

Be Safe Every Day with a Critical Thinking Mindset

If you aren't involved in activity-level work, you may be wondering how "engineered safety" applies to you. Engineered safety emphasizes the use of a critical thinking mindset to consider *a priori* how an activity can lead to an accident, and to intentionally eliminate or significantly reduce the risk of an accident given an understanding of how the accident can occur. This critical thinking mindset can be equally effective for preventing accidents in all aspects of our daily lives. This blog entry is the start of a Division-wide campaign we are calling **Every Day Safe**. The purpose is to help you learn to develop a critical thinking mindset and apply the principles of engineered safety to the many non-work-related activities in which we engage every day – at work and at home.

I invite you to consider the following three questions that capture the essence of "engineered safety" for any activity:

1. What could go wrong?
2. How can I prevent that?
3. How can I prepare for the unexpected?

Answering these questions for an activity requires only a short pause to raise your awareness and be mindful about what you will be doing, how you will do it, and how to avoid conditions or situations that can lead to accidents. Every day, we expose ourselves to risks, large and small, that can affect our safety and health. These risks often go unrecognized until they lead to an accident. By routinely using these three questions to think critically about day-to-day activities, we can eliminate conditions or situations that lead to accidents. With a little practice, this critical thinking mindset will become a habit. It's that simple.

Consider for example the risks inherent in business travel. Like many of you, I travel frequently and often catch myself hurrying to make it to the airport or to arrive on time for a meeting at an unfamiliar destination. So what could go wrong? I could miss my flight or be late to my meeting, I could be injured in a traffic accident, or worse. If I pause and think about this critically, I give myself additional time to deal with possible traffic congestion or driving in unfamiliar environments. I'll also ask myself, "How can I prepare for surprises along the way?" This will lead me to identify alternate routes, review routes in advance to avoid making decisions (or looking at traffic conditions in Google Maps) while behind the wheel. Inclement weather often creates additional risks when on business travel. Do I really want to put my safety at risk, knowing the possible consequences of driving in heavy rain, ice, or snow? I may decide the risks are too great and that canceling or deferring my travel is the best action (I have canceled or deferred business trips for this reason).

I welcome your thoughts on applying this "engineered safety" mindset to everyday life, both inside and outside of work. What experiences have you had where you applied an engineered safety mindset or maybe should have applied that mindset?