When we embraced behavior-based safety (BBS) in the 1980s, we thought we had finally found the key to creating an accident-resistant environment. We sowed a wind and we are reaping a whirlwind.

Why isn’t BBS meeting our expectations? What is the future of this process? What is the problem? What is the solution?

As I have met with safety professionals all over the world, I have often heard similar stories about BBS:

• The costs are high;
• Employees feel manipulated;
• The results don’t meet expectations;
• Other facets important to loss resistance are being neglected;
• Instead of being involved, management is distancing itself from the process.

Those safety professionals want out but can’t find a graceful way to disengage.

This analysis will explain how and why we got stuck where we are and how to extricate ourselves...with some degree of aplomb.

BBS: The Positive

Because of the good points, I was enamored with BBS when first exposed to the concepts...before I saw it in full flower.

Here’s what is good about BBS:

The concept of focusing on the human side of safety is correct because it does - ultimately, when all is said - hold the key to consistent success. OSHA has been largely unsuccessful in achieving a significant reduction in workplace injuries because it has had great difficulty moving beyond physical standards. Good point #1: The focus is on the people/human side.

Defining safe and unsafe acts based on industry and plant-specific exposures is fundamental to every loss prevention effort. In the plethora of “safety programs” that have emerged over the years this concept has historically been lost far to frequently. BBS places the focus where it belongs. Good point #2: Safe and unsafe behaviors are defined.

The high-risk behaviors are discouraged by providing soon, certain and positive reinforcement for the correct behaviors. No one can argue with this. Good point #3: There is an organized process to encourage correct behaviors and discourage the wrong or potentially destructive behaviors.

Employees are enlisted in the effort to propagate the correct behaviors and in the analysis of results. We’ve known for a long time that employee participation in the loss prevention process is essential to success. Good point #4: Involvement of many employees is encouraged and ingrained in the process.

Why We Need an Antidote for Behavior-Based Safety

While BBS has its virtues, says this leading safety authority, they are outweighed by its vices. He offers an alternative system for managing safety that he says is more enduring, integrated and cost-effective.

by Donald J. Eckenfelder, CSP, P.E.
It is an expensive process; and so, in keeping with natural human perceptions, is good since it is costly. Forgive the cynicism but perception is said to be reality and this is the unfortunate reality of the world we live in. **Good point #5:** Management has “put their money where their mouth is.” That speaks volumes to many people. It says, or seems to say, “We care about safety...because we’ve spent a lot of money on it.”

Due to the marketing and commitment, the BBS process has attracted a following that is at times almost evangelical. So much so that people who see the light don’t seem to know how to gracefully extricate themselves from the embarrassing dilemma of backing out of an expensive process that they have sold to management with enthusiastic endorsements. Passion for the concept has been achieved in many quarters. **Good point #6:** Passion and desire are essential to drive any behavioral or social change process. BBS has shown itself capable of engendering commitment, often with considerable zeal, at least in the early phases.

First line supervisor involvement in the process is built-in and significant. They are probably the “key man/woman” in the application. For years we have known that involvement of the first level of supervision is essential in any successful industrial safety effort. **Good point #7:** The BBS process inherently involves the first level of supervision to a significant extent.

**BBS: The Negative**

Now, with those good points, why should anyone speak out against BBS and what could possibly be wrong with it that isn’t overshadowed by its benefits? Here are the problems:

**First,** BBS confuses and misdirects management. It is not a new or recent phenomenon for management to find safety language arcane and the dogma inscrutable. So, they have accepted the generally unacceptable or illogical. This serves to deepen the hole safety professionals have dug for themselves. The old saying, “when you are in a hole, stop digging”, could be applied appropriately here.

All modern management thinking is based on empowerment and self-directed work. The old, discredited model is “command and control,” so popular in the early and middle parts of the 20th century. BBS is clearly based on the old, discarded model.

