addressing undesired behavior still enables planning ways of discouraging the behavior, it is a traditional but less effective safety approach. |
|  | Thebasic premise is that behavior is a function of the immediate environment. |
|  | Antecedents are events that precede behavior and prompt or cue the occurrence of that behavior. |
|  | Consequences are events that follow behavior and influence the likelihood that the behavior will occur again under those antecedent conditions in the future; these will either strengthen or weaken behavior (see Figure 21.2 for a visual diagram of the relationship between antecedents, behavior, and consequences). |
|  | If the antecedent conditions are present, then the behavior will occur; if the behavior occurs, it will be followed by the consequence. |
|  | Both the antecedents and the consequences are controlling the occurrence of the behavior. The antecedent prompts you to respond; consequences are important in maintaining the effect of the antecedent condition. |
|  | Behavior occurs because of a history of experience with the antecedents and consequences. |
|  | The two types of consequences are generally familiar: reinforcement increases behavior while punishment decreases behavior (see Figure 21.5); behavior may also be followed by a neutral event that neither strengthens nor weakens the behavior. |
|  | Safety improvement efforts need to add consequences that support safe behavior on the job. The key to accomplishing this it to arrange consequences that support compliance with safety procedures. |
|  | Natural consequences occur simply as a result of engaging in the behavior and often discourage safety compliance because unsafe behaviors can be more convenient, faster, or more comfortable. |
|  | While following safety procedures reduces injury risk, the reinforcement is often too delayed or uncertain to offset the built-in, punishing consequences. |
|  | Since built-in consequences often discourage safe behavior, workplaces must arrange contrived consequences through the use of social consequences, which require that another person be present and act immediately following someone’s behavior. |
|  | The most common consequence in traditional safety management is punishment, such as criticism or disciplinary action, which is used to enforce employees following safe procedures. |
|  | The behavioral approach reinforces safe behavior through positive consequences, such as personal praise and support, recognition, and positive attention from management and peers. |
|  | The intent of an observation process is to add social consequences that support safe behavior on the job. |
|  | Safety award programs aim to encourage safe behavior but are too delayed to be effective consequences; however, they can still be a valuable part of a comprehensive safety process (see Figure 21.6 for a contingency diagram with delayed outcomes). |
|  | The ideal safety program maximizes self-control, where employees know the safety rules and feel good about behaving in ways consistent with those rules, often in spite of built-in consequences. |
|  | Added consequences and outcomes help create and support self-provided consequences. |
|  | A complete behavioral process further includes establishing team improvement goals, safety awards programs, and other programs that support self-provided consequences for safe behavior. |
|  | There are two factors influencing the effectiveness of consequences and delayed outcomes: probability of the consequence or outcome and the significance to the individual. Both of these factors help explain why people do not comply with safety procedures simply to avoid getting hurt, even when they clearly know the correct procedures. |
|  | The probability of getting hurt from failing to comply with a given safety procedure is generally too small to be effective in maintaining safe practices and are the reason we have to add social consequences to better support safe work practices. |
|  | When identifying a safety antecedent such as verbal instructions, signs, and the situation that prompted action, you should identify the stimulus conditions that prompted the behavior to occur. |
|  | Events that do not immediately precede the behavior of interest, such as written procedures, safety rules, and safety improvement goals, should be considered part of the person’s history rather than an antecedent. |
|  | Antecedents affect behavior because of the consequences; the antecedents prompted the behavior to occur because of the consequences that usually follow in the presence of those antecedent conditions. |
|  | Training, role models, and procedure reviews, though not immediate antecedents, often establish employees' skills and knowledge of job procedures (see Figure 21.7 for a contingency diagram that includes learning history). |
|  | The VBS process supports safe practices on the job by arranging immediate social consequences that support safe practices, providing training (a learning history) that sharpens the observer’s understanding of what is and is not safe under different antecedent conditions, and supplying delayed outcomes (team celebrations and individual recognition) that support safe practices and the observation process. |
|  | Analyzing behavioral incidents is a challenging task. Many safety investigations will oversimplify causes without doing a thorough analysis of the environmental factors that actually contributed to the behavior. |
|  | Once you have analyzed the situation, use if-then statements (see Table 21.2) as a preliminary guide for developing action plans. |

