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Creating healthy work in small enterprises - from understanding to action

Summary of current knowledge

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Guest Editorial: Special Issue – Understanding small enterprises: Healthy lives in healthy businesses

Creating healthy work in small enterprises – from understanding to action: Summary of current knowledge

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ABSTRACT

Although much is known about small and medium enterprises (SMEs), our current knowledge and understanding of occupational health and safety (OHS) and the work environment in SMEs is limited. Far less is known about how SMEs put our knowledge of OSH into action. In short, how do we create healthy work and healthy lives as well as 'healthy business' in SMEs? The present paper, which also acts as an Editorial for this special issue, addresses these questions by providing a summary of current knowledge – our understanding – about how to create healthy work and healthy lives for workers and owner-managers in SMEs whilst concurrently also aiming to create a healthy business (in terms of profitability and sustainability). This paper and the special issue also emphasise the need to convert this knowledge into action – 'from understanding to action'.

Keywords: small and medium enterprise (SMEs), small business, health and safety, work environment

INTRODUCTION

Policies and research in occupational health and safety (OHS) and the working environment have had – and still have – a focus on large enterprises. There are many reasons for this, not least of which are that they still employ a high

proportion of employees and have the resources to influence, interact and contribute to development and research. As a result research on which legislation is built – if it indeed is – is mostly based on research in large enterprises since small and medium enterprises (SMEs) do not have the

resources to contribute. There has been a belief that OHS support to SMEs was just a question of scaling the general policies and programmes, developed by and for large and medium sized businesses, to something simpler to fit SMEs. This belief is now recognised to be too simplistic and outdated – due primarily to an increased research focus in the area of SMEs and OHS.

Since the 1970s many industrialised countries have changed their regulatory frameworks for OHS. This has transformed them from a multiplicity of prescriptive laws covering only parts of the labour market, to a single performance-based law setting out procedural requirements supporting self-regulation, where employers and workers had to formulate and implement health and safety policies and procedures to manage health and safety risks (Bluff, Gunningham, & Johnstone, 2004; Quinlan, Bohle, & Lamm, 2010; David Walters et al., 2011). These changes were based on an industrial structure where large businesses dominated, where there was high union density and where standard employment contracts (negotiated between trade unions and employer associations or a legislated minimum employment contract or a collective employment contracts) were the norm. SMEs simply had to fit into these frameworks as best they could, and in practice were often ignored. However, over the past four decades the industrial structure (including the nature of work and the structure of commercial operations) has changed dramatically, with larger organisations downsizing and/or outsourcing operations and services, more flexible employment or contractual engagement of contractors (Quinlan, 1999), and with a decrease in union density (Quinlan et al., 2010). This has created massive changes in the working environment in large and small enterprises and the traditional setting upon which the current OHS legislation is based has eroded (Mayhew & Quinlan, 1999). OHS in most industrial nations is now driven by Acts directly addressing its management, supported by associated legislation, regulations, Codes of Practice and guidelines. The implication under this performance based (self-regulatory) leg-

islation is that all businesses (both large and small) are expected to manage the risks that arise out of their business activity through internal risk management systems in order to create and maintain a safe and healthy work environment.

Most of the international literature suggests that the physical, although not necessarily the psychosocial (Sørensen, Hasle, & Bach, 2007), work environment in SMEs employing fewer than 20 employees is more hazardous than in large enterprises, which implies that some of the characteristics of SMEs make it more difficult for them to create and maintain a safe and healthy work environment. There is growing evidence that people working in SMEs are more frequently exposed to workplace hazards and suffer more work-related injuries and illnesses than those working in larger businesses (Hasle & Limborg, 2006; Mayhew & Peterson, 1999; Morse et al., 2004; Okun, Lentz, Schulte, & Stayner, 2001; Stevens, 1999; Targoutzidis et al., 2014; David Walters, 2006). The magnitude of exposure to OHS risks amongst the SME workforce is unknown, but is likely to be higher and greater than that in larger enterprises. For example, Sørensen et al. (2007) suggest that the workplace, physical and chemical work environment in small businesses is particularly poor compared to larger organisations.

