Developing A Critical Behavior Checklist: Behavioral Inconvenience

Last month I discussed the critical behavior checklist (CBC) – an indispensable tool for improving human competence in the workplace. Whether or not you've been misled by the critics of behavior-based safety (BBS), you cannot deny the importance of using a CBC to provide behavioral feedback and design interventions for corrective action. And it’s obvious the beneficial impact of a CBC is influenced by the behaviors targeted by the checklist.

My ISHN article last month discussed how to estimate the relative risks of behaviors considered for inclusion on a CBC. Three dimensions of behavioral risk – exposure, severity, and probability – were described as the “ESP” characteristics of at-risk behavior that should guide the process of selecting the behaviors for a CBC. This presentation introduces the role of behavioral inconvenience in determining the design and use of a CBC. First, let’s consider how behavioral inconvenience affects the “percent-safe scores” obtained from applying a CBC.

The Percent-Safe Score

A CBC enables the calculation of an upstream, leading indicator of industrial safety. More specifically, after a number of CBC’s are completed, it’s possible to calculate a percent-safe score for each target behavior by adding up all the safe observations for a particular behavior and dividing this sum by the total number of observations for this behavior, which includes the aggregate of safe and at-risk observations. Multiplying this number by 100 yields a percentage or a “percent-safe score” for a certain behavior.
Behavioral inconvenience likely influences every percent-safe score. More specifically, the more inconvenient the safe behaviors on a CBC, the lower the percent-safe score, unless an intervention has been implemented to improve one or more inconvenient behaviors. Actually, this is one of the applications of a CBC – to find out objectively which at-risk behaviors most need intervention attention.

The Behavioral Inconvenience Index

It’s certainly logical to think of behavioral inconvenience as varying along a continuous scale from “very easy” to do to “very difficult or impossible” to do. I recommend you ask people to assign a certain behavior a behavioral inconvenience index from 1 to 10, with 1 reflecting “most easy” and 10 representing “most difficult.” The number of scale values are arbitrary, of course, but it can be cumbersome to use more than 10 values on a scale. Plus, people are familiar with a 10-point scale.

Safe vs. At-Risk Behavior

Engaging and informative conversation is activated when workers give behavior an inconvenience score. For example, comparing the inconvenience scores of safe vs. at-risk behaviors can clarify why safety is often a fight with human nature. In almost every case, the inconvenience scores will be higher for safe than at-risk behaviors. And the greater the gap between a safe behavior and its at-risk counterpart, the more difficult it will be to get people to perform the safe alternative. This gap often signifies one or more environmental factors hindering safe behavior.

Identifying Environmental Barriers

The process of giving behaviors an inconvenience score naturally prompts interpersonal dialogue about the various environmental barriers to certain safe work
practices, some of which can be removed or made less significant. Sometimes these discussions identify safe behaviors that are so inconvenient or difficult to perform under existing circumstances that a revision of the safe operating procedures is called for. This could require some re-engineering to make safe behavior possible.

**Developing a CBC**

Ideally, the initial applications of a CBC includes a majority of relatively convenient behaviors. This enables perceptions of success from the start. However, behavioral risk (as discussed last month) should be given more weight when selecting CBC behaviors than behavioral inconvenience. Thus, it's likely an initial CBC will include many safe behaviors that are inconvenient. In this case, the inconvenience index can provide an explanation for a less-than-desirable percent-safe score.

Inconvenience evaluations also provide direction for the number of behaviors to include on a CBC. The CBC should not be overwhelming, especially when beginning an observation and feedback process. Therefore, it's not a good idea to include an abundance of inconvenient behaviors. Having more convenient than inconvenient safe behaviors on a CBC does not limit its power however. In fact, the more convenient safe behaviors often reduce the most risk of personal injury.

**Examples from Vehicle Use**

I'm sure you know the most convenient behavior a vehicle occupant can perform to reduce the severity of injury in a crash. In fact, the very convenient behavior of buckling-up probably has more large-scale potential to save lives than any other safety-related behavior. Reducing vehicle speed and using turn signals appropriately are two other convenient behaviors that can prevent a vehicle crash.
Turn-signal use would probably get a higher inconvenience score than reducing right-foot pressure on the gas pedal. However, the natural rewarding consequences of speeding, including arriving sooner at one’s destination, makes speeding a more difficult behavior to change than nonuse of turn signals.

**Inconvenient Behaviors**

Assessing and adjusting the air pressure in the tires of your vehicle are good safety measures, but these behaviors are more inconvenient than using a safety belt, traveling at the speed limit, and signaling lane changes and intersection turns. How about buckling-up a young child in a child safety seat? Actually, it’s quite inconvenient to do this correctly, which is one reason most children do not receive maximum protection in their vehicle safety seats.

The other reason for at-risk use of child safety seats is insufficient knowledge regarding their safe installation and use. Developing and refining a CBC is likely the best way to teach a group the safe steps of a particular task, from behaviors that maximize safe travel to those that help to achieve and maintain an injury-free workplace.

**Impossible Behaviors**

Can you think of behaviors related to vehicle use that are excessively inconvenient or perhaps impossible because of engineering barriers? How about lifting the spare tire from your trunk? Can you keep your back straight, hold the load close, and bend your knees appropriately in this situation? This problem is prevented, of course, with Jeeps and Geo Trackers that have the spare tire attached to the exterior of the vehicle. It’s likely such re-engineering was done for appearance and space-saving
rather than safety. But still, the inconvenience index illustrates the safety benefits of this design.

**Applications in the Workplace**

So what safety-related behaviors at your workplace would get a high inconvenience score? Are any recommended safe-work practices actually impossible to perform under existing circumstances? What environmental barriers make these behaviors inconvenient? How can these barriers be eliminated, or at least made less influential? These are critical questions for a work team to address. Asking a work team to assign inconvenience scores to their safe-operating procedures activates this kind of discussion.

**In Conclusion**

This second of a two-part series on the development and refinement of a CBC for building safety competence introduced the dimension of behavioral inconvenience. It showed how to use this concept to facilitate constructive conversation about ways to make a workplace safer. I propose using a 10-point scale to assess the relative inconvenience of performing the various safe work practices called for at a work site.

The identification of safe behaviors that are extremely inconvenient to perform can activate critical dialogue about environmental barriers that need to be removed. Sometimes engineering constraints make it unreasonable to expect a person to follow a particular safe operating procedure. Assigning inconvenience scores can reveal these difficulties and incite constructive conversation about various re-engineering strategies. Thus, the development and application of a CBC helps to make the participants at a workplace more safety-alert and safety-competent, from helping groups reach
consensus and ownership regarding the expected safe operating procedures to
increasing interpersonal accountability to meet or exceed the safety-related standards
of a work culture.

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