#### The New Values-Based Safety

## **Chapter 22** | Advanced Topics: Steering Committee Improvement Projects

Main Points

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|  | A steering committee is most effective when it focuses on no more than two or three projects at a time. You should gather baseline data for one reporting period (typically 1 or 2 months). When this first improvement project has been underway for about 2 months, the second project is selected; the third improvement project might be planned 2 months after that. |
|  | Approaching projects incrementally has advantages:   1. the steering committee is not overwhelmed yet is taking actions to improve safety that employees can see, and 2. more data are made available for each subsequent analysis. |
|  | Step 1 for problem-solving is to review the Pareto chart of percent safe on all checklist practices for the last reporting period. |
|  | Step 2A for problem-solving is to review the Pareto chart of the number of concerns on practices that were less than 100% safe for the last reporting period. |
|  | Step 2B for problem-solving is to review the Pareto chart of the percentage of concerns on checklist practices that were less than 100% safe for the last reporting period. |
|  | Step 3 for problem-solving is to review the trend (line) graph of the checklist practices that result from steps 1 and 2 for the last 12 months. |
|  | Step 4 for problem-solving is to compare the observation data and injury reports, looking for ones have caused injuries since the process began and which ones could cause severe incidents or injuries. Select an at-risk behavior that has the most potential to cause severe incidents. |
|  | Step 5 for problem solving is to select the target practice, using the information from steps 1–4 to select a behavior to target for improvement based on the probability of injury, the severity of potential injury, exposure, consistency, and trends in your data. |
|  | Step 6A for problem-solving is to gather additional information in case the steering committee finds that they do not have enough information to complete a thorough and accurate ABC analysis. |
|  | The methods for gathering additional information are to (1) interview the employees who perform the tasks that require this practice, (2) observe situations where employees perform this practice, (3) interview employees who have been involved in incidents, (4) interview employees who have analyzed the incidents, and (5) read policies and procedures, manufacturer’s instructions, job safety and job hazard analyses, and other materials that might describe the practice. |
|  | Step 6B for problem-solving is to conduct an ABC analysis. |
|  | The steps of conducting an ABC analysis include the following:   1. Pinpoint the safe practice, 2. pinpoint the opposite, unsafe practice and repeat the analysis, and 3. analyze the antecedents and consequences that support the safe practice/unsafe practice, and suppress the safe/unsafe practice. |
|  | Step 7 for problem-solving is to work with management to address facility or procedural issues that contribute to the unsafe act that you are targeting for improvement. If the potential injury is severe or if the exposure is high, look for ways to redesign the job to eliminate or reduce exposure to the risk or hazard. |
|  | Step 8 for problem-solving is to plan the behavioral improvement project. |
|  | The steps for the behavioral improvement projects include the following:   1. List all the missing or weak contingency elements from the behavioral analysis, 2. rank them by their influence on the practice, 3. identify solutions to the two or three most important missing or weak antecedents or consequences, 4. choose two or three solutions and specify actions to recommend to management or for the steering committee to implement, 5. assign steering committee members to implement, arrange for implementation, or recommend implementation to management, and 6. assign steering committee members to track action items and designate review dates or deadlines. |
|  | Antecedent solutions are easiest to implement because weak or missing antecedents can often be addressed with a one-time action, such as training, job aids, or equipment repair (see Table 22.1 for a list of antecedent approaches). |
|  | Address weak or missing consequences next because these often require on-going effort, which can be difficult to sustain. |
|  | The most important feature of consequences is their probability (i.e., how certain they are in) of following the practice. |
|  | Providing positive consequences will be most effective for improving your process, that is, for supporting quality observations, participation, and goal achievement. |
|  | If you are unable to redesign the job so that it provides better built-in or natural consequences (e.g., providing eye or hearing protection that is more comfortable), you will often need to increase the frequency of feedback on the targeted behavior through your observation process and site leadership. |
|  | Step 9 of the problem-solving process is to (1) meet with employees to explain why the steering committee chose the new target practice and what the committee plans to do or to recommend be done, (2) guide employees in setting a reasonable improvement goal for percent safe on that practice for the next reporting period, (3) ask employees to choose a celebration for achieving the goal from a list of two or three options, (4) ask observers to focus on the new target practice with observation and feedback, (5) post the trend graph of the target practice with the goal marked for the next reporting period, (6) schedule the celebration as soon as the goal is met, and (7) recognize individuals who implement recommended interventions. |
|  | Review all safety data at regular steering committee meetings to identify checklist practices to be targeted by improvement projects or process measures to be addressed, such as percentage of participation. |
|  | Lead employees in setting goals regarding a targeted practice or other measures during area meeting. |
|  | Ask employees to select goals by determining current performance relative to the baseline on the trend graph, where they would eventually like to be (the ultimate goal is usually 95%–100%), and reasonable steps to get there. |
|  | Once the new goal has been chosen, ask employees to select a celebration from several choices that will be the reward for attaining that goal. |
|  | Mark the chosen goal and celebration on graphs of the percent safe for that target practice; provide feedback on progress toward the goal by updating graphs and discussing data in meetings. |