It should also be noted that in contrast to larger businesses the relatively poor OHS management and outcomes in small enterprises could be attributed to characteristics typical of SMEs. These include things such as informal management structures, unstructured approaches to OHS management, little or no internal health and safety expertise, or access to external sources of assistance (Baldock, James, Smallbone, & Vickers, 2006; Biggs & Crumby, 2000; Dryson, 1993; Vickers, 2003). These issues are further exacerbated in that SMEs are difficult to regulate due to their heterogeneous nature, geographical dispersion, lack of cohesive representation and relatively short-life spans (Dawson, Willman, Clinton, & Bamford, 1988; Eakin et al., 2000; Lamm, 1999; Storey, 1994; Walters, 2001). OHS, the work environ-

ment and the creation of healthy work in SMEs is therefore an important issue for most nations to address. This is especially true since SMEs commonly comprise a high proportion of the total number of enterprises nationally and employ a relatively large percentage of the workforce. For example, in New Zealand (the home country of three of the editors), where 97% of all enterprises employing fewer than 20 people account for 30% of all employees (Ministry of Business Innovation and Employment, 2014).

It is therefore appropriate that this editorial provides a short summary of current knowledge, and describes the origin and content of this special issue. We will also focus on explaining the nature of moving 'from understanding to action', and will conclude with a short section designed to aid readers to find further sources of knowledge about creating healthy work in small businesses.

SUMMARY OF CURRENT KNOWLEDGE

Research on OHS in SMEs and how to improve the work environment was very limited until the 1990s, but has grown considerably during the last two decades. The focus has started to change from identifying the hazards, exposures and consequences (e.g., injuries, and exposures to hazards), through to identifying the causes/special circumstances that SMEs operate within (e.g. limited human resources and knowledge), to identifying interventions and intervention strategies that can help create healthy workplaces in healthy businesses (e.g., national policies and programmes).

We now have a better understanding of the special features of SMEs and that OHS intervention programmes need to be specifically designed for them. Some of the main features of SMEs in this context are: i) the owner-manager as the focal point of the organisation; ii) the close social relations between employees often including family members and friends and the owner-manager; and iii) the short distance from decision to action and not least the limited resources (Hasle, Kvorning, Rasmussen, Smith, & Flyvholm, 2012). Most SME owner-managers take a positive approach to

OHS but also try and 'talk OHS risks down', criticise regulation as bureaucracy and push part of employer responsibilities onto their employees. They try to follow what they perceive as the acceptable standard amongst the stakeholders in the industry sector. Hasle et al. (2012) suggest the reasons for SME owner-managers underestimation of OHS risks and the 'push' part of their OHS responsibilities to the employees are that they obtain part of their identity from their business – they want to be decent employers with good social relations to their employees and avoid personal guilt and blame if employees get injured. The owner-managers often overestimate their knowledge about OHS risks and underestimate the risks (Hasle, Kines, & Andersen, 2009; Hasle, Kvorning et al., 2012; K. Olsen et al., 2010). They see OHS as a small issue compared to the daily operation of running the business. The limited resources of SMEs mean that owner-managers have the responsibility of dealing with responsibilities for all tasks including sales, human resource management, planning purchase of materials and equipment and health and safety (Hasle, Kvorning et al., 2012). Finally, research indicates that owner-managers prefer personal contact with customers, suppliers and other officials and advisors (Legg et al., 2010). All these factors need to be taken into account when designing OHS interventions targeted at SMEs, including the specific national, industrial and local contexts of the enterprises. Although there still is a need for more systematic design of support programmes (Legg et al., 2010), there are also a growing number of examples of successful support strategies which build on the understanding of SMEs adapted to the local, sector and national context. Among the strategies are incentive systems (Kvorning, Hasle, & Christensen, 2014; Olsen, Harris, & Gunnarsson, 2013), networking (see Limborg et al., 2014) and action learning programmes. In addition, Laird et al. (2011) suggested that understanding and utilising the specific characteristics of SMEs may provide a useful framework for intervention development and evaluation.

