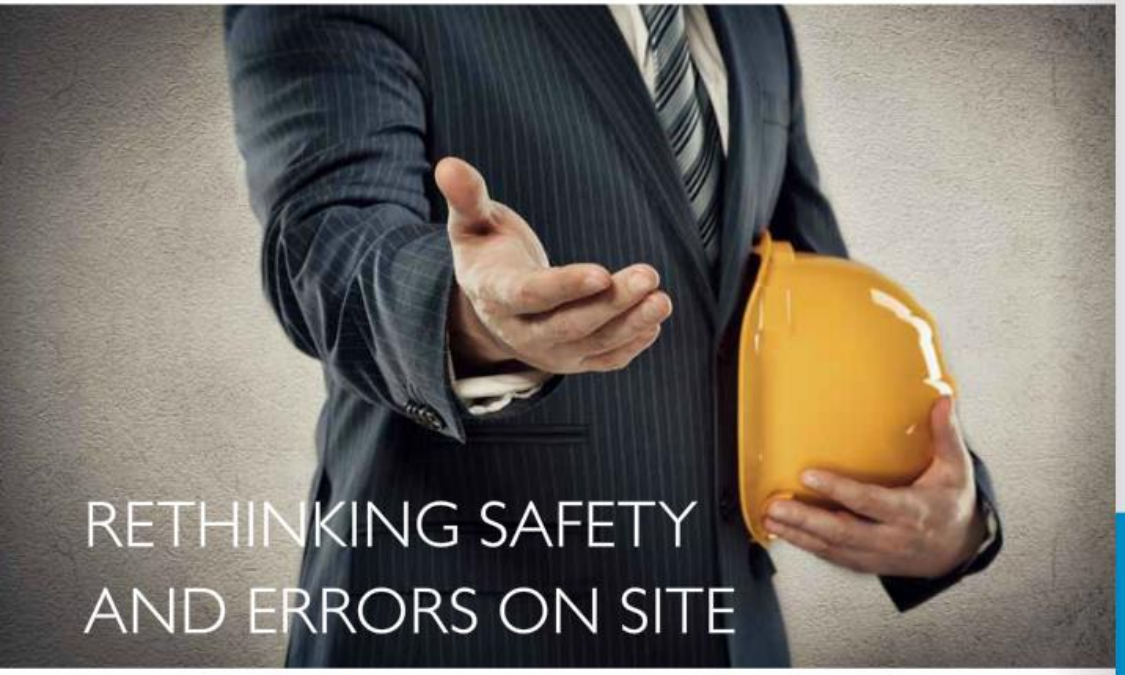

RETHINKING SAFETY AND ERRORS ON SITE

Despite countless projects and programs over many years, manufacturing is still starring - for the wrong reasons - on work health and safety lists.

The construction, mining and transport sectors record half of all Australia's workplace related fatalities each year. The latest incident at the new Royal Adelaide Hospital site in February this year is a stark reminder of the many dangers on construction sites.

At the time SafeWork SA confirmed that the fatality brings this year's work -related death toll to five. There were a total of 14 fatalities recorded in 2015.

Addressing safety procedures remains a concern for construction industry players and recent research into neuroscience suggests a new aspect to safety; that unconscious and human errors arise from inattention - and that safety can be improved by keeping people's minds alert and changing people's habits to look more and to think more about what they are doing.

Cristian Sylvestre, MD of Safe Start says the reality is that when we feel safe, we're far more likely to start operating on autopilot and pay less attention.

"Anyone who has ever driven a car home without being able to remember the last five minutes of driving knows all too well about being on autopilot."

"The answer, of course, is not to dismantle current safety systems, but rather to teach personal safety skills that help people pay attention more often," he says.

The majority of safety professionals struggle to understand how best to reduce human errors, however neuroscience research is revealing some significant new insights about the brain, offering new ways to approach the reduction of human errors in our workplaces. For example, we are learning that we do not see with our eyes, but with our brains. This means that our eyes are not serving as active video cameras, capturing every detail of the world around us.

Rather, our pre-conscious brain is constantly engaging our eyes to verify what our brains predict is going on. The brain's primary mission, unless intentionally directed otherwise, is to determine if there are any unanticipated risks to our surviving and thriving. According to neuroscientists, that means our eyes and our brains are more likely to see what they expect to see, rather than the reality of what is going on in the external world.

According to DEKRA Insight, knowing this one simple fact about the brain gives us powerful insights about how to prevent many of the human errors currently occurring in our work-places. This has implications for how we design our visual environments, and how we generate accurate situational awareness among our workforce. It means that we cannot take a passive approach to essential observational tasks, assuming people will, of course, see what they should see. Instead, to prevent serious injuries and catastrophic accidents, we need to train people to be 'active noticers' of all the weak signals in their visual environments. And, we have to build in human as well as technological redundancy on any visual search or watch-keeping tasks that are critical to process and people safety.

Fortunately, we can use neuroscience findings to develop a deeper understanding of the error mechanisms in the human brain and the impact of fatigue on brain functioning. We can also use this growing body of science to better design our organisational systems and shape our leadership messaging to mitigate brain-centric errors. By applying the lessons of neuroscience, we can finally drill down and answer the 'why' questions about human errors, and make our people, processes and environments safer.

ABOUT SAFETY FIRST

Cristian Sylvestre, MD of Safe Start is sharing his insights, as well as tools for improving your chances of not having a workplace incident, in a Premium Forum session at the Safety First Conference & Expo, taking place on 11-13 May 2016 at the Sydney Showground, Sydney Olympic Park.

The Safety First Conference & Expo is a one-stop safety event, bringing together a showcase of safety solutions alongside a packed conference program, with industry leaders sharing the latest research and strategies for improving workplace safety. Safety First runs alongside National Manufacturing Week (NMW), Australia's largest, longest-running industry event. NMW is the event that brings industry together to see and touch new technologies, and hear ideas for the future.