#### The New Values-Based Safety

## **Chapter 23** | Other Support Programs

Main Points

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|  | Process components are important, and each is worth considering as a key element of the safety process. These include process safety reviews, close-call programs, involvement in incident investigations, a safety suggestion system, and a safety orientation for new employees and contractors. |
|  | Supplemental safety programs represent a sample of optional activities that may be part of the promotional efforts when kicking off VBS or that maybe useful elements of action plans developed by the steering committee to assist in achieving improvement targets. |
|  | Supplemental safety programs include a contest to name the VBS process, worker-designed safety slogans and logos, small group discussions of value, presentations from process champions, a safety process conference, safety day celebrations, safe-behavior pledge cards, public safety declarations, verbal feedback support cards, tokens for awards or lottery, “safety share” discussions, off-the-job safety programs, presentations or question-and-answer sessions with management representatives, and the creation of a VBS process support group. |
|  | Process safety reviews, involvement in incident investigations, and the safety suggestion system are key elements of the safety process for many organizations. However, you may wish to consider several of the suggested programs as part of your initial implementation in helping to reduce resistance to your new VBS process. |
|  | Safety must be integrated into the design and layout of a site; process safety reviews help ensure fail-safe engineering of equipment and controls by analyzing potential risks at each step. |
|  | A close-call program is an important component of the safety process, through which associates can identify situations that could have resulted in injuries or catastrophic process failures; the safety committee should investigate these incidents with the objective of preventing actual future occurrences. |
|  | Representative employees should participate in investigating incidents in their work areas, as they are often in the best position to help identify and understand the factors that led to the incident. |
|  | Employee participation in incident investigations helps create ownership and acceptance of the investigation report and resulting recommendations, positions them to help explain what happened so that others in the area can more fully appreciate the report and the rationale for new procedures and preventive measures, and can further result in more accurate conclusions from such investigations. |
|  | For the VBS process to gain credibility, employees must see such issues being systematically addressed or at least see management’s plan for addressing them over a period of time; a safety suggestion system is one way to help get employees involved in identifying such issues. |
|  | A safety suggestion system is a good way to identify hazards, particularly maintenance items and hazardous conditions, that need correction; this system requires a process for reviewing suggestions, assigning priority to those that need to be addressed, tracking their status to completion, and providing feedback to the employee(s) who originated them. |
|  | Various studies have documented that the key to making suggestion systems work is providing a clear, immediate response to each suggestion and keeping employees updated on the status of their suggestions, posting a summary report that lists all active suggestions. Their status is often the best way to keep employees informed. |
|  | The orientation of new employees is a critical element of a safety program. New employees should receive a checklist that includes a list of specific safety items they need to discuss with their supervisor when they enter the work area for the first time. |
|  | The observation process is an ideal method for providing a safety orientation for new employees and contractors. New employees can review the observation checklist with their supervisors and participate in the observation process as part of their own orientation. |
|  | While designing the observation process or shortly after implementation, consider holding a contest to name your VBS process. This is a good way to begin introducing the VBS process to employees. |
|  | The steering committee can hold a contest for employee-generated safety slogans and/or logos for the VBS process where the winning slogans and logos can become the basis for signs, electronic message boards, T-shirts, or posters promoting the VBS process within the plant or work area. |
|  | One of the most effective processes to communicate the new values to all employees is to involve small groups of employees in discussions about practices that support each value statement. These can be conducted during normal safety meetings with a spokesperson for each group presenting a summary to the other groups. |
|  | Either during the kickoff meeting or in special safety meetings held after that meeting, you can invite individuals from other parts of the company to discuss their experiences with the VBS process. By discussing the similarities and differences between how each site implemented the process, you can learn how to enhance your own efforts and possibly avoid some mistakes made by others. |
|  | Your company can hold a company-wide safety conference with an agenda that might include a combination of training sessions, a celebration, and social events; typical formatting includes several blocks of concurrent training sessions, presentations or posters from safety teams describing their successful efforts, and a catered luncheon or picnic with an entertaining keynote speaker. |
|  | Companies will often sponsor a day-long celebration to kick off special programs or applaud the success of their efforts; activities could include a company picnic with games and guest speakers, a conference with meetings and seminars, or a combination of events, such as dinners, mixers, and awards ceremonies. |
|  | The goal of safe-behavior pledge cards is to get employees to make a personal commitment to a specific goal, ideally for a fixed period. These cards may identify a specific behavior, such as proper lifting or correctly using seat belts, or complex sets of behavior such as compliance with a list of pinpointed safe practices. |
|  | The purpose of public safety declarations is to have employees make a public commitment to achieving a specific compliance goal. |
|  | Written cards can be an effective way to support verbal feedback as part of the observation process in a variety of ways. They can be distributed to employees who are performing safely on the day they are observed, or to employees to support a specific safe behavior that is being emphasized by a special campaign, such as proper lifting in conjunction with a back safety campaign, or to everyone in an area with 100% safe performance (see Figure 23.1 for a sample positive-feedback card). |
|  | Tokens for awards or lotteries may be items such as bingo tokens or lottery tickets; they may have a specific value, such points that are used to earn specific awards, or they may allow those who earn them to participate in an award drawing. |
|  | Safety-sharing discussions can provide an effective safety meeting agenda. The steering committee might plan a starting point on such discussions around specific aspects of the observation process. These discussions should be kept positive and educational, always avoiding embarrassment or humiliation. |
|  | Safety programs can extend beyond the workplace, addressing risks in daily life. These programs might simply consist of a safety meeting in the spring on boat safety or at the beginning of the hunting season on gun safety, or they may be more complete campaigns targeting seat belt use or preventing off-the-job back injuries. |
|  | One way to enhance such interactions and support your VBS process is to arrange for a member of upper management to lead one of your regularly scheduled safety meetings from time to time. |
|  | Another supplemental safety program is the creation of a VBS support group within your organization. This group could include representatives from several locations who would serve as a sounding board and resource for one another. |
|  | The key to maximizing the value of the safety efforts is to coordinate ongoing safety process and the special programs. |

