

Twice as likely to die: The failure of auditing to make an impact on health and safety outcomes in New Zealand

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Abstract

New Zealanders are twice as likely to be killed at work than Australians and seven times more likely than workers in the United Kingdom (UK). This article explores why health and safety auditing to meet due diligence requirements may not have had the intended impact on occupational health and safety (OHS) outcomes in New Zealand and considers what might be done to improve this.

Keywords

occupational health and safety; audit; auditing; due diligence; Health and Safety at Work Act;

Introduction

Many elements contribute to OHS performance, and this article draws attention to only one of these – the due diligence requirements of officers (s.44, Health and Safety at Work Act 2015 [HSWA]), and the use of OHS auditing to verify a person conducting a business or undertaking (PCBU) is meeting its legislative requirements (HSWA s.44[4][f]). This article considers why auditing to meet due diligence requirements may not have contributed to improving OHS outcomes, with particular reference to the work-related fatality rates in New Zealand, Australia, and the UK. Potential opportunities (requiring further research) for improvement are discussed – including audit practices and the behaviour of officers.

Legislative context

In 2015 (following the Pike River mining disaster) new OHS legislation was introduced in New Zealand based on Australia's Model Work Health and Safety Act 2011 and the UK's Health and Safety at Work Act (Peace et al., 2017). The new legislation introduced a due diligence duty for officers PCBUs (s.44, HSWA). Officers must carry out governance activities to make sure their PCBU is legislatively compliant but do not need to manage processes directly (Campbell, 2016) – a positive duty requiring officers to take an active role in monitoring OHS performance (Cosman et al., 2017; Peace et al., 2017).

New Zealand's OHS performance

When compared to the rate of work-related fatalities in Australia and the UK, New Zealand workers are significantly more likely to be killed at the workplace (Figure 1). Although the fatality rate appears to be decreasing year on year, on average (2016 – 2022) New Zealand workers are twice as likely to be killed at work compared to Australian workers, and seven times more likely than workers in the UK (Table 1) (Health and Safety Executive; 2023; OECD, 2024a; OECD 2024b; Safework, 2024; Worksafe, 2024).



Figure 1: Comparison of work-related fatalities rate per 1,000,000 workers (15 – 64 years) in New Zealand, Australia, and the United Kingdom 2016 – 2022

Notes on 2019 New Zealand data: In December 2019, Whakaari White Island erupted during tourism activities resulting in the deaths of 22 people leaving 25 people with life-altering injuries.

Country									
New Zealand				Australia			United Kingdom		
Year	Work- related fatalities	Working age population	Fatality rate per million workers	Work- related fatalities	Working age population	Fatality rate per million workers	Work- related fatalities	Working age population	Fatality rate per million workers
2016	74	3,097,098	23.89	187	15,941,869	11.73	147	42,146,016	3.49
2017	80	3,162,798	25.29	190	16,158,258	11.76	135	42,265,600	3.19
2018	62	3,219,957	19.25	144	16,378,352	8.79	141	42,386,168	3.33
2019	110	3,261,245	33.73	191	16,572,360	11.53	149	42,482,892	3.51
2020	69	3,333,950	20.70	196	16,701,405	11.74	113	42,596,435	2.65
2021	64	3,327,261	19.24	172	16,620,136	10.35	145	41,153,964	3.52
2022	59	3,320,352	17.77	195	16,782,434	11.62	123	43,071,360	2.86

WorkSafe NZ has now published revised data including 2023 at <u>www.worksafe.govt.nz</u>

Table 1: Worker-related fatalities in New Zealand, 2016 – 2022

Why might the HSWA s.44(4)(f) duty not have improved OHS outcomes in New Zealand?

New Zealand has no mandatory OHS audit standard (Martinov-Bennie et al., 2014). OHS audits are completed by internal assurance personnel or by third-party auditors using generic standards (Cosman et al., 2017):

- ISO45001 international OHS management system standard
- Safe Plus New Zealand-specific standard for OHS best practice
- ACC AEP injury management and OHS standard for PCBUs who are part of the ACC Accredited Employers Programme (work-related injury self-insurance).