This begs the two questions: (1) “Why doesn’t management reject this thinking?” and (2) “Why would management spend a lot of money on a process that isn’t consistent with their basic thinking?” The answer to the first is a troubling two-fold answer. First, they care so little about safety that they haven’t really looked at this process carefully and recognized it for the “wolf in sheep’s clothing” which it is. Further, if they have, they just write it off as one more confusing idea foisted upon them by safety and health proponents and they must move forward in spite of this rather than because of the leadership demonstrated by the profession. When they finally realize what has been done to them, they will either be disillusioned (once again) with safety, or worse yet, fighting mad.

The answer to the second question could be that they are so fed up with inscrutable safety processes that the opportunity to solve the problem with one large check is too tempting for them to dismiss. **Problem #1:** Management has been misled. They haven’t been told the whole story. This problem neutralizes good point number 5 that suggests BBS financial support speaks to management’s commitment toward safety: It suggests that BBS is a ticking time bomb. The wise proponent will want to defuse this potentially lethal consequence of BBS advocacy.

**Second,** BBS is little more than a very old idea wrapped up in new nomenclature and clothing. In several well-written articles and presentations, Dan Petersen has pointed out that there is actually very little new in BBS. The concept of focusing on behaviors and conducting observations is almost as old as the hills. Over 30 years ago, at Merck & Co., we included behaviors in our Job Safety Analysis work and did observations, providing positive reinforcement for the application of correct methods. OxyChem, under the guidance of Bud Snell, had a documented job observation program that bore a strong resemblance to BBS long before it had a name and was popularized. Jack Gausch used a High Incidence Training (HIT) initiative that uncovered critical exposures (mostly wrong behaviors) and encouraged observations and positive reinforcement for the right methods and behaviors back in the 70s. What is new about BBS is the high costs and elaborate committee structures associated with it that de-emphasize the importance of the correct culture and necessary systems. **Problem #2:** There is really nothing new here. It is just the same old stuff with a new name and packaging... and a lot more cost in time and dollars.

**Third,** BBS distorts priorities. In his excellent article, “The Architecture of Safety Excellence,” published in *Professional Safety,* Larry Hansen uses a brilliant bridge metaphor to illustrate the relationship among various aspects of an effective effort to minimize losses. The unusual focus on BBS has caused us to view the architecture of safety as a mutation. It places behaviors in the wrong place. It suggests they are at the core or foundation of loss prevention. They are in fact only one part of an elaborate set of interrelationships where the more critical or foundation concepts are culture and processes or programs. The foundations in Hansen’s bridge metaphor, appropriately, are culture and programs. The bed of the bridge is be-
Wrong culture comes from the wrong behaviors. Certainly, if we repave the bridge road, add new lines, improve road lighting, add prominent signs and provide handrails and barriers on the bridge, we will reduce the likelihood of people or cars falling off the bridge into the river and becoming losses.

But, if in the process we neglect the two foundations, the bridge eventually collapses. We not only have a hemorrhaging of losses, but the resources we dissipated in focusing our efforts on the bridge road bed are all lost. Hansen appropriately points out that any behavioral strategy should address “what all people do,” not just front line employees. BBS tends to let some of the most critical people “off the hook” rather than energizing them: That is a big problem. **Problem #1:** BBS manipulates people and treats them like small children.

**Fourth.** BBS largely ignores the fact that loss prevention is not primarily a technical or behavioral problem: It is primarily a social or cultural problem. To his credit, Steve Simon, Ph.D., has been delivering this message for many years. Only recently have I recognized the prescience of his work. For years, virtually all practicing safety professionals have recognized that if the attitude is good, everything seems to work; if the attitude is bad, no programs or efforts seem to work. This recognition is largely ignored by the BBS practice. The installation is often preceded by an attitude survey that mitigates application if the culture is deemed to be inhospitable. This fails to address the reason for the wrong environment (the culture) and only applies the methods where they are all but guaranteed success. Any effort will produce positive results in a hospitable environment. Is this news to anyone? **Problem #2:** BBS operates on behaviors when the real problem is attitudes.

Dealing with symptoms masks the root causes. The behaviors are the result of wrong attitudes; the wrong attitudes are the product of the wrong culture; the wrong culture comes from the wrong beliefs and values often based on incorrect principles.