#### The New Values-Based Safety

## **Chapter 24** | Long-Term Case Studies

Main Points

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|  | Implementing a VBS process in a large organization with many self-contained areas presents numerous challenges, but the long-term success of this VBS process speaks for itself. A major oil refinery with two large facilities in the United States overcame these obstacles in an effort to improve safety performance. |
|  | The initial plant was comprised of six self-contained areas:   1. power thermal, 2. central maintenance, 3. catalytic cracking unit (CAT), 4. acid-alkylation treatment unit (AAT), 5. oil movement, and 6. reformer.   The plant had approximately 1,700 employees at the time. |
|  | The first phase of the VBS process was the pilot area, where the power thermal area of the initial plant, with approximately 200 employees, was chosen as the pilot group because it held the most room for improvement. |
|  | The steering committee for the power thermal area consisted of 10 hourly employees and one manager; the committee held weekly, or sometimes biweekly, meetings. |
|  | Consultants trained the steering committee in VBS methodology in 3 days, then collaboratively designed the safety process for each unit of the area over 6 days; employee training was conducted in 8-hour sessions for groups of 20, covering all levels of the organization. |
|  | Conducting safety observations was strongly emphasized, and all employees were required to practice conducting observations using videos of their own work areas. However, after training, participation as a safety observer was strictly voluntary. |
|  | The steering committee recorded three primary measurements from the start of implementation:   1. the number of observations conducted, 2. the percentage of participation (defined as conducting two observations a month), and 3. types of safety concerns. |
|  | Phase Two of the process was plant-wide implementation, to overcome the communication barriers that often result from having many self-contained areas, the steering committee designed and utilized several techniques to encourage critical communication. |
|  | All areas have bulletin boards within each unit solely dedicated to the VBS process. Graphs of the three primary measurements, campaign or contest announcements, and minutes of steering committee meetings are frequently updated and posted within each area. |
|  | The benefits of hard work and dedication toward the successful implementation of a VBS process are countless, but the financial benefits are one of the most dramatic (see Figure 24.4 for the dramatic decreases in workers’ compensation costs after successful implementation of the VBS process). |
|  | The second VBS case study occurs at an ore-processing facility, where employees work in situations where they are at risk of burns from caustic chemicals, hot liquids, and extremely high heat as well as of injuries resulting from the traditional hazards common to most industrial settings, such as slips and trips. |
|  | To assist in improving the safety process, the consultants first conducted a safety assessment, then a preestablished company safety team became the design team. |
|  | Quality Safety Edge consultants conducted a 3-day workshop on VBS and then facilitated four 2-day meetings to design a safety process that included the following components:   1. training, 2. kickoff event, 3. observations, 4. feedback, 5. recognition, and 6. safety communication. |
|  | Given the large number of employees, a novel approach to observation training had to be taken by holding train-the-trainer sessions, in which the consultants trained 12 area safety representatives on how to conduct observations, manage safety data, create action plans, and deliver feedback. These safety representatives then trained the other employees in their areas. |
|  | Following safety representative training, the company scheduled a huge weekend family day to kick off the new safety process, the plant manager participated, and safety representatives were introduced. Then the following Monday, three large site meetings were held to explain the process and trained safety representatives conducted small area meetings to discuss questions and details. |
|  | Multiple levels of the organization were involved in this voluntary observation process. The goal was to have hourly employees and general forepersons conduct at least one observation per week and managers and department heads conduct at least three observations per week. |
|  | Forms of feedback included (1) immediate feedback to the employees being observed, (2) percentage data on concerns and safe acts were then posted on the area safety boards, (3) the crew safety representatives would review the data at monthly safety meetings and send the accumulated observation sheets to the process steering committee for review every 3 months, and (4) safety performance and safety issues were addressed during regular toolbox meetings. |
|  | Area team celebrations were based on safety process milestones, the process steering committee monitored area team progress and established criteria for recognition. |
|  | The company regularly distributed a newsletter that included items and anecdotes regarding the safety process, safety performance levels, and anonymous discussions about the causes and prevention of any injuries that had occurred. It also provided recognition items and information about improvements initiated as a result of the behavioral process and stressed the importance of safe work practices at all times. |
|  | The data from the VBS process helped management and employees build support for greater participation and an increased frequency of observations. It also helped the company achieve significant reductions in both OSHA-recordable and lost-workday incidents as well as a significant reduction in accident severity. The data helped the consultants learn to not use the mentoring approach to train observers (see Figures 24.5, 24.6, and 24.7 for graphs). |

