BEHAVIOR-BASED SAFETY

Introduction

The Behaviour-based Safety process has made a tremendous impact on how safety is valued and perceived within the work environment. As the concept developed, the process successfully adapted and acclimated to various corporate cultures and soon there were numerous theories of HOW behavior-based safety was implemented. The original goal appeared to be injury reduction in the workplace by addressing individual behavior, not simply existing conditions.

It is this writer's opinion, however, that as differing opinions emerged in how to do that, the process became more competitive and complicated, losing the "pure" concept of helping people make the right choices in job performance. The perception is that behavior-based safety can only work if following specific outlines and programs and which one is chosen is based on what comes the closest to fitting the company culture. The frustration level builds; however, when what is chosen does not exactly fit and, therefore, does not produce the results expected. Company managers become discouraged and, based on poor results, move on to yet another type of injury reduction process. Often, this causes the "baby" to be thrown out with the bath water.

That is not to say the promoted methods do not work – if matched up exactly, a company can have outstanding results. But what do companies do that don't fit exactly into this format?

Performance Safety simply re-focuses the energy back to the fundamentals. Getting back to the basics is enough to allow any company of any size and with any budget to improve safety. It allows a company to take working principles and make direct applications for its needs within its culture without implementing detailed mechanics and steps.

There are fundamental principles within all the methods that are necessary and that do not change, regardless of HOW the process is followed, addressing individual performance. With over five years of focusing on total performance, not strictly employee "behavior," these principles have been proven to work with various management styles and different corporate cultures.

The purpose of this presentation is to identify those fundamental principles that help improve safety within any type culture and any production environment.

What is Performance Safety?

Performance Safety can be defined as an on-going review of processes, procedures, and practices through observation, workplace examinations, and task analysis. It is a total and comprehensive review of all performance areas (machine, worker, and environment) to ensure pro-active, continuous improvement in safe production at all levels.

I have always taken slight offense at suggesting to my people that the reason an injury occurred was a direct result of their "behavior." The phrase "behavior-based safety" conjures up in my mind a fault-driven process, even though it is not intended to be so. Behaviour alone cannot fully create or cause injuries. It is true that unsafe actions contribute to more than 85% of all injuries. I suggest the number is closer to 95% or higher. But the choice(s) made by a worker is not always a reflection of his behavior. It includes the "behavior" of the manager and the safety expectations of the company. We continue to hear phrases such as, "practice what you preach" and "walk the talk" and other such expressions. We all know lip service alone will not have much influence on choices made by employees.

Performance Safety includes a three-phase process: practices (employee choices in how to perform assigned tasks); procedures (the overall established method to perform the task); processes (the overall end result in operations and production with equipment, end product, quality control, etc.).

BEHAVIOR-BASED SAFETY

Let me illustrate with two examples of Performance Safety in progress.

We identified an unsafe "condition" in the installation of new equipment at our site prior to start-up. We got engineering, the plant manager, a production foreman, a production crew member, the safety professional (that was me), and the construction foreman responsible for the installation at the site together (crossing and involving numerous processes). We voiced concerns and began to "brainstorm" solutions while standing there. How would the task have to be performed (procedures)? How would the task actually or most likely be performed by the employee (practices)? How would the outcome of this task affect the overall product and tasks "down line" (process)?

The procedures would identify the hazard and provide a means of eliminating the hazard. The employee would need to follow the procedures to ensure safe performance. The procedures would have to be written in a manner that would encourage the employee to make the right choices and protect him from taking a "short-cut" (practices). We started the discussion with a $15,000 engineering fix to remove the hazard. Then we identified what would happen if that engineering solution broke – it wouldn't hold up within the work environment. After a few more ideas, a light bulb came on. The hazard was corrected with a $200 part that is easily handled by one person performing the task and provides the employee with a way to follow the procedures without risk and without need to take a shortcut. The procedure was developed with the newly-implemented part and the employee was able to easily follow the procedures logically and safely, ensuring he followed safe practices to perform the task. Had we not taken the overall process with the key people in the process to address this issue, we would have most likely ended up with a $15,000 fix that wouldn't work (if the hazard was corrected, at all).

