OUT OF SIGHT, OUT OF MIND

Preparing for Low Likelihood, High Severity Events By Wyatt Bradbury

This article was written after my wife and I had just returned from a trip back home to Southern California. Growing up a California native away from a major fault line, earthquakes were never a big deal. Stand in a doorway or climb under a table until the shaking stops; pick up anything that falls.

I was not yet born when the 6.7 magnitude quake hit Northridge, CA, in 1994, and quakes since then were never large enough to cause damage in my home or community.

On that trip, my wife experienced her first two large earthquakes and grew pale white as the 7.1 magnitude quake kept rolling and intensifying as it shook my childhood home despite being more than 100 miles from the epicenter. Sitting frozen, she was terrified, unsure of what to do as the five other adults with her made no move to safety. Instead of diving for the table, those other adults, including one safety professional, talked about the experience, comparing it to past quakes and remarking that the house built in the 1920s managed to not roll off the foundation.

I moved out east after the 2011 earthquake that shook the Mid-Atlantic region, and I missed the 2014 La Habra quake. In fact, until this trip, I had not experienced an earthquake since 2008. In my lifetime (which spans little more than a career for most), I had never been seriously affected by this type of disaster. In fact, I do not think I know of anyone who has. Sure, I have seen pictures or videos of the disaster, but it was not my family or friends affected. For the vast majority, the experience of a natural disaster is akin to a low frequency, high severity hazard (Floyd & Floyd, 2014).

As a safety professional, there are clearly a few lessons to be learned from this ongoing narrative. Foremost, I put my wife in a situation where a hazard existed, and she was unprepared to protect herself. What if she had been alone and the Los Angeles area was hit with a 6.0 to 7.0 magnitude earthquake? Cell service would probably be disrupted. Would she know what to do? I failed to provide a basic overview of how to protect oneself and respond in the event of an earthquake because it had been so long since I was affected. The hazard

had not gone away or lessened in potential severity, I just did not feel susceptible to it and, as a result, put someone else at risk.

Each region of the country has unique natural disasters that require a specific response. This reflection has made me realize that in the event of a tornado, I would be completely unprepared to respond and would have no concept of what it is like to experience this type of disaster. Sure, I could search what to do online, but that is not the same as physically and mentally preparing to respond. How many personal and business travelers are prepared for the regional disasters they may face, and are the means, methods and messages used to warn about the dangers actually being received?

To my mother, a transplant who arrived in California and subsequently experienced larger earthquakes in the 1980s and 1990s, earthquakes are the disaster that we need to always be prepared for. For as long as I can remember, the trunk of our car has been filled with an earthquake kit, complete with clothes, food, shoes, light and water. More recently, a 55-gallon drum sits in the back of the garage with enough resources to last for at least a month.

This part of the narrative makes me realize something else: my mother was prepared and vigilant. As recently as two weeks ago, I, a safety professional, was exclaiming my disgust that half of the car trunk has always been taken up by the big blue, 20-year-old cracked plastic tub that would be our lifeline in the event "the big one" struck Los Angeles. My mother moved to California from the Midwest and experienced the havor of an earthquake striking her geographic region. She understood the impact that focusing on the likelihood and not preparing for the severity of an earthquake may have on her children. When it came to natural disasters, she ensured that provisions were made for what she might face because she had experienced the disasters herself and witnessed the fallout firsthand.

Anna Floyd recently gave a presentation to the Advanced Safety Engineering and Management program at the University of Alabama at Birmingham. In the presentation, she described a situation where an individual or third-party bystander witnessed low frequency, high severity catastrophes but instead of responding with action and ownership, for others or oneself, the audience instead feels inculpable to the danger. Floyd calls this phenomenon "blaming the victim." It is not the victim's fault for experiencing the disaster, nor is blame being assigned with any malice. Instead, vulnerability and susceptibility are not felt and therefore the individuals assigning "blame" are distancing themselves by doing so (Floyd, 2019). They are guarding themselves from feeling vulnerable and having to physically and mentally go through the steps of response should they encounter a similar disaster. In my narrative, only my mother felt susceptible and, as a result, she remained prepared despite any ribbing for the lack of storage space in the trunk.