#### The New Values-Based Safety

## **Chapter 25** | Self-Observation Case Studies

Main Points

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|  | A behavior-based safety (BBS) process based on self-observations may be more appropriate for some companies, particularly when applying behavioral safety to employees who work in isolation. |
|  | The BBS process the consultants designed for an organization that collects and processes natural gas improved overall safety, interaction between employees and management, and employee participation that gave the employees a sense of empowerment. |
|  | They designed their implementation to concentrate on two areas: decreasing the number of vehicle accidents and demonstrating the value of the safety process. |
|  | With a group of employee volunteers, the consultants developed a *driving safety index* that listed eight items related to safe driving and a safety percentage was calculated by dividing the total number of boxes marked “yes” by the total number of marked boxes and multiplying by 100%. |
|  | Due to the nature of self-reporting, some members of the organization were concerned that inflated scores would be reported. However, the consultants did not believe this to be a concern because, at the least, the radio call to conduct an observation would prompt the drivers to think about their driving practices one time more than they would have otherwise. |
|  | Goals and reinforcement were managed by behavioral safety representatives (safety reps) and a group of volunteer employees, but were not announced to the other line workers, who were simply told they would be rewarded for increases in safety. |
|  | The *driving safety* *index* produced an increase in the average team’s levels of safe driving performance (see Figure 25.1) and a decrease in vehicle accidents, injuries requiring medical aid, and lost-workday incidents after the behavioral safety intervention (see Figure 25.2). |
|  | The *supervisor index* listed items related to their role in the safety process, such as these: hold safety meeting, provide feedback to employees on safety behaviors, post data on graph, and the like. This index was to be completed by the supervisor each time a driver was radioed to conduct a self-observation. |
|  | In addition to the reinforcer for increases in driving safety, three other reinforcers were set in place: peer-to-peer reinforcement, supervisor-to-employee reinforcement, and employee-to-supervisor reinforcement. |
|  | Unlike the driving safety index, the supervisor index included a line for supervisors to monitor their own delivery of recognition to employees (see Figure 25.3 for an increased use of positive reinforcement). |
|  | The peer-to-peer reinforcement process also provided an example of employee-delivered reinforcement tied to a tangible personalized reinforcer, as employees were given five special certificates per quarter, each worth five “organizational dollars.” |
|  | The supervisor-to-employee reinforcement involved the delivery of feedback, praise, and recognition for safety-related accomplishments and employee-to-supervisor reinforcement involved the same components as well as gratitude for involvement. |
|  | The results of the self-observation process showed a dramatic increase in safety awareness, especially among new employees. As a result of employee involvement in developing the driving safety index and managing the reinforcement budget, employees felt an increased sense of empowerment and continued their participation in the process. |
|  | Employees of a large power and light company perform hazardous work on electrical lines, often in remote locations and always in teams of three; the BBS process created for these employees involved a combination of self- and peer-sampled observations. |
|  | Instead of developing a traditional safety checklist, the lineworkers created a *lineworker index* consisting of a list of safe acts necessary to perform each job safely, where each act was assigned a point value; during an observation, each team received a certain number of points for each act based on how safely each was being performed. |
|  | The points received were totaled and a percentage was calculated using the following formula: number of points received divided by total number of assigned points multiplied by 100%. These percentages were calculated and graphed on location by the employee immediately after each observation. |