Specialised audits are utilised for high-risk industries/activities, such as major hazard facilities or adventure tourism (Worksafe, 2023).

A PCBU that chooses internal auditing rather than external audit standards may find that internal politics and other pressures influence audit design and outcomes (Blewett & O'Keeffe, 2011; Frick,

2011; Martinov-Bennie et al., 2014; O'Neill et al., 2016). Generic audit criteria that are not matched to the risk profile of a PCBU may not measure as intended and can produce corrective actions that do not address the actual issues (Hutchinson et al., 2024; Martinov-Bennie et al., 2014: Robson et al., 2017; Zwetsloot et al., 2011).

The immaturity of the OHS audit industry and a limited number of skilled and experienced OHS auditors in New Zealand may reduce the effectiveness of verification activities (Gallagher et al., 2001; Gul et al., 2013; Martinov-Bennie et al., 2014; Robson & Bigelow; 2010; Robson et al., 2012). Auditors need experience to deal with the interpretive nature of OHS legislation otherwise they may produce an insufficient level of detail for officers to be able to effectively oversee the PCBU (Blewett & O'Keeffe, 2011; Cahan et al., 2022; Martinov-Bennie et al., 2014; O'Neill et al., 2016).

Difficulty measuring the intangible and qualitative aspects of OHS may reduce the effectiveness of verification activities (Hohnen & Hasle, 2011; Hutchinson et al., 2024; Martinov-Bennie et al., 2014). Single or one-off OHS audits are unlikely to accurately capture and assess the reality of complex organisational systems and processes and an officer relying solely on audit reports may not receive a complete picture of their PCBU's performance (Karanikas, 2017; Le Coze, 2005; Martinov-Bennie et al., 2014). As a result, OHS auditing can become a tick box exercise with officers seeing a narrow slice of information that does not verify the full nature of their PCBUs practices (Hohnen & Hasle, 2011).

How can the effectiveness of OHS auditing be improved in New Zealand?

The HSWA does not specify how officers are to meet s.44(4)(f), however, it is accepted that audits can be used to review occupational health and safety management systems (Cosman et al., 2017; Martinov-Bennie et al., 2014). As officers are often removed from operations, they need to be able to rely on the data from performance measures to ensure OHS is being effectively managed in their PCBU (O'Neill et al., 2015).

A focus on audit practices and officer capability may contribute to improving OHS outcomes in New Zealand. PCBUs using audit outcomes as performance measures need to ensure the audit is measuring as intended on a consistent basis (Robson & Bigelow, 2010). Although still susceptible to factors such as management pressure (Gul et al., 2013; Stice et al., 2022), adopting models and practices from other well-established fields could strengthen OHS auditing (Gallagher et al., 2001; Wheelwright, 2005; Martinov-Bennie et al., 2014). Using certified auditors who have the required technical expertise and interpersonal skills may improve the quality of audit outcomes (Martinov-Bennie et al., 2014). Conflicts of interest can be avoided by utilising auditors separate from any consulting and advice services or involvement in previous audits (Blewett & O'Keeffe, 2011; Martinov-Bennie et al., 2012)' however, this may be difficult to achieve in a small country like New Zealand.

Audit outcome reports have limited due diligence value if the officers reading them do not understand what is being reported or do not have a thorough knowledge of OHS from which to ask meaningful questions (Campbell, 2016; Cross & Locke, 2009; Martinov-Bennie et al., 2014). Officers can attend training to assist with understanding the requirements of OHSMS (Institute of Directors & Worksafe, 2016). This may help officers understand that lone audits can be a narrow window into a PCBU's health and safety performance, but building a range of audits with specific themes can allow auditors a better chance of uncovering deficiencies (Hutchinson et al., 2024).

Officers can require an in-depth and wide-ranging auditing process that is not a box-ticking exercise but rather an "...ongoing critical self-examination" (Hutchinson et al., 2024, p.8). An in-depth auditing process utilises a mixed-method approach, where auditors directly interact with groups of workers to obtain a fuller picture of the organisation and do not just use a desk-based approach (Gallagher et al., 2001; Martinov-Bennie et al., 2014). Auditors compare work-as-imagined (in processes and documentation) with work-as-done (in observations, interviews, worker focus groups and other operational activities) (Hutchinson et al., 2024). Any discrepancy between work as imagined and work as done is identified and rectified in the form of corrective actions (Hutchinson et al., 2024). Auditing in this manner will provide officers with information about the current overall state of OHS in the organisation, including the verification of actual risk exposure (O'Neill et al., 2016).

