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Behavior-Based Safety: Making the Case for a Focus on Habits

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Fig. 1: Sign showing required safety controls at the Nipigon River Bridge Project in Ontario, Canada

As safety professionals, we are tasked with ensuring our company activities conform to regulations. It's up to us to help supervisors achieve all the requirements for job site safety. This usually means implementing solutions according to the *hierarchy of controls*. As the name suggests, there is a preferred order to deploying safety solutions, with engineering controls coming first, followed by administrative controls, and then by personal protective equipment (PPE)—the last line of defense.

Using these controls at work means putting guards on tools and points of contact; developing risk assessments, hazard controls and procedures for performing all tasks safely; and providing all the appropriate PPE as well as training on its use and selec-

tion (Fig. 1). The hierarchy of controls means that we can ensure that our crews are pulling post-tensioned cables safely in confined spaces, that they are applying cathodic protection to cooling towers 400 ft (122 m) in the air safely, and that they are using top-of-the-line safety controls to administer structural strengthening underneath bridge decks over water.

The industry does well when performing very dangerous work as safely as possible—especially given the hazardous potential of construction work. Unfortunately, even our best is not good enough. According to the US Bureau of Labor Statistics, the construction industry still leads all industries with the total amount of fatal workplace injuries each year.¹ It's not a good race to be winning. Even though we do a lot to keep our work-

force safe, we need to ask ourselves how we could do better, and one considerable answer is to focus on changing attitudes toward safety.

Safety Is Not Only a “Work Thing”

Statistics from the National Safety Council show that almost 90% of unintentional injuries happen off the job—and only 3% of deaths caused by unintentional injury happen at work.² In fact, more people are hurt or killed while driving as all workplace incidents combined (Fig. 2).

Why is there such a large discrepancy between safety at work and safety at home? One piece of the puzzle is the fact that there is no enforcement at home. We don’t have supervisors breathing down our necks to “tie-off” and “secure the ladder” when we clean the gutters or to “wear protective footwear” when we mow the lawn. People are far more likely to take shortcuts off the job because safety is not a 24/7 concern to them. It’s only a “work thing.”

Even at work, rules and engineering solutions do not achieve the desired results. Incidents happen every day, even though supervisors remind workers to be compliant and watch them as closely as possible.

We know that there aren’t any functional defects with safety controls, but users of the controls are still getting hurt. This means we need to take a closer look at the users—the workers. One of the reasons that employees take safety shortcuts is because they don’t see the need to follow every rule and regulation to the letter. It’s up to us to make safety something they believe in, and not just something they have to do.

For these reasons, in addition to safety basics like hazard controls, it is also important to focus on behavior. If we can help people get committed to safety and develop better habits at home and on the road, they will be much more likely to be safe at work.

This is where leaders, managers and safety professionals can help by adding a few simple pieces to the company safety program and its language. Using systems that are easy to integrate with existing programs are advised, rather than introducing additional control solutions—new initiatives are easier to implement when they don’t involve tons of additional paperwork!

I am Safe Enough, but Is My Family?

Experience tells us that simple and proven behavior-based programs will provide streamlined additions to hazard assessment and control. For example, the SafeStart process adds just a few simple concepts to a safety program; states of mind lead to errors which lead to increased risk. These additions include teaching workers about common errors that lead to incidents at work, at home and on the road, and provides them with error

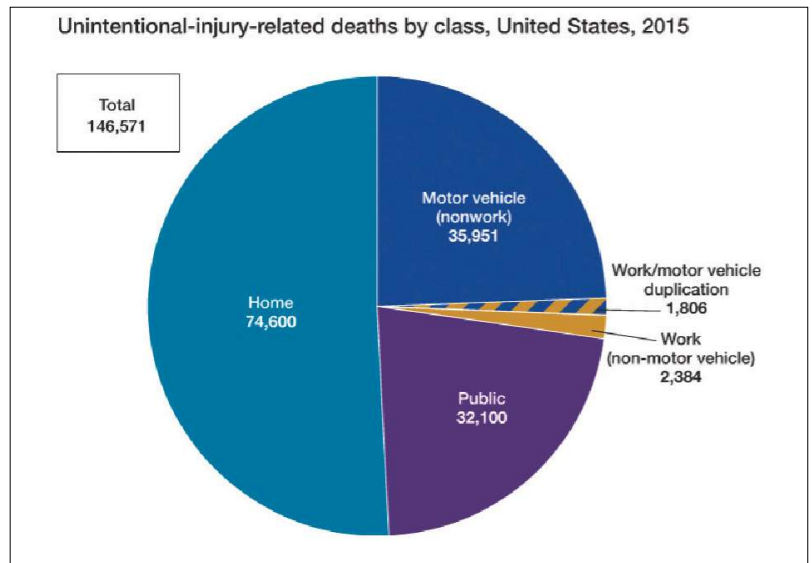


Fig. 2: Unintentional-injury-related death statistics (image courtesy of the National Safety Council)

reduction techniques to help them avoid these errors wherever they are. It’s not a total overhaul but it can have a huge impact on getting workers to truly believe in safety.