However, working environment programmes for SMEs are, in many cases still considered to be adjunctive ('placed in a sidecar'), with limited integration into business strategy and operation. Government programmes are most often split between the working environment or business development. Examples of integration are rare. The same applies to many programmes developed by Non-Governmental Organisations (NGOs) such as employers' associations, unions and insurance companies. The same split applies to small enterprises. Owner-managers believe that health and safety has to be fostered because of moral and legal obligations, yet is simultaneously a hassle which is costly and distracts attention from the daily fight for survival of the business.

There is therefore a need for the development of strategies which can overcome the split. One possibility is to prove the business case of working environment investment. A recent report from the European Agency for Safety and Health at Work has summarised existing case studies on this (Targoutzidis et al., 2014). Although helpful, SMEs rarely make such investment calculations (Hasle, Kvorning et al., 2012; Hasle & Limborg, 2006). For most owner-managers the decisive questions have to do with the practical problem the change (whether in equipment or organisation) is supposed to solve, whether the cost is sufficient low, and whether the practical implementation and operation can be carried out with limited use of the scarce time resources. The integration of business and the working environment is therefore a question of thinking the two issues together in daily operation. For example in small construction businesses, it is a question of including the working environment in the tendering process and using the safest equipment because it is also the most efficient. Another example can be the use of tools based on 'value stream mapping' from 'lean manufacturing', which can be used to identify both productivity and health and safety issues at the same time (Hasle, 2009).

Rethinking the business case in this way can be used by researchers and practitioners in the development of tools and methods, and it can be used

by governments and NGOs in cross-sectional programmes where, for instance, labour inspectors also relate to the business case of the working environment and ministries of commerce integrate the working environment into their business support programmes. In short, in order to create healthier work in small enterprises, there is currently an urgent need for new strategies designed to reach and support them. These strategies should be based on the concept of 'research to practice', which focuses on transfer of knowledge, interventions and technologies into prevention practices and products which are adopted into the workplace. The present special issue adds to our understanding about these issues and focuses on taking action.

FROM UNDERSTANDING TO ACTION

The papers in this special issue are based on presentations given at an international conference – *Understanding Small Enterprises (USE): Creating healthy lives in healthy businesses – From understanding to action*, held in Nelson, New Zealand in February 2013 (USE2013) (www.useconference.com) attended by 120 delegates from 22 countries, organised by the co-guest editors. It included nine keynotes and 82 presentations in 21 sessions reflecting ten streams (identifying the problem; agriculture sector; intervention; informal sector; stress and small business; hospitality and tourism; globalisation; practical tools; ethics and corporate social responsibility, and; governmental issues) including three roundtable discussions/workshops (managing OHS in the fishing industry – developing a research agenda; relationships in SMEs – problems, issues and resolutions; building capability for healthy SMEs and informal work – ergonomics and hygiene, and; what have we learnt from USE2013?).

Seventeen papers based on presentations at the conference were submitted for consideration for inclusion in this special issue. Nine were rejected, either immediately by the co-guest editors as unsuitable or after double blind peer review. Of the eight papers accepted for publication, five are

full papers and three are research notes. They complement the themes considered in the above summary of current knowledge.

The first two papers in this issue set the scene by outlining the need for a better understanding of OSH in SMEs (Cunningham et al., 2014), including agreement about the definition of an SME, and the challenges for research and practice (Lamm, 2014). Cunningham et al. (2014) kick off by pointing out that knowledge of OSH in small businesses (i.e. SMEs) is in its infancy. They consider how the characteristics of SMEs such as the number of employees, business age, structure, workforce, manager centrality, and culture can make it hard to conduct research and develop policy and practice to help create better work conditions (health and safety issues) in SMEs. Further, SMEs operate in a complex system of organisational relationships. They point out that OHS in SMEs is vitally important to national economies, due to the high prevalence of SMEs and large numbers of people employed in them. They emphasise the importance of a good psychosocial work environment and express concerns about the apparent lack of clarity relating to definitions of size of 'small businesses'. Lamm (2014) extends these considerations to include vulnerable, more culturally and ethnically diverse workers; i.e., employees in the small business sector that are increasingly engaged in low paid, non-standard, insecure or precarious work. In the western world at least, the ways in which people work (e.g., part-time, remote working) is changing and can materially influence both physical and psychosocial work environments and can have profound implications for the creation of good working conditions, particularly for vulnerable workers. Lamm points to the challenges of conducting research in small businesses, especially with vulnerable workers who are frequently transient, often work non-standard hours, and are likely to be marginalised and 'invisible'. She suggests some innovative research solutions to examine the 'extent of the problem', the 'experiences of vulnerable workers' and the creation of 'effective

OHS interventions', such as participative, community-based, mixed method triangulatory qualitative studies that go well beyond traditional 'myopic' epidemiological paradigms.