BBS proponents have suggested that you can’t change attitudes directly but that changing behaviors will eventually modify attitudes. They are right; changing behaviors will affect attitudes. The problem is that, as often as not, it will harden attitudes against just what you are trying to accomplish. Take the example of parents who restrict behaviors of their children without ever explaining why or “winning them over” by changing their beliefs and values. We all know what happens when the parents stop monitoring, or no longer can control, the behaviors of their children. Often the children will adopt just the behaviors that have been restricted, at times with passion and enthusiasm.

**Fifth.** BBS addresses the critical attitude element downstream: A values-driven approach addresses attitude upstream where it is more efficacious and will be more enduring. The BBS mantra suggests that the only practical way to address attitudes is by modifying behaviors and that will - in turn - impact attitudes positively. That ignores the power of beliefs and values. The right beliefs and values will produce a culture that results in the desired attitudes; those attitudes will be enduring. When attitudes are affected by manipulating behaviors — as in the case of BBS — the result is ephemeral. My book, *Values-Driven Safety*, and the article “It’s The Culture, Stupid,” published in *Occupational Hazards* and reprinted in New Zealand’s SAFEGUARD, explains my thinking in considerable detail. To suggest that you can’t change beliefs and values, or that it isn’t practical to try, is wrong and self-defeating. **Problem #5:** BBS denies the importance of beliefs and values. It is far better to engender passion and desire by education and exposing truths than by hype and misinformation. The former is enduring; the latter is ephemeral. A culture enrichment process commits management and will engender passion, even deeper than that elicited by BBS.

**Sixth.** BBS is often manipulative. How would you like to have your boss observe your work, take notes and document results against what he or she had told you to do and then have colleagues and others perform the same exercise at periodic intervals? Would you conclude that all these efforts were altruistic and none of them were designed to improve organization performance or make any of the observers look better? Analysis of this subject can be made very complex by credentialed behavioral scientists but becomes pretty clear when we reduce it to its simplest terms. If you get the desired behaviors from your children by watching them but never “win them over” to your beliefs and values, what is going to happen when you stop watching? **Problem #6:** BBS manipulates people and treats them like small children. Adults don’t like to be treated like children. When they realize what’s happening, they often get mad and then get even. Angering your employees will, eventually, not only adversely affect safety performance, but labor relations and production as well.

**Seventh.** BBS, in spite of protestations to the contrary, fails to deal with...
the root cause of accidents or bad outcomes. Anyone who has practiced loss prevention for any length of time knows that behaviors are symptoms of the causes of losses. The root causes are the systems and culture. Failure to recognize this fact will produce short-term results and long-term breakdown. When we take cold medications, the symptoms are abated but the body mechanisms designed to heal us are thwarted and the eventual recovery period is extended. BBS, as it is commonly applied, has the same effect on loss reduction. **Problem #7: BBS masks the root cause and so delays implementation of the cure.** Any time you focus on symptoms, you mask the real problem and what you do is, in effect, worse than doing nothing at all. This suggests that all the benefits of a BBS approach are not worth putting off the cure.

**Eighth.** BBS provides a very poor return on investment. The process is very costly and there is just so much money that will be spent on loss prevention. If all - or a large portion of it - is devoted to a questionable process, there is very little money and energy left to be applied to more efficacious areas such as systems, process and culture. **Problem #8: BBS is very costly and, in that way, works against production goals and general business success.** For what it costs to install BBS in a single plant, a large corporation can employ a safety culture enrichment process. Hence, the cost for a far better process is a small fraction of the cost of BBS. And, it is a one-time cost. The costs associated with a BBS program, like the “Eveready Bunny,” just go on and on. This cost factor and the adverse effect on so many aspects of organizational performance should make any good manager seek to achieve the benefits (good points of BBS) in ways that are more efficient and less harmful to overall enterprise well-being.

**Ninth.** BBS tends to isolate the safety subject. Organizations that achieve world-class safety have a set of common attributes. These include the integration of safety into the management process. BBS suggests that safety and the correct behaviors that predict loss resistance should be handled as a separate subject from the overall management of the enterprise. Cultivation of this thinking will constantly work against the achievement of real organizational loss resistance. **Problem #9: BBS isolates instead of integrating safety into the management process.** Eventually management will see this and discard the BBS process and everything associated with it, including its advocates.

