## Meta Incident Analysis: An Exploration of Incident and Near Miss Reporting

A. Fernando<sup>1</sup>, W. Smith<sup>2</sup>, Dr A. Hawkes<sup>3</sup> and T. Vincent<sup>4</sup>

<u>A. Fernando</u>, Chief Strategy Officer, Sentis, Brisbane QLD 4172.
Email: alex.fernando@sentis.com.au
2.W. Smith, Principal Consultant, Incident Analytics, Melbourne, VIC, 3121.
Email: warren@incidentanalytics.com.au
3. Dr A. Hawkes, Head of Psychology, Sentis, Brisbane QLD 4172.
Email: amy.hawkes@sentis.com.au
4. T. Vincent, Principal Consultant – Partnerships Lead, Sentis, Brisbane QLD 4172.
Email: thibault.vincent@sentis.com.au

Keywords: Critical Risk, Learning from Unplanned Events, Causal Analysis, High Risk industries, Governance and Reporting

## ABSTRACT

Incident reporting is a common feature of workplace health and safety, however longitudinal trends across incidents are rarely considered. A major Australian Port operation sought to strengthen their approach to the management of high-risk activities through an in-depth review of all incidents that had serious injury or fatality potential (SIFp).

A Meta Incident Analysis® (MIA) was undertaken and involved a precursor analysis of 355 incidents and near misses reported over a four-year period. There were 55 incidents identified with SIFp and these were subjected to a deeper analysis which included assessing efficacy of corporate reporting, effectiveness of critical controls and a causal analysis of human, local and organisational factors.

The analysis found that the the organisation invested a disproportionate level of resources, time and effort on low consequence incidents with a high proportion of SIFp incidents going under the radar. It was found that circa 1 in 6 incidents had SIFp with Motor Vehicles comprising 31% of these and Gravity related events comprising 35% of SIFp incidents.

More than half the SIFp incidents resulted from intentional work-arounds due to situation-specific control breaches. A lack of conscious attention was a major driver of human errors, poor planning and risk assessment were found to be major contributing factors for those incidents where the work was enabled.

As a result of this project, the Port Operation engaged in a renewed focus on critical risk management and enhanced its operating cadence for the workforce. As a result, the Port strengthened the presence of critical controls across all high-risk areas through further bow tie analysis, an update to its critical risk standards and increased workforce engagement in the use of critical control verifications in the field. Data analytics with lead and lag indicators continue to provide senior leadership team and risk owners with an understanding of exposure for SIFp and control effectiveness.

The audience will takeaway learnings from a real-world case study that provides data-driven insights of the human, local and organisational factors contributing to incidents with SIF potential. In addition, participants will understand the steps taken to categorise and analyse this incident data and the initiatives currently being implemented by the organisation as a result.