The next two papers (Chaiklieng et al., 2014; Gardner et al., 2014) provide specific examples of the size and scope of the problem by describing respectively the prevalence of musculoskeletal disorders and attitudes and perceptions (safety climate) about managing noise in SMEs. They also both provide good examples of different research methodologies. Chaiklieng et al. (2014) use a traditional epidemiological approach to show that there is a high prevalence of shoulder pain in garment workers in small 'informal' businesses in the Northeast of Thailand and propose that education of the workforce combined with redesign of their seats may provide a solution. Gardner et al. (2014) showed that compliance with hearing loss prevention ('noise') regulations was very low in 20 New Zealand SMEs, perhaps reflecting the difficulties that many SMEs face in managing noise. It is somewhat worrying to speculate that the situation may be widespread and potentially worse in industrially developing countries. Whilst safety climate in large companies was related to safety attitudes and safety behaviour and to perceptions of management priorities in managing hazards, these relationships were not present in their study of small businesses. Perceptions of safety climate in relation to noise were also unrelated to actual levels of noise, to organisational compliance with requirements to manage noise or to reported use of hearing protection devices, suggesting that there needs to be further examination as to how safety climate develops and is sustained in small organisations. In terms of policy implications they argue that research is needed into factors which facilitate or limit compliance with legislative requirements in small businesses, including identification of any additional resources that may be required to enable small businesses to meet their obligations to adequately manage noise hazards.

The last four contributions in this special issue (Martin and Guarnieri, 2014; Limborg et al.,

2014; Andersson and Rosen, 2014; Gunnarsson et al., 2014) provide current state-of-the-art examples of potential solutions, all aiming to help simultaneously to create better conditions for working lives of employees within SMEs and also to help in creating healthy businesses. It is pertinent to note that this duality of aims reflects an ergonomics/human factors approach (Dul et al., 2012) in which participative interventions are sought that can help to improve both small business performance (in an economic/business practice sense) and also in the working conditions, practices and environment for all of the actors within the small business system (mainly employees and owner managers, but others too, such as family members, wives, stakeholders).

Martin and Guarnieri (2014) also exemplify the difficult challenge of studying small businesses. They used an unusual methodology (monographic) to show that in a context where there is little differentiation in the social relationships that characterize the business, a small business owner can find it difficult to deploy a risk prevention plan. They remind us that while actions to raise the awareness of small business owners of their regulatory obligations have been well documented, we know little about their sustainability in practice. In a further twist to their unique methodology (a form of action research called research intervention management science), they show how their researcher transmitted health and safety information to the wife of a small construction business owner and to the workforce, but that the use of the information was limited by the social relations both within the business ('she lacked professional authority') and within the husband-wife relationship. So it seems that one of the common 'solutions' (i.e. informally or formally engaging the owner/manager's wife) used to overcome employee resistance to the creation of good work conditions, may have practical and social limitations. The study suggests that wife's role should be limited to administrative functions since the management and leadership of health and safety in small businesses

expose her to family and professional pressures that make it difficult for her to properly carry out the task.

In contrast, Limborg et al. (2014) explored the efficacy of networking to try and meet the challenge of creating good working conditions (health and safety). Once again exemplifying the need for innovative methodologies to study small businesses, they used realist evaluation and social capital theory based on data obtained via qualitative interviews, document analysis and observations to analyse two networks of small enterprises in Denmark that launched similar occupational health projects but had different outcomes. They identified that the mechanisms driving small business workplace safety decisions within each network were external (pressures from labour inspectors; professional support), and internal (horizontal relations/shared identity; workers involved in 'button up' process; exclusion criteria; pact on openness; shared commitment to new standards) and showed that both external pressures and internal motivations must be present to drive small businesses within a network to improve health and safety conditions.

