

and safe work for all, work-related safety actions need to include a focus on males, older workers, and workers in the primary production and transport sectors.

#### 8C.002 LABORATORY SAFETY STANDARDS AND THEIR IMPORTANT IN LAB SAFETY AND TRAINING

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Every year, preventable laboratory accidents either kill or maim laboratory workers. Yet despite the plethora of legislation, regulations and Standards, these incidents continue to happen. One of the key methods of reducing laboratory based incidents is AS/NZS2243 Safety in Laboratories series and AS 2982 Laboratory Design and Construction. These standards are unique as there is no other in-depth and substantive laboratory standards in the world.

This paper, using case studies, will provide an overview of AS/NZS 2243 an AS/NZS 2982 how by adopting these laboratory safety standards, that laboratory based incidents can be prevented.

#### 8C.003 BARRIERS OF SAFETY PRACTICE AND HEALTH-SEEKING BEHAVIOR AMONG FISHERMEN IN COASTAL BANGLADESH

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**Background** Over 37 million people are involved in fishing occupation worldwide, around 90% are from Asia. Bangladesh is a riverine country bordering with the Bay of Bengal where fishing is a vulnerable occupation as they exposed to water related risks and affected by disaster. There is limited information on drowning and its health consequences among fishermen. The objectives of the study were to explore the barriers of safety practices and identifying health-seeking behavior of the fishermen in coastal Bangladesh.

**Methods** A qualitative study was conducted between October-November 2016 deploying IDIs, FGDs with fishermen, lenders and boat owners along with fishing practices observations. Transcribed data were coded into NVIVO-11, then analyzed by thematic contents.

**Results** Fishermen mentioned they prioritized livelihoods over their safety. Instability in work and financial hardship contributed to risk-taking behavior of fishermen. They usually went for fishing in sea as forced by boat-owners or local lenders from whom taking loan for fishing-net. Many women engaged in fishing with their young children and faced drowning-risks because their traditional cloths restricted free-movement in water. Fishermen usually carried first-aid box in sea, but those were not sufficient. Most of the fishermen didn't have adequate knowledge on CPR, used traditional methods in case of any drowning-case.

**Conclusion** Fishing occupation is high exposure to drowning risks in the coastal region of Bangladesh.

**Learning Outcomes** Legislation on carrying life-saving equipment on fishing boats and training on resuscitation of post

drowning during fishing in sea would be crucial intervention to reduce drowning among the fishermen.

#### 8C.004 LABORATORY SIGNAGE, IS THERE A CLUTTER ISSUE?

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Work areas such as research laboratories expose workers to a variety of hazards with different risk levels. Providing adequate safety in these environments is an extremely complicated exercise that can only be achieved with adequate training as well as effective visual signage. In work places like The Australian Institute of Bioengineering and Nanotechnology, where each area is subjected to stringent government regulations on top of the inherent risks posed by the existing chemicals and instrumentation, there is a risk of over-accumulation of signage with the net result of overloading the senses of users. My Masters' literature review research project identified a number of ideal features to facilitate noticeability, visibility and comprehension of signs and it is therefore crucial to abide by best practice. Signage at my institute was collected and classified according to published and revised criteria. The analysis highlighted issues with clutter display. Effective design and placement of signage needs to be undertaken using a multidisciplinary approach incorporating social psychology, communication studies and the visual creative sciences, as well as taking into consideration cultural differences among the intended audience.

#### 8C.005 POST-PREVENTION CONTROL: MODERATING THE GROUND HANDLERS' FATIGUE AND SAFETY PERFORMANCE OUTCOMES

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The aircraft ground handling is widely known as complex operations with adverse working conditions in the air transport industry. The significant growth of the industry require an extensive ground handling services to cater the demand from air traveller and cargo. The ground handling workers were overwhelmed by work and prolonged fatigue, thus leading to workplace accidents or near misses. The study aims to investigate the relationship between fatigue and safety performance outcomes of ground handling workers, and to examine whether the post-prevention control of accident/incident can change the magnitude of the relationship. A sample of 523 workers were drawn from four major ground handling companies operated at Malaysia's international airports to participate the survey. The results indicated that were significant relationship between physical and emotional exhaustion with accidents and near misses as well as working condition and near misses, but not with accidents. The results also revealed that post-prevention control only influenced the physical and emotional exhaustion with near misses, in contrast with accidents or relationships between working condition with accidents and near misses. The study

provides concrete evidence that fatigue factors are predictor to near misses and not in the case of accidents. The introduction of post-prevention control however proven to be effective with workers' fatigue and emotional exhaustion instead of working condition of this companies. This study contributes to aircraft ground handling safety by investigating the workers' fatigue factors, thus helping to improve the company and individual performance as well as reduce the risks related to fatigue.

