

Construction News Sense



BBS Flowdown

Recently, when asked if they are familiar with the Behavioral Based Safety (BBS) program at Sandia National Laboratories (SNL), many employees have responded "No." The SNL BBS program has been in existence for more than three years, and this is not the expected response. Consequently, this article is intended to serve as a refresher for what the BBS program is and how individual subcontractor companies can use SNL supplied information to improve safety within their operations.

The BBS program helps prevent injuries with sustainable results by:

- Extending OSHA regulatory requirements;
- Identifying potential injuries before they occur; and
- Gathering proactive measurement data.

The BBS process identifies worker-controlled behaviors that can prevent injuries and reinforces these behaviors. BBS helps to identify and remove system, conditional, and behavioral barriers that make safely performing work activities difficult or impossible.

BBS observers gather data on worker safety behaviors and identify potential reasons that tempt workers to take risks. The gathered information is provided to all with the intention of helping to prevent accidents/injuries. When asked about their safety behaviors, workers' responses are categorized as:

- **Perception** (Conscious Choice) – Typical answers are: "In my opinion / In my experience / I've done it before and not gotten hurt."
- **Habit** (Sub-Conscious Choice) – Typical answers are: "I did not think about it / That is the way I always do it / I do not know."
- **Barriers** (Limited Choice) – Typical answers are: "I cannot do it any other way because... / If I do it that way, this would happen."

Data are grouped according to worker behaviors in the field. The BBS steering committee analyzes the data and looks for behavioral trends. Behaviors eliciting the highest safety concerns become focal points for training. This information is also provided quarterly to individual subcontracting companies for dissemination to all field personnel as a proactive method for preventing future accidents. Most concerns identified through BBS observations can be avoided with minimal effort, and with the help of subcontractor company management and continual feedback from workers, SNL can minimize dangerous work behaviors and accidents at construction sites.

Every quarter, contractor companies will receive the following information specific to the individual company:

1. A "Red/Green" report showing the overall "% Safe" for each behavior noted. Company management should review with all workers those behaviors with a low safety rating and ask workers to rethink their behavior as they perform work activities.



2. A "What/Why" report showing all concerns noted by the SNL BBS observers. Every concern is categorized as either Perception-Conscious Choice, Habit-Subconscious Choice, or Barrier-Limited Choice. The What/Why report is provided as backup information for the Red/Green report.

Reason: **What and Why Report** Observations: 21

Division: 4000
Date: From: 4/4/2009 To: 5/20/2009
SOS: Construction & Service
Observer: Workgroup: Construction & Service

Behavior	Comment Code	HAB	Habit
All PPE			
Reason: All items 100%			
No tool use - keep digging			
Electrical Awareness			
Reason: All items 100%			
All workers 100% in electrical zones - no work conducted in live areas			

Because BBS data are a set of predictive points, they should be used as much as possible in company safety planning and tracking. The information should be communicated to field personnel and incorporated into daily activities. Any questions related to BBS data should always be directed to a steering committee member for clarification.

William Tierney, BBS Construction Steering Committee

Safety Eyewear—Why the excuses?

For a teacher, excuses are a normal part of life from the classic, “The dog ate my homework,” to this more original note from a parent: “Please excuse my daughter for missing school yesterday. We forgot to get the Sunday paper off the porch, and when we found it Monday, we thought it was Sunday.”



Police officers also hear their fair share of excuses. A tourist from the East Coast vacationing in Colorado was stopped for speeding. When asked if she was aware that she was speeding she replied that her speedometer must not be working properly at the much higher elevation in Colorado. It always worked properly in New York, where she lived

Teachers and police officers are not alone in hearing excuses. Safety professionals also hear excuses. Some excuses are attempts to address behavior with consequences far greater than a traffic ticket or detention at school. For example, if a worker uses excuses for not wearing eye protection, the consequences can be painful and in some cases, life-changing. An eye injury may affect a person’s long-term ability to do their job, and it will affect their personnel life as well.

Many workers believe that safety eyewear makes them look like a “nerd.” However, if you are wearing an eye patch due to an injury, you will get many questioning looks and will be asked to give repeated explanations about what happened. Looks should not be an issue. Manufacturers offer a wide variety of safety eyewear that is just as stylish as some designer sunglasses and is not much more costly than the inexpensive visitor glasses. I have even seen safety eyewear decorated for NFL teams or NASCAR drivers.

Workers sometimes complain that they can’t see well with the safety glasses, either because the glasses are not clear or the eyewear fogs up. As with the previous excuse, this excuse may be addressed by taking a little more time selecting better eyewear. Often vision problems can be dealt with by simply cleaning the glasses.



“This job won’t take very long,” is a common excuse. An injury can happen in only a fraction of a second. If you don’t have time to get your safety eyewear, you’d better have time to deal with an injury. Some workers believe that any glasses will protect them. Prescription glasses are only useful as eye protection if specifically designed and manufactured as safety eyewear.

Eye protection should not be reserved for just the workplace. Home improvement projects or hobbies such as woodworking are potential sources of eye injuries. Sporting activities such as softball, tennis or shooting also expose the participant to eye injury. A tennis ball, racquetball, or even the humble badminton shuttlecock can reach speeds over 100 miles per hour.

Injury data show that with 70 -90% of eye injuries, the injured person was wearing inadequate eye protection or no eye protection at all. Eye injuries can have painful and expensive consequences. Effective and useable eye protection is available and reasonably priced, but even the best eye protection does nothing to protect you if it is resting on your forehead, placed in your pocket, or left back in your truck.

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