|  | The consultants faced two significant challenges with the safety process at this organization:   1. how they were going to establish random sampling of observations and 2. how they were going to motivate employees to perform the observations. |
|  | Every Friday, a group meeting was held to celebrate the safety process. These celebrations were twofold: (1) each team graph was recognized simply for the time having been taken to conduct observations and (2) any increases in safety that occurred throughout the week were recognized and praised. |
|  | The power and light company experienced substantial safety improvements as a result of the consultants’ innovative behavioral safety implementation (see Figure 25.4 for the significant decreases in lost-workday cases, injuries requiring medical treatment, and vehicle accidents after the behavioral implementation & Figure 25.5 for the increase in safety scores after the intervention was implemented). |
|  | Baseline safety performance that had averaged 60% increased to an average of 90% after implementation of the BBS process. |
|  | Some organizations require only a quick, easy, and creative safety program to achieve dramatic positive results. |
|  | Some organizations, like the logging industry, have a very tense and negative environment due to the extremely dangerous nature of the work involved and therefore do not welcome peer observations. |
|  | Loggers and fallers work in isolated wooded areas surrounded by extremely hazardous conditions and *always* work with a partner. An initial examination suggested that a peer-to-peer observation system would best fit an organization without lone workers, but further investigation revealed that relationships among employees were very tense and negative and the organization was located in a state where employees would not be covered by disability if they were found responsible for an incident. |
|  | Employees were extremely fearful and reluctant to participate in any program that would document their safety performance and could possibly link them to a hazardous action or, worse, a severe incident, so employees took *extreme* caution in developing a data collection process that would ensure their anonymity and did not include peer-to-peer observation. |
|  | The consultation services were conducted with two divisions within the organization; division 1 was comprised of fallers, those who worked up in the trees, and division 2 was largely made up of loggers, those who worked with the lumber on the ground. |
|  | The implementation process began with a 2-day training session attended by all management and a representative from each crew (as part of the training, representatives developed a sample safety index for their crew). Next, all employees attended a 3-hour “overview” session that outlined the safety process and at the end of the session, each crew elected whether or not to participate in the safety process. |
|  | Safety representative training included a pilot of the safety checklists and conducted several observations and then they were trained on how to graph the safety data and reinforce participation and improvements in safety. |
|  | Although the development of the safety indexes and management of the process were the same across both divisions, the observation system varied for each because fallers initially engaged in peer prompts and self-observation. |
|  | Three loud blasts were emitted from a loudspeaker to prompt division 2 employees to take a moment to conduct an observation using their specific index; these indexes were dropped off during coffee breaks. |
|  | The safety representative responsible for division 2 was faced with an extremely low participation rate and resistance to the process. They came up with creative ways to reinforce participation and safety improvements involving personal and thoughtful reinforcers, which played an important role in creating a more relaxed and positive culture, particularly regarding safety. |
|  | Figure 25.8 shows division 2’s average safety and participation percentages after implementation, with an initial drop on the graph in safety percentages after the start of publicly posting the scores – this drop is attributed to an initial inflation of scores. |
|  | The consultants also note the two data points that have an arrow pointed toward them (see Figure 25.8); these two points represent specific dates when the organization experienced union and management problems, employees reported being upset and distracted on these specific dates and thus did not perform very safely. |