n the second example, an employee was required to enter a tunnel with a sledge hammer to unclog material getting stuck at a transfer point on a conveyor line. I was asked what could be done to minimize the hazards the employee was exposed to when performing that task. Through questioning the overall process, I found that the material was getting stuck because it was too large for the engineered design of the transfer point. The material was to be "crushed" to a designated size before it reached this point. The material was too large for the transfer because the crushing process had been "opened up" to increase the amount of tonnage handled in a shorter time. As a result, the down-line transfer was getting jammed. Now, I could have addressed the specific hazard, but that would have treated the symptom, not the problem. Once the adjustment was made back to the engineered design, the entire hazard and exposure was eliminated. When the material was at the "right" size, it passed through the transfer point. There was no employee exposure to noise, dust, tunnel hazards, and no continued beating and damage to the transfer box since the sledge was no longer needed, either. It created the optimal performance of the entire process, thus correcting the need for a practice in an exposed environment. Everyone understood that a change in the process created a whole set of other problems that, on the surface, could not be explained. The transfer point was too far down the process to connect what seemed to me to be an obvious problem back up-line. The old saying, "You can't see the forest for the trees" certainly fit in this case.

Performance Safety helps keep the big picture in view while addressing specific issues. In the above example, it was not my job to tell an experienced manager how to do his job. But in the process of doing my job, we were able to identify a situation that ultimately helped the manager's production numbers, as well.

Anyone with knowledge of conducting accident investigations knows to ask questions that help get to the "root cause" of the accident. In the same way, getting to the root cause of hazards and unsafe behaviours will allow a manager to correct the problem rather than continuing to correct a symptom that never seems to go away.

BEHAVIOR-BASED SAFETY

Why Performance Safety?

The principles presented in this paper provide a recipe or prescription to follow to reach zero injuries and incidents. It also provides personal and team involvement and accountability to pro-actively prevent injuries and eliminate or reduce exposures to hazards.

Performance Safety encourages positive recognition and feedback at all levels within the organization to promote positive change and optimal performance.

I have mentioned twice the concept of "optimal performance." It should be every individual's goal to reach and maintain optimum performance rather than maximum performance. As in my second example, maximum performance involved getting as much tonnage through a crusher unit as possible to reduce ton/hour costs. So, the number of tons produced through the crusher increased. Its affect, though, slowed the finished tons produced. When the settings were changed to fit the design of the crusher and the down-line transfers, finished tons produced increased even though the crusher tons went back down. The crusher was working at its engineered design level as was the transfer point. Down time was eliminated at the transfer point, the hazard for the employee was eliminated at the transfer point, the total cost to produce a finished product went down, and there was less wear and tear on the equipment. Thus, optimum performance was achieved.

An employee may be capable of lifting a maximum weight of 150 pounds. But if that weight is reduced, the employee can lift more for a longer period of time and reduce back strain, as well. This creates optimum, not maximum, performance for that employee. More gets accomplished with less risk. Thus, production goes up, risk goes down, and safety is improved. Everyone benefits!

Unsafe Condition and Unsafe Act Defined

Historically, an unsafe condition has always been defined as a condition that exists due to equipment failure or equipment/machinery being altered, such as operating with guards off. An unsafe act has been defined as an action taken or choice made by an employee that caused an injury to occur.

In Performance Safety, these definitions are not quite accurate. Equipment that is operated without the guard is not a failure of the equipment – it is a choice of an employee. An employee getting hurt because he failed to use appropriate personal protective equipment can potentially involve more than the employee simply choosing to not work in a safe manner.

Performance Safety involves all the aspects of a person's and company's performance, so defining an unsafe condition and unsafe act are based on performance issues.

Unsafe Condition: an individual does not have either knowledge or the control over existing circumstances that may be unsafe, that would otherwise suggest he would not perform the action.

Unsafe Act: an action taken by an individual who has both knowledge and control of an existing unsafe condition or action, but chooses to perform the action or ignore the condition.

The above definitions account for behaviors as well as for culture and expectations.

