What is behavioral safety?

Everybody who works to reduce accidents and improve safe performance is concerned with human behavior. “Behavior and accidents is what it’s all about,” is a commonly heard phrase.

Is everybody who is concerned with reducing workplace injuries and illnesses, and the work practices associated with these injuries and illnesses, using “behavioral safety”?

While behavioral safety shares a concern with human behavior and safe performance in the workplace with other approaches, it is more than that. Behavioral safety is the application of behavioral research on human performance to the problems of safety in the workplace. This means that any safety program labeling itself as a behavioral safety program must meet the standards of behavior analytic research as practices are applied to the workplace.

How does Behavioral Safety work?

Behavior analysis is the science of behavior change. Applied behavior analysis is the application of the science of behavior change to real world problems, such as safety performance. As we do this, we are looking for functional or systematic relationships between

- Environmental changes, i.e., the stimuli or cues that lead to behavior
- The behavior itself, such as specific areas of work performance
- And the consequences of behavior, i.e., the positive or negative responses that occur immediately after a person performs a particular work task.

These relationships have been exhaustively studied in the laboratories. Applied behavior analysis applies the lessons learned in laboratory research to the challenges of human behavior in everyday life. In this case, to the challenge of building safe practices in the workplace. To do this, sound behavioral safety programs include the following basic steps:

1. Behaviorally specify the desirable performance
For example, if we want to improve safe practices in a certain workplace, we first specify as behaviorally as possible, those practices. For example, correct forklift operation or lifting behavior. Or, we may specify the outcomes that are achieved if safe practices are performed. For example, a shop floor that is free of hazards such as wires or oil slicks that could trip an employee and cause a fall. The process of specifying these criteria for good performance results in a measuring instrument that can be used to periodically sample safety performance in the workplace and measure human performance.

2. Measure safety performance

Using the criteria for safe workplace performance, we periodically sample and measure safety performance against those criteria. These measurements are recorded and become part of a database; a cumulative log of performance for each workplace.

3. Shape safe performance through feedback and other consequences

Behavioral research on learning teaches us powerful lessons about how to teach and build performance improvement. First among these lessons is the power of consequences. Consequences shape performance. One very powerful consequence is feedback on workplace performance. Properly designed and used, performance feedback will produce learning and positive performance changes—often very dramatically.

As a practical matter, once measurement takes place, a sound behavioral safety program will provide timely, usually immediate, feedback on workplace safety behavior to the employees whose workplace is being observed. It will not be delayed for lengthy periods of time. In addition, feedback will focus on positive gains in performance, not negative performance decrements. It will be predictable and certain. And, it will be delivered in ways that are meaningful to the people who are receiving it.

The posting of graphs of the performance of work teams or departments in building safe performance over time is another form of feedback that sets
the occasion for coaching and feedback on workplace safety performance. As teams and departments improve in their achieving high levels of safe practices in the workplace, celebrations are often held, further acknowledging and reinforcing safe performance.

These are only a few highlights of a fascinating field, behavioral safety. We hope you will sample some of the applied research articles listed in the CCBS Behavior Safety Bibliography. Perhaps they will be applicable to your work settin

**Why all the interest in behavioral safety?**

The application of behavioral research to the solution of human problems is building and demonstrating the first effective and reliable technology of behavior change in human history. No other field of psychology or the behavioral sciences has been able to successfully do this.

In workplaces with troublesome rates of unsafe performance, behavioral safety programs, properly implemented, produce significant improvements in safe performance and major reductions in workplace injuries and illnesses. Human suffering and financial costs are sharply reduced. Moreover, the costs of producing these gains in human performance are a good investment, paying for themselves many times over.