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"We Exist to Assist"

DANGER

A Second on Safety

June 2016

LITFR, MTIFR, TRIFR and other dodgy digits.

It's time to think again, and again, and again.

Recently I have been confronted again with a number of organizations who have reached out with the intent to take their business to the next level when it comes to safety. They have even come out and said quite bluntly "we have done the Du Pont thing and it worked for a while, but we're back where we were, might even be worse. We know we need to do something different to get where we want to be". What a refreshing thing to here. So my response whenever I hear such a refreshing observation is "how do you know what has worked for you in the past and what has not?". Why our Lost Time Injury Frequency Rate (LTIFR), of course. It is precisely at this point I have a really tough decision to make, and I need to make it fast.



- How genuine do I think these guys are in getting their safety right.
- Do I think they have the stamina to hear what I'm about to tell them.

If I am uncertain about either of these questions I generally wish them well, and step back.

Transforming the safety culture of a big business is challenging enough, without having to swim against the tide of mythical disinformation, that has developed a toxic "reality" over quite a number of years now.

LITFR, MTIFR, or whatever you might like to call it, has very little predictive value when it comes to the health of your organization, or your understanding of its safety culture. We know that without any doubt. The math is unassailable. Yet the myth remains real. It is true that at the very tails of the normal distribution curve, there might be some reasonable

conclusions we can draw. For example a bad LTIFR number is quite able to be used as a measure of a poorly performing organisation with respect to safety.



Now you might like to think that the converse is true. Nothing could be further from the truth. We know, again without any shadow of a doubt, how much effort people put into massaging numbers, and procedures, in order to minimise the LTIFR type result. What this means is that LTIFR numbers are invariably unreliable, at best. What it also means is that bad LTIFR numbers are frequently worse than understood. Yes, that's right. This can be a very tough pill to swallow for the millions of managers who have been seduced by the LTIFR mirage.

Please remember that on the day that the Macondo rig blew up, they were celebrating seven (7) years LTI free. Yes, that's right. BP were reporting seven years with no lost time injuries at all on that project. They were cutting the cake at the precise moment that they killed eleven guys. Clearly maintaining such a laser like focus on LTIFR, and the like, did nothing to contribute to the safety and health of that operation. The Macondo explosion is not the only event that shows almost identical history. That is, a significant bad event occurs immediately following a number of years of "good times" - those good times being measured by LTIFR etc.



It is my view that the focus on these LTIFR type numbers, that infects all levels of a business, actually adds to the levels of hidden toxicity within a business. In its simplest form you might think of that as a level of complacency. It is way more than that I'm afraid.

Allow me to come back to some observations I made a few years ago now. They are as relevant now, as they were then.

I little while ago now I presented the Keynote Address at the Safety Institute of Australia's National Conference in Sydney.

This gave me an ideal opportunity to mingle and review some of the latest and more exciting research and opinions being expressed from within our world of Safety.

The person who shared the Podium with me that Wednesday morning gave an excellent presentation. More on that one a little later, and she was an Accountant too.

Firstly though I made sure I attended the Presentation of Dr Ian Woods (Sr Research Fellow, Sustainable Development, Australian Equities). Ian spoke from the perspective of an organization that conducts in depth analysis of some of the world's largest companies, for the purpose of determining whether they would make a sound equity investment for

their Clients. This was a perspective I had not heard before and I was very interested in what he had to say. Dr Woods presentation went to the hub of one of the biggest challenges Safety Professionals have confronted for many years. The dreaded Lost Time Injury Frequency Rate (LTIFR) - there are related ones such as MTIFR and TRIFR etc. They all come from the same bucket though.

I was in for a bit of a surprise. Dr Woods made it abundantly clear that the analyses of LTI's rated very lowly when potential equity investors are exploring what it is that is predictive of a sound, profitable and sustainable investment. Very clearly, it was said, they are far more interested in seeing evidence of the existence of a concerted effort toward the "leading indicators" than LTIFR. When they actually looked at using LTIFR as a statistical predictor it actually showed a negative trend. The conclusion: LTIFR is of minimal use as a benchmark toward sound corporate investment (so why do we still find senior managers literally obsessed with LTIFR?). There are far better metrics to be considered. This research by Ian Woods is very refreshing. It is showing that the financial world is beginning to catch up with something that competent Safety Professionals have known for some



years now. I would go so far as to say that Dr Woods and the clients he is speaking about are actually ahead of the game. There are still far too many people playing in the sandpit of safety who tell potential clients what they want to hear, just to get the work. This unconscionable behaviour just serves to reinforce the myth. Those client companies invariably end up in the safety quicksand, trying to get themselves on solid ground again.