Andersson and Rosen (2014) illustrate another unusual method of studying how information about health and safety (dusty atmospheres in this case study) may be transferred to SMEs – video exposure monitoring used in a 'visualisation'-training context. They claim the method could have advantages over traditional educational approaches and could help to improve managers' and workers' motivation to adopt good practices.

Lastly, Gunnarsson et al. (2014) address a seldom considered aspect of work in SMEs – return to work after sick leave. Using a qualitative methodology in 16 SMEs in Sweden, they found that none of the employers had formalised or documented routines for the return to work process and instead, used an ad hoc approach, yet they clearly recognised that they were, and should be, responsible for occupational adjustments and redeployment since they had the detailed knowledge of the enterprise's production and organisation. They all felt that they needed professional support in

developing the return to work process. Gunnarsson et al. point out that professional health service programmes are usually based on return-to-work to larger companies, not SMEs. They indicate there is a need for SME-oriented extensions to the professional competence of national occupational health service personnel as well as for improvements in provision of support in the return to work process so that adaptations can be more readily made to the SME workplaces and systems.

FURTHER SOURCES OF KNOWLEDGE

Whilst this special issue includes papers that cover a wide range of issues and methodologies that reflect current research in occupational health and safety in small enterprises, there are six other current and recent sources of up-to-date material. As already mentioned above, the first is the proceedings of the USE2013 conference (www.useconference.com), organised by the authors of this editorial. Its focus was 'from understanding to action'. The second is a special issue of the journal *Safety Science* (Legg et al., 2015a), also co-guest edited by the same authors. It contains 10 papers and is also based on presentations at the USE2013 conference, but with a different focus: 'Managing safety in small and medium enterprises' (SMEs) (Legg, Olsen, Laird and Hasle, 2015b). The third source is the proceedings of the first USE conference, held in Elsinor, Denmark in 2009 (USE2009) (www.useconference.com). This was conceived and chaired by one of the present editors (Hasle) and contains a plethora of conference abstracts and papers around the original conference theme: USE – a healthy working life in a healthy business. Its focus was 'from understanding to practice'. The fourth and fifth sources are also journal special issues, each resulting from the USE2009 conference (*Policy and Practice in Health and Safety*, volume 8, issue 2, 2010; *International Journal of Workplace Health Management*, volume 4, issue 2, 2011). The sixth and most recent source is a European Agency for Safety and Health at Work report on the business case for safety and health at work: Cost benefit analyses if

interventions in small and medium-sized enterprises (Targoutzidis et al., 2014).

The next iteration of USE conferences (USE 2015) will take place in Groningen, The Netherlands in October 2015. Its theme is: *A Healthy Working Life in a Healthy Business*, with a modern sub-theme: *Globalisation of SMEs and Corporate Social Responsibility* (www.useconference.com).

References

- Andersson, I-M., & Rosén, G. (2014). Video exposure monitoring for transfer of knowledge in chemical hazards to small enterprises. *Small Enterprise Research*, 21(2), 223-228.
- Baldock, R., James, P., Smallbone, D., & Vickers, I. (2006). Influences on small-firm compliance-related behaviour: the case of workplace health and safety. *Environment and Planning C – Government and Policy*, 24(6), 827-846.
- Biggs, D., & Crumie, N. (2000). *Characteristics of people working with chemical products in small firms* (No. 278/2000). Epsom, Surrey: Health and Safety Executive.
- Bluff, E., Gunningham, N., & Johnstone, R. (Eds.). (2004). *OHS regulation for a changing world of work* (1st ed.). Sydney, NSW: The Federation Press.
- Chaiklieng, S., Suggaravetsiri, P., & Puntumetakul, R. (2014). Prevalence and risk factors for work-related shoulder pain among informal garment workers in the northeast of Thailand. *Small Enterprise Research*, 21(2), 180-189.
- Cunningham, T. R., Sinclair, R., & Paul Schulte, P. (2014). Better understanding the small business construct to advance research on delivering workplace health and safety. *Small Enterprise Research*, 21(2), 148-160.
- Dawson, S., Willman, P., Clinton, A., & Bamford, M. (1988). *Safety and work: The limits of self-regulation*. Cambridge, UK: Cambridge University Press.
- Dryson, E. (1993). Occupational health needs in small industry in New Zealand: preferred sources of information. *Occupational Medicine*, 43(4), 176-179.
- Dul, J., Bruder, R., Buckle, P., Carayon, P., Falzon, P., Marras, W. S., et al. (2012). A strategy for human factors/ergonomics: developing the discipline and profession. *Ergonomics*, 55(4), 377-395.
- Eakin, J., Lamm, F., Limborg, H. J., Frick, K., Jensen, P. L., Quinlan, M., et al. (2000). International perspective on the promotion of health and safety in small workplace *Systematic Occupational Health and Safety – Perspectives on an International Development* (pp. 227–247). Oxford, UK: Pergamon.