Conclusion

Work-related fatality data indicates that despite legislative changes the overall OHS outcomes for New Zealand workers continue to be poor when compared to Australia and the UK. The due diligence

requirements introduced in 2016 increased the accountability for officers to be more active in the governance of OHS outcomes; however, despite this specific set of duties workers continue to be injured and killed in the course of their work at a rate up to seven times higher than their counterparts in Australia and the UK.

Officers of a PCBU can utilise OHS auditing to meet their HSWA s.44(4)(f) duty, although generic audit criteria, the immaturity of the OHS industry, limited availability of skilled auditors, and the narrow focus of OHS audits may reduce the effectiveness of this activity. Adopting practices from well-established fields, educating officers on what to look for in audit results, and expanding the scope of audits may contribute to reducing work-related fatalities in New Zealand. Further research is needed to determine the link between HSWA s.44(4)(f) duties and OHS outcomes in New Zealand before realistic solutions may be identified.

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References

- Blewett, V., & O'Keeffe, V. (2011). Weighing the pig never made it heavier: Auditing OHS, social auditing as verification of process in Australia. Safety Science, 49(7), 1014–1021. https://doi.org/10.1016/j.ssci.2010.12.010
- Cahan, S. F., Che, L., Knechel, W. R., & Svanström, T. (2022). Do audit teams affect audit production and quality? evidence from audit teams' industry knowledge. Contemporary Accounting Research, 39(4), 2657-. <u>https://doi.org/10.1111/1911-3846.12807</u>
- Campbell, M. (2016). Due diligence and the Health and Safety at Work Act: a brave new world? The New Zealand Law Journal, July 2016, 218–222.
- Cosman, M., Tooma, M., Butler, A., Marriott, C., and Schmidt-McCleave, R. (2017). Safeguard health & safety handbook 2018. Thomson Reuters.
- Cross, J. & Locke, S. (2009). Safety reporting to the board. The Journal of Occupational Health and Safety, Australia, and New Zealand, 25(2), 137–143.
- Frick, K. (2011). Worker influence on voluntary OHS management systems A review of its ends and means. Safety Science, 49(7), 974–987. <u>https://doi.org/10.1016/j.ssci.2011.04.007</u>
- Gallagher, C., Underhill, E. & Rimmer, M. (2001). Occupational health and safety management systems: A review of their effectiveness. Retrieved from <u>https://www.safeworkaustralia.gov.au/system/files/documents/1702/ohsmanagementsystems_review_ofeffectiveness_nohsc_2001_archivepdf.pdf</u>, 18 May 2024.
- Gul, F. A., Wu, D., & Yang, Z. (2013). Do individual auditors affect audit quality? Evidence from archival data. The Accounting Review, 88(6), 1993–2023. <u>https://doi.org/10.2308/accr-50536</u>
- Health and Safety at Work Act 2015. <u>Health and Safety at Work Act 2015 No 70 (as at 23 December 2023)</u>, <u>Public Act Contents – New Zealand Legislation</u>
- Health and Safety Executive UK. (2023). Work-related fatalities in Great Britain, 2023. Retrieved from https://www.hse.gov.uk/statistics/assets/docs/fatalinjuries.pdf, 17 May 2024.
- Hohnen, P., & Hasle, P. (2011). Making work environment auditable A 'critical case' study of certified occupational health and safety management systems in Denmark. Safety Science, 49(7), 1022–1029. <u>https://doi.org/10.1016/j.ssci.2010.12.005</u>
- Hutchinson, B., Dekker, S., & Rae, A. (2024). Audit masquerade: How audits provide comfort rather than treatment for serious safety problems. Safety Science, 169, 106348-. <u>https://doi.org/10.1016/j.ssci.2023.106348</u>