**Tenth.** BBS is not designed to be self-sustaining. If the money and committees and paperwork are removed, the results will evaporate very quickly. When culture is enhanced to mimic the cultures of loss-resistant environments and supported with well-designed systems, loss resistance will persist long after all support efforts (budget dollars) are withdrawn. **Problem #10: BBS is not self-sustaining.** Take away the committees and observations and reports and things go back to where they were...if you are fortunate; if not, they could get worse.

**Eleventh.** BBS is largely based on experiments with rodents. People don’t always think and behave like rodents. In an interesting article published in *Professional Safety*, Tom Smith covers this in great detail and with a far greater knowledge of the subject than I possess. But, he convinced me. Read the article and see if he can convince you. **Problem #11: The very foundation of BBS is probably based on inapplicable science.** I leave further examination of this assertion to those with greater knowledge of the experiments of Skinner and others than I possess.

**Safety Culture Enrichment**

Okay, so what does liberate? What can achieve the benefits of BBS without the disastrous side effects? The answer is a safety culture enrichment process complemented by a comprehensive risk measurement system. It has been suggested that safety culture can’t be measured and managed; that is untrue. There is a process, Values-Driven Safety, which demonstrates the correlation between the attributes associated with world-class safety performance and a set of beliefs and values that can be taught through the application of targeted and customized exercises.

Here are the 14 attributes that are invariably resident in organizations that are loss resistant:

1. Each employee takes responsibility for safety.
2. Safety is integrated into the management process.
3. The presence of the full-time safety professional is limited.
4. There is an off-the-job safety effort.
5. Safety and other training are seamlessly integrated.
6. Compliance comes naturally.
7. Programs and technical processes have history and occur naturally.
8. There is a bias against gimmicks.
9. Leadership always sets the example; safety is never taken lightly.
10. There is a recognizable safety culture.
11. The focus is more on process than statistics.
12. Negative findings are treated expeditiously.
13. The few safety professionals have stature.
14. Safety is seen as a competitive edge...not overhead.

The beliefs and values, worded as imperatives that will lead to the acquisition of the 14 attributes, are:

1. Do it for the right reasons.
2. See it as part of the whole.
3. Recognize there is no end.
4. First, it is a people business; things are a distant second.
5. Put the right person in charge.
6. Use a yardstick everyone can
read.
7. Sell benefits...and they are many.
9. Be guided by logic, not emotion.
10. Empower others rather than seeking after support.

A Safety Culture Barometer can be applied to produce an organization Safety Culture Profile. This profile will suggest exercises that can be applied strategically to improve the profile and in turn encourage the acquisition of the attributes historically associated with loss resistance.

This safety culture enrichment process will integrate loss prevention with every other aspect of the enterprise and - over time - enhance every other aspect of business. Rather than drawing from other resources, this concept adds to other initiatives. The Safety Operating System that results can be enlarged to become a Social Operating System for the benefit of the entire enterprise.

Such an approach will utilize the exposure know-how acquired in the BBS initiatives but then will make all the committee meetings and most job observations passé. Less onerous and broader-based risk related data collection will confirm the efficacy of the culture enrichment process while monitoring initiatives. There are numerous systems in use and some very creative work being done on more comprehensive Internet-based systems suggests that our future may hold some excellent risk measurement devices.

The antidote for behavior-based safety is a measured and monitored values-driven approach that makes acquisition of known attributes of excellence natural and intuitive as well as integrated rather than artificial, ephemeral and disparate. A culture enrichment and measurement process is prospective instead of retrospective. It provides a crystal ball instead of fodder for “Monday Morning Quarterbacks.”

I have used a safety culture enrichment process that I have devised and written of in a book and articles. Others have suggested their approach to safety culture enrichment. The wise consumer will evaluate various approaches and choose the one that best meets their needs. This paper doesn’t suggest that any one safety culture enrichment process or risk management data system is the best for everyone. It does suggest that almost any such approach is better than a resource-draining focus on behavior-based safety that ignores the realities of sound loss prevention that has a long and rich history.