- Gardner, D., Legg, S., McBride, D., & McLaren, S. (2014). Safety climate, attitudes to noise management and exposure to noise in small and medium sized workplaces in New Zealand. *Small Enterprise Research*, 21(2), 190-201.
- Gunnarsson, K., Larsson, M., Schill, H. P., & Josephson, M. (2014). Return to work in small enterprises. *Small Enterprise Research*, 21(2), 229-237.
- Hasle, P. (2009). Lean and the psychosocial work environment. In P. Ø. Saksvik (Ed.), *Prerequisites for healthy organisational changes* (pp. 1-9). Bussum, NL: Bentham Science.
- Hasle, P., Kines, P., & Andersen, L. P. (2009). Small enterprise owners' accident causation attribution and prevention. *Safety Science*, 47(1), 9-19.
- Hasle, P., Kvorning, L. V., Rasmussen, C. D. N., Smith, L. H., & Flyvholm, M.-A. (2012). A model for design of tailored working environment intervention programmes for small enterprises. *Safety and Health at Work*, 3(3), 181-191.
- Hasle, P., & Limborg, H. J. (2006). A review of the literature on preventive occupational health and safety activities in small enterprises. *Industrial Health*, 44(1), 6-12.
- Hasle, P., Limborg, H. J., Kallehave, T., Klitgaard, C., & Andersen, T. R. (2012). The working environment in small firms: Responses from owner-managers. *International Small Business Journal*, 30(6), 622-639.
- Kvorning, L. V., Hasle, P., & Christensen, U. (2015). Motivational factors influencing small construction and auto repair enterprises to participate in occupational health and safety programmes. *Safety Science*, Special Issue, 71, 253-263. doi: 10.1016/j.ssci.2014.06.003
- Laird, I., Olsen, K., Harris, L.-A., & Legg, S. (2011). Utilising the characteristics of small enterprises to assist in managing hazardous substances in the workplace. [Conceptual paper]. *International Journal of Workplace Health Management*, 4(2), 140-163.
- Lamm, F. (1999). *Occupational health and safety in Australian small business: What can be done to reduce the lack of awareness and raise the level of compliance in Australian small business?* Randwick, NSW: Sydney Industrial Relations Research Centre, UNSW.
- Lamm, F. (2014). The challenges of researching OHS of vulnerable workers in small businesses. *Small Enterprise Research*, 21(2), 161-179.
- Legg, S., Olsen, K., Lamm, F., Laird, I., Harris, L.-A., & Hasle, P. (2010). Understanding the programme theories underlying national strategies to improve the working environment in small businesses. *Policy and Practice in Health and Safety*, 8(2), 5-35.
- Legg, S., Olsen, K., Laird, I., & Hasle, P. (Guest editors) (2015a). Managing safety in small and medium enterprises. *Safety Science*, Special Issue, 71, 189-298.
- Legg, S., Olsen, K., Laird, I., & Hasle, P. (2015b). Managing safety in small and medium enterprises (Editorial). *Safety Science*, Special Issue, 71, 189-196.
- Limborg, H. J., Grøn, S., & Jensen, M. H. (2014). Networking among small and medium-sized enterprises: Meeting the challenge of promoting safety and health measures. *Small Enterprise Research*, 21(2), 214-222.
- Martin, C., & Guarnieri, F. (2014). The role of the entrepreneurs' wives in the management of occupational risk: A monographic study of the limits of delegation. *Small Enterprise Research*, 21(2), 202-213.
- Mayhew, C., & Peterson, C. (1999). Identifying patterns of injury in small businesses: Piecing together the data jigsaw *Occupational health and safety in Australia*. Sydney, NSW: Allen & Unwin.
- Mayhew, C., & Quinlan, M. (1999). The effects of outsourcing on occupational health and safety: A comparative study of factory-based workers and outworkers in the Australian clothing industry. *International Journal of Health Services*, 29(1), 83-107.
- Ministry of Business Innovation and Employment. (2014). *The Small Business Sector Report 2014*. Wellington, NZ: Author.
- Morse, T., Dillon, C., Weber, J., Warren, N., Bruneau, H., & Fu, R. (2004). Prevalence and reporting of occupational illness by company size: population trends and regulatory implications. *American Journal of Industrial Medicine*, 45(4), 361-370.
- Okun, A., Lentz, T. J., Sieber, W.K., Jones, J.H., Piacitelli, G.M., Catlett, L.R., Schulte, P. A., & Stayner, L. (2001). Identifying high-risk small business industries for occupational safety and health interventions. *American Journal of Industrial Medicine*, 39(3), 310-311.
- Olsen, K., Harris, L.-A., Laird, I., Legg, S., Perry, M., & Hasle, P. (2010). Differential intervention strategies to improve the management of hazardous chemicals in small enterprises. *Policy and Practice in Health and Safety*, 8(2), 57-76.
- Olsen, K. B., Harris, L.-A., & Gunnarsson, K. (2013). Realist analysis applied to an occupational health and safety economic incentive programme for micro businesses in high risk industries. In: Laird, I & Olsen, K. (Eds), *Understanding Small*

