

The Best *Vs.* The Worst

by Mackenzie Wilson

The World's Best Safety Experts tackle the worst and most persistent safety problems.

Competence, complacency and fatal injuries

The counter-intuitive nature of serious incidents and fatalities

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SafeStart Author and SafeConnection moderator Larry Wilson doesn't just read summaries: he dives deep where others skim to get at the telling details.

While examining over 400 detailed incident investigation reports, Larry discovered that over 45 percent of fatalities happened to people over 50. Indeed, the majority involved craftsmen long experienced in their trade. To some, this might seem counter-intuitive. Wouldn't you be less likely to get hurt with more experience, more competence? And wouldn't new and young workers with less experience or training be more likely to get hurt?

This surprising pattern (similar findings were also just released in the UK) brought to mind the words of a long-serving occupational safety professional from over 30 years ago: "Larry, the young guys get hurt more than the old guys, but it's the old guys who die". At the time, Larry didn't understand why this should be so, but he recognised a phenomenon that needed proper understanding.

Unfortunately, the age dimension remains just as relevant today as it was back then, which is exactly why he invited eight more panellists to discuss competency, complacency and serious incidents and fatalities (SIFs) during this series of SafeConnection Webinars.

At the outset, Larry canvassed the panel to see if they too recognised this tendency in their workplaces: across the board, the answer was Yes:

- "With 20 years of experience, complacency will set in," says Ravindra Dhapola (Head Corporate SHE, CSR & Sustainability, Tata Coffee). "Then one day something happens and there is a serious incident".

- Indeed it might be that "multiple things go wrong", explains Alex Carnevale (President, Dynacast International). "It's an 'and-and' problem". In other words, a worker's eyes or mind were off task – and there was deviation from the procedure, PPE requirements, and so on.

- Larry agrees: "The number of reports I read where a fall arrest harness was five feet away from the guy with a perfectly good anchor point right there..."

The fact is that our brains are hardwired to become complacent, and the psychology that overlays that physiology plays an equally decisive role:

- "Incidents don't always happen because of at-risk conditions", points out Shankar Rajagopalan (Head Safety, Quality, Systems, Sustainability, Process Improvements & Business Excellence – Sterling & Wilson Middle East Solar Energy). When you do something for long enough you become 'unconsciously competent' – but sometimes you aren't doing the job 100 percent correctly, so there will also be times when you are 'unconsciously incompetent' and you aren't even aware of any deviation from proper procedure.

- Our brains use so much energy, evolution has caused us to try to conserve blood glucose. Therefore, "when the task is routine, the brain doesn't need to think about it", adds Jim Spigener (Chief Client Officer, DEKRA). "Serious events often happen during routine operations. This is why someone with so much experience can end up making a potentially fatal mistake".

Given these challenges, what can be done by way of prevention or mitigation? How can we reduce the disproportionately high level of serious incidents and



happened". As Alex says, a lot of the time you will hear 'oh, yeah, I almost did that once' or 'I almost forgot that once'. You want to make sure people aren't punished for coming forward with those near-misses".

Case Study: Jack Jackson (Senior Consultant, SafeStart) shares a chilling story about an SIF that happened under his supervision. The employee was a routine contractor who serviced dock plates. Jack noticed he wasn't using the safety arm: "I went to him and asked if he should be using the safety arm", he recalls, "and he told me 'I've been doing it this way for years'". The alarm sounded for a break.



When Jack returned afterwards, it wasn't until after he had been standing on top of the dock plate for some time looking for the employee that he realised he was crushed below the dock plate, underneath his feet.

"All I could think about", Jack recalls, "is how somebody who's been doing it this way for years could make a mistake this bad?". Probably the first time the man did it he thought to himself: 'what if this thing falls?'. And he probably thought that the second and third time too. But after a decade or so, he probably didn't think about it anymore.

The man lived, but he was paralysed from the neck down and never spoke again.