This makes me wonder how many other hazards or dangers I do not feel vulnerable to for any number of reasons. And, how often do I unknowingly pass that lack of susceptibility along to someone else who might find him/herself at an even greater risk? As safety professionals, it is our job not only to identify the hazards present in our workplace and community, but also, communicate them. However, if our communication is solely focused on the probability or severity of an incident and the communication flows through something as formulaic as a risk matrix or job hazard analysis, will individuals at risk truly understand their personal vulnerability or will they say "it won't happen to me," and continue living out their life depending on luck to see them through safely (Floyd & Floyd, 2014)?

This ability to communicate the dangers in a way that helps employees understand that they are susceptible to the consequence in the associated likelihood

Vantage Point

Vantage Point articles in Professional Safety provide a forum for authors with distinct viewpoints to share their ideas and opinions with ASSP members and the OSH community. The goal is to encourage and stimulate critical thinking, discussion and debate on matters of concern to the OSH profession. The views and opinions expressed are strictly those of the author(s) and are not necessarily endorsed by Professional Safety, nor should they be considered an expression of official policy by ASSP.

is the only way we can ensure that appropriate precautions and necessary responses are taken should catastrophe strike our workplace or community. It is also important to understand that risk perception is situation specific and low feelings of susceptibility are equated to a failure to adequately adopt a precautionary posture (Floyd & Floyd, 2014). In this example, my mother had a higher risk perception, which drew her to adopt a behavior pattern in which the family would be prepared no matter where they were.

This can be accomplished this is by telling a story, as humans are "naturally drawn to stories" and "experiences and opinions of other people play a key role in how we perceive appropriate actions and behaviors" (Floyd, 2019). As the audience relates to the characters of the story, they are increasingly likely to be drawn into the message of the narrative as a whole (Floyd, 2019).

As Floyd (2019) points out, this successful communication requires that safety professionals first show our vulnerability and that we have gone through the physical and mental preparation and response steps

necessary for what is being discussed. This can be accomplished through telling a personal or relatable story designed to appeal to the audience and bring them into the narrative and, thus, the intended message. In fact, this article is an attempt to demonstrate this very point: demonstrating my vulnerability employs this strategy so its effectiveness can be assessed and an example provided as we look to duplicate the approach in our daily lives, both personal and professional, with all the hazards faced.

It is key to understand that one's perception of risk is based on a feeling, influenced by countless factors and biases, not the numbers or list of consequences associated with it (Floyd, 2019). At that point, it is our ability to empathize, understand the challenges and be as vulnerable as those we serve that will allow our message to be fully appreciated. What was once out of sight, out of mind must be a recognized low likelihood, high severity consequence that has been taken into consideration and prepared regardless of our ability to fully contain and control it. Using personal narratives that penetrate to the human level, not just the professional level, will help us make sure our message is considered and appropriate risk perceptions are developed. PSJ

References

Floyd, A. (2019, June). Risk perception and the value of vulnerability. Advanced Safety Engineering & Management 601 presentation, at the University of Alabama at Birmingham.

Floyd, A. & Floyd, L. (2014, April). The value of vulnerability: Helping workers perceive personal risk. Professional Safety, 59(4), 32-37.

Wyatt Bradbury, CSP, CHST, CIT, serves as advisor for Hitachi Rail. He has experience in aquatic and recreation risk management, electrical construction, powerline safety, rail safety and safety consulting. Bradbury is pursuing a Master of Engineering in Advanced Safety Engineering and Management from University of Alabama at Birmingham. Bradbury serves on the planning committee of the Mid-Atlantic Construction Safety Conference. He is a professional member of ASSP's National Capital Chapter, which he also serves as president, and a member of the Society's Emerging Professionals Common Interest Group. He also serves on ASSP's Education and Training Committee.