#### The New Values-Based Safety

## **Chapter 26** | Small-Company Case Studies

Main Points

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|  | The challenge often lies in determining an effective implementation strategy for small organizations, as demonstrated by the following case studies, which highlight the potential effectiveness of a behavioral approach within these organizations, when the logistics can be addressed effectively. |
|  | Monitoring the safety of employees who work in small, isolated groups poses a particular challenge for safety improvement efforts. |
|  | Employees at a pipeline company were at risk not only for physical torque injuries and line-of-fire injuries from the energized systems they worked with, but also for injuries from natural hazards (e.g., snakes) in the rough and remote territory in which they worked. |
|  | A team of seven workers and the district manager created a field checklist that worked for all of the field groups and an additional one for administrative and office settings. The checklist included items relating to body position, line of fire, general work conditions, and vehicle safety. |
|  | The safety process included all employees being asked to conduct one observation per month, with managers and supervisors conducting observations twice per month; from there, data was sent from the field locations to the steering committee for review and problem-solving, and then summaries and trends were sent back to each location for field crews to discuss and plan their own safety action plans. |
|  | After implementing a VBS process, the pipeline company achieved significant reductions in its total recordable injury rates (TRIRs) and experienced zero injuries for 3 consecutive years (see Figure 26.1 for more). |
|  | Critical factors in the success of the Values-Based Safety (VBS) process were the strong support and involvement of the district manager and the development of trust between hourly workers and management. |
|  | Next, to meet the needs of a 100-employee plastic extrusion plant, the consultants worked with a six-member design team in the planning of its safety process and kicked it off within 6 weeks. |
|  | The safety process for this company consisted of primarily a system of employee-conducted safety observations together with incentives for individual participation, including such small items as hard-hat stickers, can coolers, and coffee mugs. |
|  | Expected safety performance improvements did not materialize for two reasons:   1. upper-level managers were pressuring supervisors, who in turn were pressuring hourly workers, to conduct observations, thereby effectively eliminating the concept of “voluntary” observations, and 2. teams and departments were competing against each other to be the first to receive the seemingly modest incentives. |
|  | The solution to the issues with performance improvements not materializing included (1) the plant manager instructed supervisors to stop pressuring employees to conduct safety observations and (2) the incentive system was modified to eliminate potential competition between employees. |
|  | The average annual number of total recordable unsafe incidents decreased from 17.9 prior to the implementation of the safety process to 3.4 after implementation (see Figure 26.2 for more). |
|  | The incentives in this safety process served crucial purposes in that they (1) helped promote and sustain a high level of employee involvement, (2) increased motivation concerning safety, and (3) helped overcome initial resistance to the process. |
|  | The case study of the food-processing plant shows how the successful implementation of a VBS process can inadvertently and positively affect other aspects of an organization, ranging from increased attendance to changing a negative attitude about safety. |
|  | Before the VBS process was implemented, the mill area of the food-processing plant reported up to seven lost-workday incidents per month. However, within the first 6 months after implementation, a 50% reduction was achieved in lost-workday incidents, while the control group reported three major lost-workday incidents (see Figure 26.3 for more). |
|  | As a result of successful implementation of a VBS process, the Louisiana plant experienced a dramatic improvement in employee attendance. |
|  | In 2001, the consultants were asked to assist a Texas plant with its struggling BBS program because of the significant safety improvements achieved in the Louisiana plant after VBS process implementation. |
|  | The site was experiencing three problems with their process:   1. participation—defined as conducting at least two observations per month— was down to only 10%, 2. the steering committee was ineffective, and 3. the process had not reduced injuries. |
|  | To revive the process, a QSE consultant trained and coached the steering committee to manage the BBS process, the company began to share the observation data, used the data to develop action plans that were routinely reviewed with employees in safety meetings, and recognized individual participation and celebrate team successes. |
|  | Once the three problems were addressed, participation rose significantly, and both management and employees believed the process was functioning much more effectively. This site achieved a 65% reduction in injuries during the year following these enhancements. |

