Exploring Body Stressing Injuries in the Construction Industry: A Project conducted by an Australian Safety Authority

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Abstract

1. Introduction

Manual tasks present as a significant health hazard and financial cost (WorkCover, Western Australia, Government Gazette Rates, April 2014) in the Construction industry in Western Australia (WA). It is noteworthy that the Construction sector remains highly represented in terms of the number of injuries related reported to regulatory bodies, across all industries. Of the injuries reported, a vast number of these are musculoskeletal in nature. Many of these are due to body stressing and while performing manual tasks associated with particular occupations.

Occupational Safety and Health legislation in Western Australia advocates a risk management approach and the application of the hierarchy of controls towards preventing manual tasks injuries (Code of Practice – Manual Tasks, Western Australia). This can be achieved through the clear identification of duty holders and requirements related to the provision of safe systems of work in the workplace. Despite this, effective control of hazards associated with manual tasks remains difficult so it would be useful to explore what risk management initiatives were currently being implemented in the industry to mitigate the risks outlined above. This presentation will report findings of the project and any recommendations that have been made based on the findings.

2. Methods

This project incorporates a step-wise approach to achieving its aims in understanding and addressing task hazards in the construction industry. The steps included: (i) intelligence gathering from a range of sources, commencing with an analysis of statistical evidence related to body stressing injuries, reported to the workers’ compensation regulatory body (WorkCover), (ii) stakeholder engagement and meetings, (iii) workshops with medium to large sized Construction organisations, (iv) voluntary participation in a desk based audit tool incorporating an evaluation of both general systems related to control of manual task hazards in addition to those related to specific occupations or trades employed by the organisation, and (v) an analysis of collected data.

A stakeholder engagement model was utilised to encourage peak bodies representing large and medium sized Building and Construction companies to invite their members to attend voluntary workshops across the metropolitan Perth and south west regional Western Australia. Selected organisations attending the workshops were recruited to voluntarily participate in a standardised audit of their manual tasks

3. Results

Findings from the pilot investigations and existing body of knowledge in the area strongly suggests that body stressing certain occupations engaged in Construction sustained body stressing (Refer to Figure 1, Frequency Rates by Nature of Injury).
Figure 1.

There are a great number of manual tasks associated with construction, and within each occupation, many activities have manual task demands which may be difficult to eliminate entirely.

The audit tool and site inspections revealed several factors were implicated as hazards associated with body stressing in Construction. This included insufficient hazard identification and employees’ autonomous risk assessment of work tasks, incomplete or poor adherence to safe work procedures or JSAs, inadequate training and supervision, unexpected pressures associated with project timelines, poor or inadequate planning and ill equipped use of or provision of equipment and tools for the task, in addition to other high level controls at the design phase and those employed. Additionally, those employed in the Construction industry do not usually have a “fixed” workplace whereby controls are easier to implement and manage.

4. Conclusion

This project is currently being undertaken to explore some of the factors which may contribute to and perpetuate the risk of musculoskeletal injury due to body stressing in the Building Construction sector. The project approach utilises information synthesis, incorporating statistical analysis, stakeholder engagement feedback, site investigations and desk based audits utilising a standard tool. Future investigations will focus on identifying high risk manual tasks performed by workers employed in high risk occupations (based on WC data) and practicable control measures that are currently applied in the industry.

Preliminary findings reveal that Construction work inherently incorporates a significant number of manual tasks which present as hazardous. Construction faces unique complexities which present as significant barriers to a risk management approach to safety, unique to the industry. Construction workplaces are not fixed thereby making controls more challenging to implement and maintain. Some occupations are
being identified as significantly high risk of injury due to body stressing. These include carpenters, builder’s labourers, electricians, concreters and bricklayers.

Likely recommendations based on the preliminary findings of this project include continued stakeholder engagement, simplified industry and occupational specific educational publications and tailored enforcement approaches for industry inspectors to utilise in relation to specific hazardous manual task issues.

References


