



DEFENSELESS MOMENTS

A Different Perspective on
Serious Injuries and Fatalities

By Larry Wilson

“That’s exactly what happened to me,” he said, “I was hiking in the badlands of North Dakota.”

“Well,” I said, “that sounds somewhat dangerous.”

“But I’ve done lots of long hikes on mountain crests and other world famous trails. So yeah, it was in the badlands but this trail was no big deal. It wasn’t technical, as they say. I didn’t need ropes. But along the way, I saw a number of signs that warned people to ‘stay on the trail’. I just assumed they were for inexperienced hikers who would likely get lost and wouldn’t be able to find their way back onto the trail. It didn’t occur to me that it might be because the ground off the trail was really loose—until I was cartwheeling down the hill like a human tumbleweed. I put my arms up to try to protect my head. I could feel things breaking as I hit, bounced, floated, flailed and hit again.

Finally, it stopped, or I stopped. I was still alive and conscious. But I couldn’t move. No cell phone either. Thankfully, some German tourists saw me and called for help. I had to be evacuated by what’s called a long-line helicopter rescue (see Figure #1).

I had broken my pelvis and had lots of severe bruises, cuts and a mild concussion (note: get exact details from Dave). So that was by far the worst injury or incident of my life, but it was hardly the most dangerous hike, let alone the most dangerous thing I’ve ever done.”



Figure #1

A flood of memories suddenly came back to me as he told this story. It was like so many times before—especially at the beginning when I’d ask people to think about the most dangerous things they’d ever done and then think about their worst injuries. And that was around 30 years ago. Since then, I’ve asked the question to over 125,000 people in 66 countries. Only about one or two percent ever had a match.

But why? Why isn’t it perfectly intuitive, like the old risk matrix says it is? (See Figure #2) Why aren’t the serious injuries and fatalities in the top right-hand corner, where they “logically” should be? Why are the vast majority in the middle where there wasn’t high speed, high voltage, high temperature or toxicity? Where are yours? Was your most serious injury the result of doing the most dangerous thing or the most dangerous activity? There are a few. Like I said, about one or two percent. But for every one of those, there are just as many that are the opposite: like skiing on a green run and blowing

your ACL where the danger, risk or amount of hazardous energy was very, very low (See Figure #3).

If we face the facts, preventing serious injuries and fatalities over the last 10-15 years has been very illusive. We’ve all seen the national data and international data showing serious injuries and fatalities flatlining vs. steadily declining. So perhaps, the timing is right to look at serious injuries and fatalities from a different perspective: the worker’s, the person’s, or to cut to the chase—yours or mine.

We are all motivated not to get seriously hurt or killed even if we’re not worried about it. And we have defense mechanisms

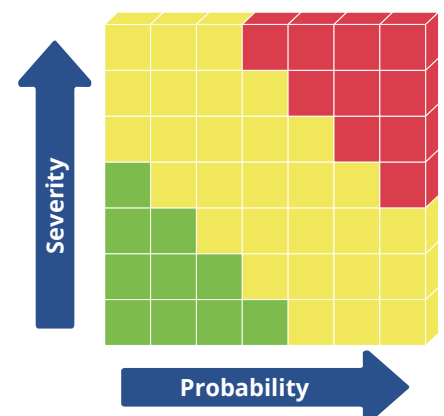


Figure #2

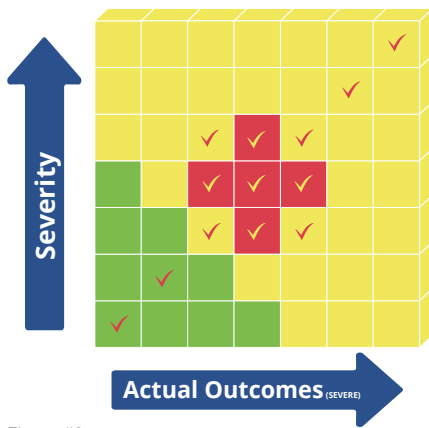


Figure #3

like reflexes and our ability to anticipate danger that are very effective. How good are you at preventing injuries if you're paying attention and you get the benefit of your reflexes? How good are most people? Answer: really, really good. Most people have never been seriously hurt when they were paying attention (eyes and mind on task), trying to anticipate danger and they get the benefit of their reflexes. And when you're doing something you think is dangerous—you are paying full attention.