- Institute of Directors & Worksafe New Zealand. (2016). Health and safety guide: Good governance for directors. <u>https://worksafe.govt.nz/dmsdocument/860-health-and-safety-guide-good-governance-for-directors</u>
- Karanikas, N. (2017). Evaluating the horizontal alignment of safety management activities through cross-reference of data from safety audits, meetings, and investigations. Safety Science, 98, 37–49. <u>https://doi.org/10.1016/j.ssci.2017.05.008</u>
- Martinov-Bennie, N., O'Neill, S., Cheung, A., & Wolfe, K. (2014). Issues in the assurance and verification of work health and safety information [Research Report]. Safe Work Australia, NSW. <u>https://www.safeworkaustralia.gov.au/doc/issues-assurance-and-verification-work-health-and-safety-information</u>
- Le Coze, J-c. (2005). Are organisations too complex to be integrated in technical risk assessment and current safety auditing? Safety Science, 43(8), 613–638. https://doi.org/10.1016/j.ssci.2005.06.005
- OECD (2024a), Working age population (indicator). doi: 10.1787/d339918b-en (Accessed on 17 May 2024).
- OECD (2024b), Population (indicator). doi: 10.1787/d434f82b-en (Accessed on 17 May 2024)
- O'Neill, S., Flanagan, J., & Clarke, K. (2016). Safewash! Risk attenuation and the (mis)reporting of corporate safety performance to investors. Safety Science, 83, 114–130. <u>https://doi.org/10.1016/j.ssci.2015.11.007</u>
- Peace, C., Mabin, V., & Cordery, C. (2017). Due diligence: a panacea for health and safety risk governance? Policy and Practice in Health and Safety, 15(1), 19–37. https://doi.org/10.1080/14773996.2016.1275497
- Robson, L. S., & Bigelow, P. L. (2010). Measurement properties of occupational health and safety management audits: A systematic literature search and traditional literature synthesis. Canadian Journal of Public Health, 101(Suppl 1), S34–S40. https://doi.org/10.1007/BF03403844
- Robson, L. S., Ibrahim, S., Hogg-Johnson, S., Steenstra, I. A., Van Eerd, D., & Amick, B. C. (2017). Developing leading indicators from OHS management audit data: Determining the measurement properties of audit data from the field. Journal of Safety Research, 61, 93–103. <u>https://doi.org/10.1016/j.jsr.2017.02.008</u>
- Robson, L. S., Macdonald, S., Gray, G. C., Van Eerd, D. L., & Bigelow, P. L. (2012). A descriptive study of the OHS management auditing methods used by public sector organizations conducting audits of workplaces: Implications for audit reliability and validity. Safety Science, 50(2), 181–189. <u>https://doi.org/10.1016/j.ssci.2011.08.006</u>
- Safework Australia (2024). Work-related fatalities. Retrieved from <u>https://data.safeworkaustralia.gov.au/interactive-data/topic/work-related-fatalities</u>, 17 May 2024.
- Stice, D., Stice, H., & White, R. (2022). The effect of individual auditor quality on audit outcomes: opening the black box of audit quality. Managerial Auditing Journal, 37(8), 937–966. https://doi.org/10.1108/MAJ-07-2021-3235
- Wheelwright, K. (2005). Some care, little responsibility? Promoting directors' and managers' legal accountability for occupational health and safety in the workplace. Deakin Law Review, 10(2), 470–497. <u>https://doi.org/10.21153/dlr2005vol10no2art288</u>
- Worksafe, 2023. Regulations at a glance. Retrieved from <u>https://www.worksafe.govt.nz/laws-and-regulations/regulations/regulations-at-a-glance/</u>, 15 May 2024.
- Worksafe, 2024. Dataset: Fatalities and injuries. Retrieved from <u>https://data.worksafe.govt.nz/graph/detail/fatalities?startDate=2016-04&endDate=2023-06&worksafe_confirmed_fatalities=Yes</u>, 14 May 2024.
- Zwetsloot, G., Hale, A., & Zwanikken, S. (2011). Regulatory risk control through mandatory occupational safety and health (OSH) certification and testing regimes (CTRs). Safety Science, 49(7), 995–1006. <u>https://doi.org/10.1016/j.ssci.2010.12.007</u>