An employee that has not been trained properly may not know how to do the task properly, resulting in an unsafe condition. He is not choosing to do it with risk, so it is not an unsafe action being performed. An employee that knows how to perform the task but circumstances take control away would also be defined as an unsafe condition. For example, while welding, an employee must bend at the waist to reach the work area. There is no mechanism available to allow him to reach it from a different angle. As a result, the employee experiences back

pain while performing his duties. He had no control over the location of the work and was unable to modify the duty to protect his back. This would be considered an unsafe condition. An employee knows how to properly perform a task and has been trained specifically in this task, yet he insists on modifying the procedure to "save time." He has full control in the decision to perform the task and has all appropriate tools and equipment to complete the task safely. An example of this is choosing not to wear leathers to weld and, as a result, catches his clothing on fire. This is clearly an unsafe act. The process is clear, the procedure is clear, the practice (behavior) is at-risk.

How to Implement Performance Safety

There are six keys to performance safety that will take the lead in implementing this concept at any work location. These keys are described below.

1) Pro-Active vs. Reactive

If a company's response to safety is based on reacting to an injury or incident and does not include pro-active preventive measures, there will always be injuries and there will never be success. Remembering the famous accident "pyramid," or sometimes pictured as an iceberg, by the time an injury occurs there are already 300 separate unsafe actions and/or events that have occurred to set up the conditions for that injury. Only pro-active measures that address performance at all levels at the base of that pyramid/iceberg will begin to show marked improvements in safety.

2) Recognition vs. Incentive

There is an on-going debate about whether incentive awards should or should not be used in a safety program. My training addresses "quality-of-life" issues and how an injury may adversely affect that quality for that employee. If an employee does not want to be safe for his own quality of life, a few bucks or a prize is not going to get his attention, either. These can get very expensive and soon are viewed as "entitlements" by employees. It doesn't necessarily change behavior or improve performance; it simply rewards the attainment of a goal that could have as easily been attained by being lucky as doing the task right.

Rewarding an employee through recognition of good performance, however, is different. I believe this is a more productive way to promote pro-active performance and supports an on-going review of all processes, procedures, and practices. It shows appreciation for a job well done and allows recognition to occur on measurable improvements rather than luck. It keeps the focus on safe performance rather than "not getting hurt."

Recognition can occur in a variety of ways, so a manager stays away from the "entitlement" rut. It also encourages optimal performance in doing the task right rather than on maximum performance that could inherently promote shortcuts or other risk-taking.

3) Values vs. Priorities

Does your company have stated values with its mission statement? How does that affect how business is conducted? If there are values stated, all business conducted is within those value expectations. There is no compromise and employee performance centred around those values are clear. Deviation from the company's values results in coaching or termination, depending on the perceived impact of that action.

BEHAVIOR-BASED SAFETY

A priority changes when circumstances change. If you have ever made a "To Do" list for the day, only to find that you can't get to your list because of other things that came up, you recognize that priorities change. If safety is a priority, then it goes away when the deadline pressures to produce hit. A vital piece of machinery has just seized and production grinds to a halt. An employee is supposed to lock out the machinery before beginning work on it, but the lock-out procedure will take longer than the 30 seconds of exposure to remove the blockage. What do you tell the employee to do? That depends on whether the employee's safe performance is a value or whether the employee's quick performance is a priority.

Safety must be one of those unchanging, unwavering, uncompromised values. Business is not conducted unless safety is part of the ingredients that make up that business. Safety is not a piece of the pie, but one of many balanced ingredients that actually make the pie. You can't remove customer service; you can't remove product quality; you can't remove safety. To remove any of these or other ingredients, you create a deformed or bad end product. You get something, but you don't get the pie you wanted. Without all the required ingredients in the appropriate measured amounts, you don't maintain a profitable business for long. Safety is one of those ingredients.

4) Team Cooperation vs. Individual Aggression

Safety cannot be in a void. An individual cannot be in a void. Safe performance is expected by each individual and as a team. There are times when a person, for various reasons, can be distracted from the task and do something he might not normally do as a result of that distraction. An injury can occur if others on the team are not helping each other to stay focused and attentive to the task at hand. I refer to such a distraction as a "brain fart." Have you ever been driving on the interstate and suddenly realize you are 20 more miles down the road than you thought you were? Have you ever been in such a fixed routine on the job that you didn't remember whether you performed a specific step in the process? Those are examples of times when you are prime for an injury, given the right conditions.