One of the crucial outcomes is that workers are convinced that 24/7 safety is important. To do that, spend a lot of time thinking and talking about what’s most important to workers. Good behavior-based solutions focus on workers’ motivations—and for almost everyone, the biggest priority is the safety of their loved ones. So we make sure that our safety programs provide workers with the right behavioral tools and the safety language that helps them look out for their families.

For example, it’s not possible to give your children PPE whenever they play. But developing a common language and making them aware of situations in which they are more likely to be harmed is going to help keep them safe. Telling children to “be careful” doesn’t work. But making them realize that rushing might cause them to miss something dangerous (such as an approaching car) will make it much easier to tell your kids to “slow down” and have them understand why.

That is how simple a behavior-based component can be. Most people think that they are safe enough as it is, but give them the tools to help them keep their family safer, and you might see a change in their own behaviors.

Behavior-Based Safety Benefits

Adding behavior-based safety components and continuously supporting them can be a part of significantly reduced recordable injury rates. This is great news for the industry and encourages companies to keep working hard to ensure the continuing safety of workers. Taking a 24/7 safety approach really works. But if we want to keep improving our workers’ engagement in safety, focusing on injury rates is not the way forward. That’s because the injury rate is a lagging indicator that shows the



Fig. 3: Workers catch up and share stories during stretch and flex sessions at the Antelope Valley Station in North Dakota



Fig. 4: Toolbox session helps share safety messages and continuous learning of behavior-based safety programs in front of the Legislative Building in Edmonton, AB

results of our commitment but doesn't measure engagement. And that's what we should concentrate on to make our next leap forward in safety.

One of the best ways to measure engagement is with leading indicators such as near-hit reporting. Near-hit reporting by frontline staff increases when focusing on behavior-based safety programs and educating workers on the errors contributing to potential mistakes. Near-hits are important to share during daily safety huddles, morning stretch and flex periods (Fig. 3), and weekly toolbox training sessions (Fig. 4).

Importantly, these discussions should also include mistakes made at home and descriptions of how workers are going to commit to being safer all day, not just for themselves or their company, but for their family. This helps reinforce the fact that safety is an around-the-clock issue. Safety is not just a "work thing," it's an attitude and a habit that should be shared with our families.

Communication as a Safety Tool

The use of near-hit reporting closely relates to the fact that good behavior-based programs stress the importance of using stories to always keep the importance of safety fresh. Stories help to identify unsafe acts and behaviors. The way stories are told needs to encourage people to work on habits, remind them about the most common errors before starting work, or support them in using their error reduction techniques when performing hazardous tasks.

Sharing stories makes future incidents less likely to happen, creates a sense of community, and encourages people to look out for each other. When leaders start to share their own stories of how they nearly got hurt at work or at home, they actively participate in the building of a stronger safety culture, showing

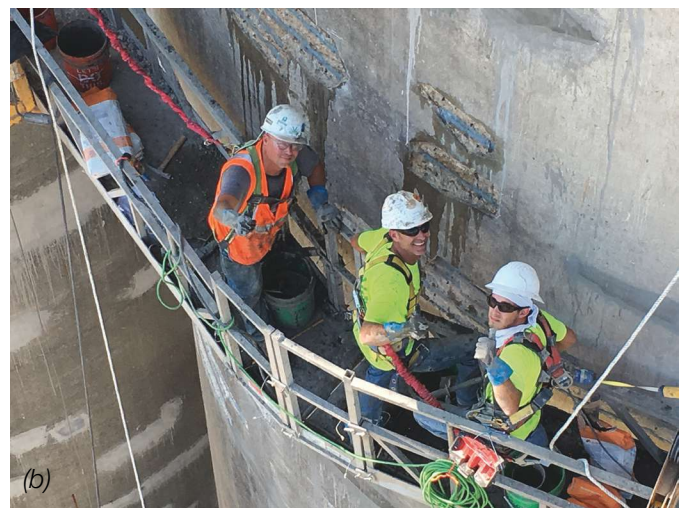


Fig. 5a & b: Workers are encouraged to work together and watch out for one another, building strong culture and teamwork even on the most dangerous projects

their commitment to changes in behavior, starting with themselves.

Stories play a big part in communication. Behavior-based programs also strive to provide the workers with a common safety language because they are likely to become more engaged and discuss safety if they have a language to address it. After a while, using a common safety language and looking out for the safety of others becomes part of the workplace culture. When workers look out for one another, rather than having to look over their shoulder for a supervisor or safety cop, it builds team resolve (Fig. 5).

We can spend a lot of time and money implementing every control imaginable when it comes to preventing incidents on construction sites, and we should certainly strive to do that.

But, as the statistics show, engineering controls are not everything, and they certainly aren't doing enough. Introducing a behavioral component can result in a marked improvement in safety and morale and help increase compliance by getting workers to believe in safety. With some small additions, you can help change workers' attitude and shift their perspective of safety from "a work thing" to a 24/7 habit. ■

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1. US Bureau of Labor Statistics, Current Population Survey, Census of Fatal Occupational Injuries, 2016.
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