

The ten pathways to death and disaster questionnaire: a simple safety benchmarking tool

M. Cattani¹, J. Boylan²

1.Senior Lecturer, Edith Cowan University, Perth WA 6027. Email: m.cattani@ecu.edu.au

2.Senior Research Officer, Edith Cowan University, Perth WA 6027

ABSTRACT

In 'Ten Pathways to Death and Disaster' Quinlan (2014) identified ten risk factors after an analysis of many mining and other industry catastrophic incidents.

In this project we developed a questionnaire based on the ten pathways which asked participants to rank their employers effectiveness in each pathway from 1 (i.e. ineffective) to 10 (effective), and some additional participant background information. Following approvals, we administered it via an online survey tool to 704 participants across 13 venues at the 2019 WA Mines Safety Roadshow. We compared the questionnaire results to the WA Government analysis of mining fatalities publically available register.

Results included that of all participants 40% had a role including being a Health and Safety Representative, 25% were safety professionals, and 17% Managers. The strongest response (M = 7.48) suggested participants perceived their employer as being relatively effective in the implementation of a risk based approach to preventing injuries. The weakest response (M= 5.83) showed a relatively low perception of employers use of auditing as a continuous improvement process. Other results will be shown in the presentation.

Review of the 71 fatalities in the hazard register showed most fatality investigations included four or five of the ten pathways, and none of the fatalities included all ten pathways.

In this presentation we will discuss how to improve to a level of risk as low as reasonably practicable (i.e. should we aim for 8, 9 or 10?), and how do we assist the lower performing organisations?

The survey tool will be used to detect changes in fatality risk over the next 3 years, which is of interest considering the pending new WHS legislation in Western Australia.

The questions are available for use during this conference at the following link and a report of these results will be forwarded after the conference.