Behavior modification… safety management…. attitude adjustment… behavior-based safety… culture change… cognitive alignment… person-based safety… human engineering… social influence. These are all terms used to address the human dynamics of injury prevention. Each can be linked to a set of principles, procedures, or a consultant’s service which defines a particular approach to managing the human side of occupational safety.

Each of these terms, and most of the accompanying materials, are insufficient. They are either too narrow and restricting, or too broad and nondirective. Some focus entirely on behavior change, while others attempt to target vague and unobservable aspects of other people, like attitudes and thoughts. Still others have the grandiose notion of directly targeting culture change.

All of these approaches are well-intentioned, and none are entirely wrong. The human dynamics of an organization include behaviors, attitudes, cognitions, and the context (or culture) in which these aspects of people occur. However, some approaches are too equivocal or ambiguous to be practical, while others may be practical but are not sufficiently comprehensive.

The Solution is Not New

More than a decade ago, I proposed the need to address both behavior-based and person-based factors to improve workplace safety over the long term. I called this approach “people-based safety” and proposed substituting empowerment, ownership, and interpersonal trust for more traditional safety jargon like top-down control, compliance,
and enforcement. And I accompanied these new people-oriented concepts with practical procedures. My partners at Safety Performance Solutions began implementing these procedures in 1995 under the popular label: “behavior-based safety.”

Systematic evaluations of our implementations have enabled successive refinements of procedures, as well as the discovery of guidelines for increasing effectiveness and the long-term impact of our interventions. We also developed research-based and practical support materials for the behavior-change and culture-enrichment process.

Today we call this approach “People-Based Safety” (PBS). It strategically integrates the best of behavior-based and person-based safety in order to enrich the culture in which people work, thereby improving job satisfaction, work quality and production, interpersonal relationships, and occupational safety and health.

This article is the first of a five-part series in which I explain the essential principles and procedures of PBS. Here I introduce seven underlying principles of PBS.

**Seven Basics of People-Based Safety**

**Principle 1: Start with Observable Behavior.**

Like behavior-based safety, PBS focuses on what people do, analyzes why they do it, and then applies a research-supported intervention strategy to improve what people do. The improvement of others results from *acting people into thinking differently* rather than targeting internal awareness or attitudes so as to *think people into acting differently*.

However, unlike behavior-based safety, PBS considers that people can observe their own thoughts and attitudes. Thus, people can think themselves into safer actions.
In other words, self-management requires self-dialogue or thinking as well as self-directed behavior.

**Principle 2. Look for External and Internal Factors to Improve Behavior.**

We do what we do because of factors in both our external and internal worlds. While behavior-based safety deals with only external factors, PBS teaches people how to address their internal thoughts, perceptions, and attitudes related to injury prevention. A behavioral analysis of work practices can pinpoint many external factors that encourage at-risk behavior and hinder safe behavior. But, it’s also possible for individuals to conduct a self-evaluation of their own self-talk and selective perception regarding safety-related behavior, and choose to make appropriate adjustments.

**Principle 3. Direct with Activators and Motivate with Consequences.**

Activators (or signals preceding behavior) are only as powerful as the consequences supporting the behavior. In other words, activators tell us what to do in order to receive a pleasant consequence or avoid an unpleasant consequence. This reflects the ABC model, with “A” for activator, “B” for behavior, and “C” for consequence. This principle is used to design interventions for improving behavior at individual, group, and organizational levels.

**Principle 4. Focus on Positive Consequences to Motivate Behavior.**

Control by negative consequences reduces perceptions of personal freedom and responsibility. Think about it. Do you feel more free or empowered when you are working to avoid an unpleasant consequence or working to achieve a pleasant consequence?
Unfortunately, the common metric used to rank companies on their safety performance is “total recordable injury rate” (or an analogous count of losses) which puts people in a reactive mindset of “avoiding failure” rather than “achieving success.” PBS provides proactive measures employees can achieve in order to prevent occupational injury.

We can often intervene to increase people’s perceptions that they are working to achieve success rather than working to avoid failure. Even our verbal behavior directed toward another person, perhaps as a statement of genuine approval or appreciation for a task well done, can influence motivation in ways that increase perceptions of personal freedom and empowerment. Of course, we can’t be sure our intervention will have the effect we intended unless we measure the impact of our intervention procedures. Hence, the next basic premise of PBS.

**Principle 5. Apply the Scientific Method to Improve Intervention.**

People’s actions can be objectively observed and measured before and after an intervention process is implemented. This application of the scientific method provides critical feedback upon which to build improvement.

The acronym “DO IT” says it all: D = Define the target action to increase or decrease; O = Observe the target action during a pre-intervention baseline period to identify natural environmental and interpersonal factors influencing it (see Principle 1), and to set improvement goals; I = Intervene to change the target action in desired directions; and T = Test the impact of the intervention procedure by continuing to observe and record the target action during and after the intervention program.
The systematic evaluation of a number of DO IT processes can lead to a body of knowledge worthy of integration into a theory. This is reflected in the next principle.

**Principle 6. Use Theory to Integrate Information.**

After applying the DO IT process a number of times, you will see distinct consistencies. Certain intervention techniques will work better in some situations than others, by some individuals than others, or with some work practices than others. You should summarize relationships between intervention impact and specific interpersonal or contextual characteristics. The outcome will be a research-based theory of what is most cost-effective under given circumstances. By doing this you are using theory to integrate information gained from systematic behavioral observation.

**Principle 7. Consider the Internal Feelings and Attitudes of Others.**

Feelings and attitudes are influenced by the type of intervention procedure implemented, and such relationships require careful consideration by those who develop and deliver the intervention. This is the essence of empathic leadership taught by PBS.

The rationale for using more positive than negative consequences to motivate behavior (Principle 4) is based on the different feeling states resulting from using positive versus negative consequences to motivate behavior. Likewise, the way an intervention process is introduced and delivered can increase or decrease perceptions of empowerment, build or destroy interpersonal trust, and facilitate or inhibit an interdependent teamwork.

**In Conclusion**

The PBS principles reviewed here provide a perspective that improves how people view injury prevention and talk about this challenge to themselves and to others.
Besides providing a paradigm that improves the quality and increases the quantity of safety conversations, PBS provides specific tools and methods for increasing safe behaviors, decreasing at-risk behaviors, and motivating participation in safety-related activities.

Each of my next four ISHN contributions will cover the four skill components of PBS - - Acting, Coaching, Thinking, and Seeing. This will not be new information to ISHN readers who have followed my contributions over the past decade. For you, the organization of the material under the acronym “ACTS” may facilitate communication about PBS. And teaching others to use PBS skills will not only prevent injury, but will improve quality of interpersonal relations and enrich the culture in which people work.

E. Scott Geller, Ph.D.
Alumni Distinguished Professor, Virginia Tech
Senior Partner, Safety Performance Solutions

Dr. Geller and his partners at Safety Performance Solutions (SPS) help companies worldwide apply the principles and procedures of People-Based Safety (PBS). Also, Coastal Training and Technologies Corporation has recently published Dr. Geller’s new book on PBS, as well as five video/CD programs, accompanied by workbooks and leader guides. For more information, please log on to www.safetypformance.com or call us at 540-951-7233.