Enterprises (USE) 2013 – From USE to Action: Transforming our understanding of small enterprises into practice to create healthy working lives in healthy businesses. Nelson, NZ: Massey University & AUT University; pp. 319 – 334.

Quinlan, M. (1999). The implications of labour market restructuring in industrialized societies for occupational health and safety. *Economic and Industrial Democracy*, 20, 427-460.

Quinlan, M., Bohle, P., & Lamm, F. (2010). *Managing occupational health and safety; A multidisciplinary approach* (3rd ed.). London, UK: Palgrave Macmillan.

Sørensen, O. H., Hasle, P., & Bach, E. (2007). Working in small enterprises: Is there a special risk? *Safety Science*, 45(10), 1044-1059.

Stevens, G. (1999). Features - Workplace injuries in small and large manufacturing workplaces: An analysis of the risks of fatal and non-fatal injuries, including figures for 1994/5–1995/6. *Labour Market Trends*, 107(1), 19-26.

Storey, D. J. (1994). *Understanding the small business sector*. London, UK: Routledge.

Targoutzidis, A., Koukoulaki, T., Schmitz-Felten, E., Kuhl, K., Hengel, K. M. O., Rijken, E., et al. (2014). *The business case for safety and health at work: Cost-benefit analyses of interventions in small and medium-sized enterprises*. Luxembourg: European Agency for Safety and Health at Work.

Vickers, I., Baldock, R., Smallbone, D., James, P., and Ekanem, I. (2003). *Cultural influences on health and safety attitudes and behaviour in small businesses*. Epsom, Surrey: Health and Safety Executive.

Walters, D. (2001). *Health and safety in small enterprises. European strategies for managing improvement*. Brussels, Belgium: P.I.E.–Peter Lang.

Walters, D. (2006). The efficacy of strategies for chemical risk management in small enterprises in Europe: evidence for success? *Policy and Practice in Health and Safety*, 4(1), 81-116.

Walters, D., Johnstone, R., Frick, K., Quinlan, M., Baril-Gingas, G., & Thébaud-Mony, A. (2011). *Regulating workplace risks. a comparative study of inspector regimes in times of change* (1st ed.). Cheltenham, UK: Edward Elgar.

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Understanding small enterprises: Healthy lives in healthy businesses

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