

Local hazards to cross-reference against key areas of organisational risk.

Evidence for policy or strategy development/recombination of corrective actions.

Analysis Cluster Diagrams for Musculoskeletal injury, Mental Stress and Challenging Behaviour incidents.

Learning outcomes Understanding of qualitative analysis for strategy development.

Identifying multi-hazard interaction and associations.

Appreciation for a visual representation of hazard identification when developing in the risk-management strategy.

3F.002 RISK ASSESSMENTS – VALUABLE TOOL OR AN EXERCISE IN FUTILITY

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The question that is posed by this presentation is whether or not risk assessments are a valuable tool or an exercise in futility. Organisations are faced with a conundrum, as WHS/OHS Legislation identifies that employers must ensure the health and safety of people 'so far as reasonably practicable This is done by identifying the hazard and controlling the risk.

But regulators state that the 'method does not require elaborate systems or large amounts of paper to support it. How the method is put into action depends on the complexity of the hazards or risks, the nature of the organisation and how its business is conducted.

What happens if the risk assessment is wrong? Who is qualified to prepare a risk assessment? Assessing risk is not an exact science. It relies on knowledge, experience and an understanding of chemicals, processes and human behaviour. What one person considers as a risk another may not. This presentation also poses the question of whether or not having a poorly prepared risk assessment is better than having no risk assessment. Using case studies this presentation will examine the advantages and disadvantages of proprietary risk assessments along with other issues that are that seemed to have become urban myths when completing risk assessments.

3F.003 SAFETY DATA SHEETS EXPOSED; THE IMPLICATIONS OF POOR AND INACCURATE SDS

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Safety data sheets contain critical information for the safe use, handling, storage, transportation and disposal of chemicals. SDS's provide essential information for the production of risk assessments. The reliance of such documents by occupational health and safety professionals, chemists, and students is massive.

As health and safety professionals it is important to understand that all safety data sheets are not necessarily equal. But how do you know if the information contained on the SDS is accurate? What are the implications/ramifications of having an inaccurate data and information of the SDS?

This is paper is a case study surrounding the purchase of a pack of irritant smoke tubes used for the testing of fume cupboards, and the ongoing narrative which occurred when an importing supplier was asked for an Australian GHS Compliant safety data sheet.

This presentation also looks at the implications of a poorly written SDS and the possible consequences of an inaccurate information, as well as raising questions about the use of third party SDS and who can be considered as a 'subject matter expert'.

3F.004 OCCUPATIONAL HEAT STRESS AND ECONOMIC BURDEN: EVIDENCE FOR WORKPLACE HEAT MANAGEMENT POLICIES

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Background The adverse effects of heat on workers' health and work productivity are well documented. However, the resultant economic consequences are less understood. This review aims to summarise the retrospective and future economic burden of workplace heat exposure.

Methods Literature was searched from database inception to August 2019 using PubMed, Scopus and Embase. Papers were limited to original human studies investigating costs from occupational heat stress.

Results This review included 14 studies. 12 studies estimated costs secondary to decreased labour productivity. Predicted global costs from lost worktime were \$US 311 billion in 2010 ($\approx 0.5\%$ of GDP), \$2.5 trillion in 2030 ($>1\%$ of GDP) and up to 4.0% of GDP by 2100, with additional expenses after considering decreased work efficiency. Three studies estimated healthcare expenses from occupational illnesses/injuries due to heat with averaged annual costs exceeding \$1 million in Spain and Guangzhou and \$250,000 in Adelaide. Developing countries and countries with warmer climates had greater GDP losses. Some studies investigated and observed greater costs per worker in outdoor industries, amongst males, those aged 25 to 44, and medium-sized businesses.

Conclusions Estimated global expenses are substantial.

Climate change mitigation and adaption can minimise most future costs. Further research exploring the relationship between occupational heat stress and costs, expenses from decreased work efficiency and healthcare, and costs stratified by demographics factors is warranted.

Learning Outcomes Analysing heat-attributable occupational costs may guide the development of workplace heat management policies and global warming strategies. Responding to climate change is crucial to minimise future economic burden

3F.005 THE EPIDEMIOLOGY OF HOME AND WORKPLACE INJURIES IN NEPAL: A HOUSEHOLD SURVEY

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