An intervention in the Wholesale Storage Industry to reduce injuries particularly those associated with manual order picking.

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1. Scope
This case study will detail an intervention undertaken by WorkSafe Victoria (WSV), the Regulator of Occupational Health and Safety in Victoria, to reduce work-related and in particular musculoskeletal injuries associated with manual order picking/selection in warehouses and the reduction of injuries in the industry that followed.

The process was based upon a participative ergonomics model with WSV engaging the industry association, leading employers, the peak employee and employer associations, key unions and health and safety representatives from some larger employers. WSV was represented by an ergonomist, project officer, and inspectors.

2. Background
In 2002, it was identified that each year, over 280 claims from manual order picking occur in Victoria at a cost of A$11.5 million. A three year strategy was developed to engage with the industry to address these issues and involved:
- Formation of an industry forum where employers, industry associations, unions and health and safety representatives could discuss warehousing issues with the WSV;
- Analysis of the injury claims data by an ergonomist to identify high risk activities leading to the injuries;
- Workplace visits by the ergonomist and inspectors to research available controls to address high risk activities
- An industry solutions workshop.
- Publication of ‘Guide to Manual Order Picking’ by WSV to reflect the results of the workshop.
- Marketing strategy where a communications plan was developed and presentations occurred across Victoria to make employers and employees aware of the publication, and that OHS inspectors would visit their workplaces after six months to allow employers time to implement controls;
- OHS Inspector visits.

3. Discussion
3.1 Industry Forum
An industry stakeholder group was formed where warehousing employers, warehousing industry associations, unions and health and safety representatives could discuss warehousing issues with WSV. Manual handling issues within the sector were identified by the author after reviewing specific claim details. Issues were discussed by the group to determine how relevant it was to the industry, what control measures were used in workplaces, and whether the industry considered it a priority to address.

3.2 Claims analysis
Analysis of the injury claims data by the author in warehouses identified manual handling issues that included: order picking, container unpacking, cement bag handling, gas cylinder handling, and handling large or bulky loads.

3.3 Workplace scoping visits
Workplace visits by the ergonomist and inspectors were conducted to research available control measures in good performing workplaces identified from industry forum participants or previous inspector visits. Information gained from these visits were used to prepare guidance material or to determine scenarios for industry solutions workshops.
3.4 Industry Solutions Workshop

An industry solutions workshop was conducted in June 2003 involving 140 people from the warehousing industry, including representatives from industry associations, employers, employees and employee associations, suppliers, labour hire companies, safety inspectors, ergonomists and health and safety representatives.

The workshop included an overview of the issues in the industry presented by WorkSafe Victoria, Employer association, Employee association and a Certified Practising Ergonomist. Participants were then shown some typical order picking activities including; picking of items from one, two or three levels within racking, replenishing to these levels; picking to conveyor belt; packing to pallet from conveyor belt; and picking from racking using high bay order picking forklift.

The participants then were divided into groups and each group discussed one of the typical order picking activities. A brief body mapping exercise was conducted so that participants could relate the types of injuries that occur during this activity and what postures, movements or forces were contributing to these injuries. The final activity was to propose control measures that would address the postures, movement or forces identified. Each group reported back to all the participants. The mixture of employers, employees, inspectors and technical specialists within each group provided a wide range of experience and enabled the problems to be clearly identified with many participants ready to implement controls at their workplace.

3.5 Guide to Manual Order Picking document

From the results of the workshop, a document was drafted. Technical aspects of the document were provided by the author and the document was reviewed, amended and approved by a tripartite process involving the employer and employee associations and WSV;

3.6 Marketing Strategy

To promote the Guide, a communications plan was developed which involved a mail out to businesses in the industry of the document together with promotional material detailing the best working zone for your business. A series of presentations occurred across Victoria to make employers and employees aware of the publication that also included case studies from workplaces that had implemented good controls. Employers were also made aware that OHS inspectors would visit workplaces after six months to allow employers to implement controls;

3.7 Inspector visits

Around 1400 inspector visits were conducted during the course of the project. Field intervention resulted in more than 450 Improvement Notices, 30 Prohibition Notices and 38 Directions being issued to enforce compliance with the OHS legislation and the state of knowledge created by the guidance material ‘Guide to Manual Order Picking’;

4. Results

This intervention achieved a reduction in musculoskeletal claims within the target sectors of 18.6% for the period of the intervention. This result had not been achieved previously in this industry and so is testament to the approach taken by WSV in seeking industry and inspectorate input to solutions for addressing risk, producing guidance material which clearly shows WorkSafe’s expectations, conducting a focused campaign to publicise the material and educate affected parties on its requirements, and undertaking a targeted field intervention to ensure requirements are being implemented ‘on the ground’. The result is evidence that we have succeeded in an area that traditionally is recognised as one of the less ‘tangible’ risks.

5. Conclusion

This case study and other interventions by WSV demonstrates why WMSD arising from manual handling in Victorian workplaces have been steadily decreasing over the last 10 years while injuries from other mechanisms have remained constant even though the number of employees in Victoria has been slowly
increasing. The strong safety results recorded by the WSV are almost solely due to a reduction in injuries arising from manual handling.

While it is arguable that the reduction in claims achieved following this intervention is in large part due to the clarity of the guidance material on Manual Order Picking, this guidance was instrumental in informing both our inspectorate and workplace parties of our expectations for minimising or eliminating risks from manual order picking, and as such provided a critical tool to support enforcement activity

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References