Yes, everyone has a part in keeping everyone safe on the job. Whether it is taking a couple minutes to review a group task with all those ready to perform it, reminding someone to wear the appropriate PPE for a task, or getting someone out from under a suspended load, we all have the responsibility to help each other perform safely. Failure to get that level of cooperation could result (and has resulted) in a fatal injury.

5) Prevention vs. Complacency

Does safety at your site include pro-active prevention measures or simply complacency to not respond until reacting to an injury or incident? If taking preventive measures are part of the safety culture, every member of the team is pro-actively looking for ways to prevent an injury. Looking at the overall process, the established procedures, the practices of employees performing tasks by everyone provides a prevention climate that is not intimidating to anyone. Recognizing employees who take the initiative to correct or eliminate hazards that they have identified will encourage others to do the same. The manager is responsible for ensuring a safe work place. The manager cannot remove an employee's responsibility to help identify and correct problems. Such involvement may include an employee suggestion program that crosses all department boundaries. A suggestion to enhance a product should include a safety review as well as an engineering or marketing review. A suggestion to improve safe conditions should also include a review with maintenance or production to ensure the change doesn't adversely affect other tasks in the process.

BEHAVIOR-BASED SAFETY

Complacency – not doing anything until something happens – is just another form of lazy or apathy. Both of these conditions can be deadly in the right combination – to the individual and to the business. If an employee doesn't care about his own personal safety or the safety of those with whom he works, he doesn't care about the quality of his work, either. You may want to shop around for a replacement and "free up the future" of your problem employee.

6) Performance vs. Compliance
I train constantly with my people that compliance is required by law, but performance ultimately benefits them. If the task is done correctly, it is safe, efficient, productive, profitable, and in compliance. Most employees don't care that OSHA has a book that controls what they can or can't do. Managers might, but employees don't. Managers that intimidate do not eliminate injuries. Telling an employee he has to do something because "OSHA says so" will not get the employee to comply.

Helping an employee understand why it is in his best interest to do it "this way" provides him with a means to make the right choice. Showing an employee how performing a task a certain way can either enhance or risk his and his family's quality of life will more directly influence the choices the employee will make when he is alone. Changing a behavior while being watched" does not last. A change in performance through understanding the risks and knowing the expectations will last a lifetime.

Where Do We Go From Here?
There are various tools that you can develop for your own unique use. There are also samples and suggestions that will be part of my presentation hand-outs for you to use. Again, this is not intended to become a "program" for you to follow, but principles that can be used as guides to fit your specific needs.

Ask these questions:
What type of programs and processes do you currently have in place to prevent injuries at your workplace?

What other ideas do you believe you could implement that more readily involve your employees in injury prevention practices?

The key is to follow the "KISS" principle. Fancy, complicated and detailed programs work well AFTER you get the basics in line. If your people do not understand basic concepts in safety, you can implement all the formalized programs you want, but you will soon become frustrated. Your people will miss the point and, as a company, you will lose ground. It will be harder to get people excited about injury prevention because they will keep thinking of the one that didn't work rather than looking at opportunities.

I was at a company that was looking at a "cookie cutter" safety program from a well-known source. One manager stated that, although it may have its time and place later in the process, it was just too much to handle right now. We have employees still trying to learn the basics, let alone have them go on to the next step. Don't take the next step or the giant leap until you know the basics. That foundation will carry you the rest of the way. Having no firm foundation will leave you crashing down every time.

So, what CAN I do? Some suggestions:

BEHAVIOR-BASED SAFETY

Pro-active activities - employee and manager observations, employees conducting their own workplace examinations prior to the start of their shift to look for hazards, injury prevention review teams, review of current procedures with a task hazard analysis to ensure all identified hazards are addressed for that task, pre-task reviews with work groups preparing to perform a task (to discuss how it will be done, what tools and equipment are necessary before getting to the job, who will do what, etc.). Use hazard recognition charts to track successes; develop and use job aids, such as checklists for various tasks; develop trainer checklists for use in specific task training that employees and managers sign after completion of training; other ideas that fit your location.

Re-active activities - prompt injury/incident investigations with team reviewers, prompt injury review with all employees, focusing on preventive measures (not blame), follow-up training sessions to review proper procedures after an injury, others.

Most importantly, lead by example! You wear the PPE when in exposed areas; you follow procedures for tasks being performed; hold employees accountable for actions through performance evaluations, coaching, etc.