#### The New Values-Based Safety

## **Chapter 27** | The Observer Effect

Main Points

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|  | Both the feedback and observation processes are critical components of behavior-based safety (BBS), but interestingly, there are many studies on the effects of feedback, whereas studies of the observation process are almost nonexistent. |
|  | The observer effect is a hypothetical effect that states employees who conduct safety observations do work more safely as a result of conducting these observations. |
|  | For the first study (Study 1), the researchers recruited 12 undergraduate students to serve as participants. Each student was randomly assigned to one of two groups, A or B, and given a list of instructions that described the work they would be asked to perform during the experiment. |
|  | Throughout all phases of the study, the researchers measured safety performance on the following eight behaviors:   1. back posture during lifts, 2. knee position during lifts, 3. neck position while typing, 4. wrist position while typing, 5. back position when sitting, 6. shoulder position when sitting, 7. feet position when sitting, and 8. neck position when using the telephone. |
|  | During the baseline condition, participants simply performed the office tasks described on the instruction sheet, and data were collected on their safety performance for the eight cited behaviors. |
|  | The next phase of the experiment was an information phase. Participants were given a list of four behaviors that included a description of how to perform each one safely and they were told these behaviors would be measured throughout the study. |
|  | During the observation phase, participants were asked to conduct safety observations while viewing a video of an associate. They were given an observation sheet containing a list of behaviors, descriptions of how to perform each behavior on the checklist safely, and columns to score each behavior as safe or unsafe. |
|  | Overall safety performance during the observation phase averaged 77.2% for group A and 74.4% for group B, increases of 70.5% and 64.4%, respectively, above the baseline averages (see Figures 27.1 & 27.2 for more). |
|  | The second study (Study 2) on the observer effect compared the effects of conducting observations to those of feedback. The researchers wanted to know how the effects of conducting observations would compare to those of receiving feedback in a simulated office environment. |
|  | The researchers recruited eight participants for the research – four were assigned to the observation group and four to the feedback group (the setting and procedure for this study are identical to Study 1). |
|  | Participants in the feedback group were exposed to the same baseline and information phases as the observation group. During the feedback phase, participants received feedback (presented as written percentages) on their safety performance from the previous session. |

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|  | The effects of conducting safety observations and written feedback on safety performance were sizeable and very comparable – overall safety performance averaged 86.7% during the observation phase and 88.9% during the feedback phase, increases of 77% and 68.1%, respectively, above the baseline averages (see Figures 27.3 & 27.4 for more). |
|  | The results of this study seem to suggest that the effects of conducting observations are similar to those of written feedback within the context of a laboratory setting. |

# **For questions or additional resources, contact KeyPress Publishing at** [**keypress@abatechnologies.com**](mailto:keypress@abatechnologies.com?subject=TNVBS%20Teaching%20Notes)**.**

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# McSween, T. E., & Hockman, A. S. (2024). *The New Values-Based Safety: Using Behavioral Science to Improve Your Safety Culture.* KeyPress Publishing.