See the link for an exceptional paper by [Geoff McDonald](#). Would you believe that paper is fifteen (15) years old, and still we don't learn. By the way Geoff was a key authority to the Australian Government in their Industry Commission Report looking into state of Occupational Health & Safety in the Land of Oz. So don't discard his comments too quickly. I accept they might again be "difficult" to swallow for many?

Back to the Podium. Following my own "song 'n dance" I was joined by Dr Sharon O'Neill from the Faculty of Economics and Business at The University of Sydney. Sharon conducted an audience participation exercise that I had never seen done before; and I've seen a few. She asked the audience how many used the LTIFR as a key measure in determining the success/health or otherwise of the workplace. I'd say that more than two thirds of the room raised their hands. Fair enough; not surprising. Here is where it got really interesting. Sharon then on went to describe over a dozen different ways that her research has found that LTIFR is calculated. Her data-set came from within the minerals extraction sector; you would hope these guys would get it right. Anyway back to the room. For every one of the different methods described there were people in that room who indicated "that's the way we do it". Her very powerfully demonstrated conclusion; there is absolutely no value in comparing different LTIFR rates across companies; they are likely to be all measuring different things. Differences as little as not counting someone as being an LTI if they managed half their shift, verses counting them made a significant difference to the outcome result. The more dramatic was around some companies counting fatalities and most not.



Sharon then also showed a number of international company reports where it could even be shown that graphs were manipulated, or different representations chosen, that would try and sell the "message" that was desired. What we have is invalid information being aggregated, recreated, and obfuscated. Maybe even celebrated (Macondo). All keeping rooms of Mr Potato Heads busy for months. Not only an absolute waste of time and resources; a key contributor toward the maintenance of toxic safety cultures.

What is clear is that equity partners and shareholders actually want to know the real safety performance of their potential corporate partners. They are said to have an emotional or ethical stake in how safety is managed. When directly asked the question they reply by saying they would prefer to have information about significant injuries; e.g. sig absences, fatalities, burns etc. than the "small stuff". Guess what LTIFR strategically measures. The "small stuff". It does not discriminate between the infected finger and the amputated wrist. If you have six infected fingers and one amputated wrist you quite realistically will get a worse LTIFR result in the workplace with the infected fingers. People want to know about the amputated wrists.

Here is a quote from a person in the audience when Sharon and myself presented at the Conference.

G'day David,

I was at the conference when Dr O'Neil and you presented, strongly agree with your comments on LTI's. As the OH&S Supervisor at [REMOVED] between 2000 - 2004 my exposure to LTI's was to say the least a daily occurrence. The amount of energy devoted to ensuring we achieved our LTI ratio was beyond comprehension. Unfortunately, I was not in a position to change this approach as the corporate body located in the US believed this to be the Holy Grail in monitoring safety performance, as we both know this is not the case.

There is a very powerful message here. Sadly I believe it shall again fall on "deaf ears".

"LTIFR has had its day; It is time to focus on Safety Culture, Leadership and Process"

So Please, when you see "blips" in your LTI's, don't do the "chicken dance".

Stand back and think about the processes that you have in place.

- Are we doing enough safety leadership walk-arounds?
- Do we have pre-start meetings?
- Do we actively encourage our people to report hazards?
- Do we respond quickly when hazards have been identified by the workforce?
- Do we even know what our Safety Culture looks like (over 95% of business do not)?
- Do we have development opportunities for our people to enhance their individual safety leadership competencies?

Finally, remember that whenever you are measuring anything concerned with LTI you are actually measuring a small exclusionary metric. Apart from the fact that the metric is almost always infected in the manner described by Dr O'Neill, the minor deviations which do occur are rarely statistically significant.

This is a critical point!

Organisations themselves can contribute to significant workplace damage by responding in a reactive manner to data which actually is not significant. In any other industry that would be considered irresponsible.

Why do we accept it in Safety?

That one I have not answered. .

With my kindest regards

David G Broadbent

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