Experience insight from SafeStart's Larry Wilson, noting "the number of times a senior manager has asked me 'how can someone get complacent with 13,800 volts?' And I always answer, 'the same way you got complacent enough to fall asleep at the wheel'". Echoing this, Jim Spigener says: "during the first two weeks I worked at a cyanide plant I was terrified... after a couple of years I was hunting cyanide leaks with my nose". A human being can get used to any level of risk. When put like this, it makes sense. But to many, the idea that someone can become complacent with high amounts of hazardous energy is hard to accept.



fatalities amongst workers in their fifties and older? The answer lies in leadership mentality and in process preparation:

- "Management can put processes in place to avoid this type of complacency", explains Dr Waddah Ghanem (Senior Director, ENOC; Fellow, GCC Board Directors Institute). "If you have someone who is very good at their job, they will fall into their routine. So, you want to get them doing something else to switch up their routine."

- Alex Carnevale recommends that managers and organisational leaders stay catastrophe aware at all times: "We have to assume that there could be non-compliance or something going wrong on a personal level. Very rarely was it the first time that it almost

- Another panellist shares that they will have non-safety or employees from non-operational departments walk through the plant and see what makes them feel uncomfortable, because those are the things that an operations specialist might take for granted. He shares that they also ask employees this question: "if your child was working in this facility, where would you not want them working and why?"

As this tragic instance makes clear, the issue of competence and complacency can become even more difficult with external contractors: "How do you build a culture of resilience with contractors?" Larry asks the panels:

- "It's very challenging," says Hari Kumar (Director Group EHS Assurance, Emirates National Oil Company). Hari points out that it is no secret that contractors are often the weakest link, and at ENOC they see a higher incident rate within the contractors than permanent employees. "When it comes to preventing SIFs, we cannot



While on the surface the nature of fatal injuries seems counter-intuitive, examining the drivers reveals that experience breeds complacency: the combination of the latter with the unexpected means that everyday situations have the potential to escalate even a minor error such as a loss of balance to a SIF.

distinguish between the two, but priority usually is with your own people when you have limited resources and time”.

- To balance this natural tendency, they have put more resources into monitoring the contractors at his workplace, going from three to 11 safety officers who are there to refresh the contractors on procedures, and make sure they are competent.

- Ravi also emphasises the importance of building the capability of the managers who are working closely in the field and operations to monitor the workers’ behaviour. “We cannot just say ‘we have trained them, it’s their responsibility now”, he concludes. We have to go out there and make sure they are doing it.

The last word on this vital topic goes to SafeStart Author and SafeConnection moderator Larry Wilson: “While human error is inevitable or unpredictable, the states that cause them are not. You know when you are likely going to be tired every day, and you’re probably going to be right within 5-10 minutes. You know when you will likely be rushing. You know who or what makes you frustrated, and you can also predict, fairly accurately, when you will probably become complacent or go on autopilot. So now all you need to do is think about the four states, especially complacency, since you can’t notice it – in the moment – and just ask yourself, on a scale from 1-10: ‘how complacent am I with this job or task?’ In other words, we can beat complacency, but we have to put the tools to do it in the worker’s hands. It’s not going to happen just by putting up signs that say, ‘Think Safety’”.



Caveat: Let’s not discredit the importance of competence: we don’t want incompetent electricians, mechanics, crane operators or even forklift truck drivers! This is especially true when it comes to contractors: ensuring that personnel are properly trained, certified and performing their jobs correctly is imperative.



Take Aways

- ✓ Complacency is a human trait – with the experienced particularly prone
 - ✓ Modify job design so that workers avoid monotonous routines
 - ✓ Stay catastrophe aware: take every near-miss report seriously
 - ✓ An outsider's perspective can reveal unnoticed complacency
 - ✓ Contractor monitoring calls for extra commitment

- Based on SafeConnection panels on North America, Europe, The Middle East, India and Asia.
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