But when your mind is not on task and your eyes are not on task, we are almost defenseless. If we don't see it coming, or we can't see what we are falling on to, then we don't get the benefit of our reflexes which quite often protect a vital part—like quickly putting your hands up to protect your head. And that's just on foot. Not getting a reflex like your foot not hitting the brake could be much more serious. And on average, or statistically, it is. More people die accidentally on highways and roadways than in workplaces in every country in the world.

Very simple errors, like a blind fall or backing a forklift into someone who also wasn't looking can (easily) be all it takes for a serious injury or fatality. Not a predictable failure in an opaque tightly-coupled complex system that academics like to talk about. Just a simple slip or fall where someone falls backwards on the steps, hits their head and never gets up again.

If you think only about your own injuries and serious close calls that could have killed you, was the reason it was only a close call because you got the benefit of your reflexes? (Hit the brake, jerked the steering wheel or got your hand up at the last second.)

Now, what about those times when you didn't get a reflex? What happened then? For most people, that's "when" their serious injuries occurred. Eyes on task vs. eyes not on task. If you're looking—you get a reflex and it's usually just another close call or minimal injury, fender bender, etc. But if you didn't see it or see it coming, then—chances are—that's when it was serious. Eyes and mind not on task at the same time is a "defenseless moment". We have many of these with no consequence. It's not like we get hurt badly every time we take our eyes off the road when we're already driving on auto-pilot, but the one time there's gravel on the corner or a truck in your lane, that moment of defenselessness can easily cause a serious injury or fatality.

It's a different perspective. And what's good about it is that fixing or improving eyes and mind on task is free. Improving your habits with eyes on task does not cost any money and even taking a second look barely takes any time at all. However, learning to "move your eyes first" isn't as easy as it sounds. People will have to make an effort to improve. Changing bad habits that are deeply hardwired takes even more effort. Effort takes motivation. But most safety professionals are not trying to get their co-workers to try to improve their habits and skills with eyes on task: they're only trying to motivate people to follow the rules, procedures and personal protective equipment standards. No wonder serious injuries and fatalities have flatlined.

I remember an incredible "ah ha" moment for the CFO at a huge chemical company when I was asking how many times a day do people at this facility turn or move without looking first. The group's consensus was probably between ten and 100. We just used ten. Yes, it was the low end of the range—but it does make for easy math. They had just over 2,000 employees at this site. If everybody moved ten times a day without looking, that's 20,000 per day times 250 working days per year, which equals five million...to which the CFO said, "No wonder we can't get to zero—we have too much unintentional risk! It's not that we have a problem with the

rules.” Too many defenseless moments to get to zero. But that, for some, is not the real issue. It was also too many to eliminate all of the serious injuries and fatalities either.

So, when was the last time you tried to improve your own safety-related habits and skills? Have you been stressing the importance of this to your co-workers? (See Figure #4). Furthermore, have you told them about human factors like rushing, frustration and fatigue that can easily override their “habit strength”—provided

they do have good habits or are working on them?

In summary: everyone cares about serious injuries and fatalities. Yes, we also care about the total recordable injury rate, but that’s not really what it’s all about. Worrying about someone getting killed, maimed or permanently disfigured is what keeps most safety professionals up at night. And since it’s fairly obvious looking at the data that things aren’t getting any better, perhaps it is time for a new perspective and a different set of skills.

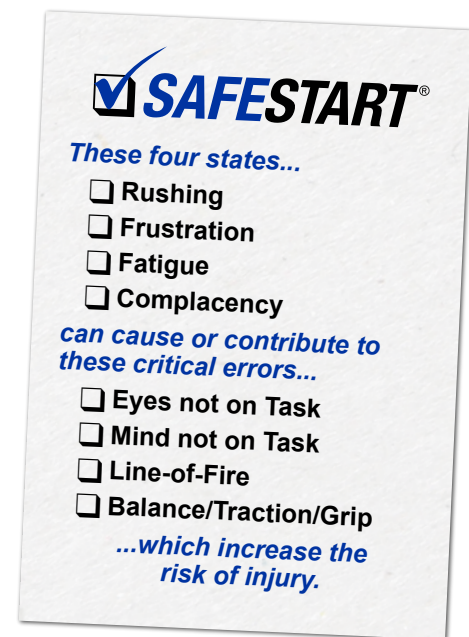


Figure #4



About the Autor

Larry Wilson is a pioneer in the area of Human Factors in safety. He has been a behaviour-based safety consultant for over 25 years and has worked on-site with hundreds of companies worldwide. He is also the author of SafeStart, an advanced safety and performance awareness programme, successfully implemented in more than 3,500 companies, in over 60 countries, with more than 3,5 million people trained.



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