### 8C.006 KEY FACTORS FOR SUCCESSFUL IMPLEMENTATION, MAINTENANCE, AND SUSTAINABILITY OF WORK SAFETY INTERVENTIONS

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**Background** An investigation of Disability Support Workers' (DSWs) psychosocial work safety showed poorer health and safety outcomes than norm groups. Numerous safety interventions derived from a work safety climate measure and stakeholder feedback were identified, with seven translated into practice and evaluated. At evaluation, roll-out varied from organisation-wide implementation to implementation that was restricted to limited work-sites. Successful implementation of interventions was facilitated by wide safety benefit consensus, strong overt management commitment, and use of change champions. Findings supported the importance of factors identified in research for successful change implementation, but less research had been reported about ensuring longer-term intervention maintenance and/or sustainability. Thus, a follow-up study used and evaluated a model to understand the key factors required for the successful implementation, maintenance and sustainability of work safety interventions.

**Method** Semi-structured interviews were used to follow the seven implemented work safety interventions to identify factors facilitating or hindering their implementation, maintenance, and sustainability.

**Results** Numerous influential intervention and organisational factors were identified. These were conceptualised in the model as: 1) intervention attributes; 2) implementation process characteristics; 3) leadership behaviours and characteristics; and 4) the internal and external organisational context.

**Conclusions** Findings suggested no 'one size fits all' approach to factors critical for implementing, maintaining and/or sustaining these successful interventions. Rather, relevant factors and combinations of factors varied in importance across interventions and over the course of the intervention implementation.

**Learning Outcomes** Findings support the need to identify and address factors facilitating and/or hindering the longer-term sustainability of implemented safety recommendations.

### 8C.007 IMPROVING THE SAFETY OF VULNERABLE GARMENT SECTOR WORKERS COMMUTING TO WORK

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**Context** In Cambodia, more than 700,000 factory workers face unacceptable and preventable risks daily commuting to & from work. Irrespective of a number of interventions implemented to mitigate these issues, daily commuting safety risks for factory workers remain high.

**Process** Our recently completed pilot program focused on four key areas:

1. Road Safety Management
2. Vehicles & Modes of Transport
3. Safer Infrastructure
4. Safer Road Users

Our activities compliments Universal Road Safety Goals and aligns with the following UN SDGs:

- Good Health
- Sustainable Cities and Communities

Our Program impacted 26,000 workers and drivers and engaged over 100,000 people through online campaigns.

**Analysis** Gathering data by various methods including worker and driver baseline and end-line KAP surveys, helmet observations and crash reporting facilitated evidence-based decision making and the evaluation of the effectiveness of the program.

**Outcomes** The Program has made tangible changes to the attitudes and behavior of workers and drivers. 85% of workers and 28% of drivers at targeted factories reported safer driving conditions. Reports indicate drink-driving among transport providers reduced by 22% and speeding reduced by 18%. Helmet-wearing at five factories increased by 24%. Passenger vehicle changes at 3 factories total 15 new buses and 30 new vans. Factories report a 77% decline in the number of crashes.

**Learning Outcomes** The success of the program confirms the effectiveness of our program model in improving commuting safety among workers in low and middle-income countries. Moreover, lessons learned provide opportunities for improvement and effective adaption to different contexts.

### 8C.008 ACTIVELY ENGAGING ACADEMICS THROUGH AN OHS HAZARD PROFILING EXERCISE: LESSONS LEARNED

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**Context** In 2019, Occupational Health and Safety (OHS) staff within the Faculty of Health performed a hazard mapping exercise as a means to greater understand the current OHS risk profile of our teaching operations.

**Process** Fifteen hazard profiles were performed across five schools within the Faculty of Health. The use of a specifically designed OHS hazard mapping toolkit provided a consultative framework to openly discuss with staff current practices and concerns relative to OHS and teaching program quality.

**Analysis** A qualitative analysis of the hazards and considerations required to manage student hazards and risks aligned to teaching and research activities was performed though discussion held. Action plans from the common themes identified were implemented with shared responsibility between professional OHS and teaching program staff.

**Outcomes** The hazard mapping toolkit enabled a consultative and stepped approach to encourage open discussion, and aid greater understanding of the OHS responsibilities relative to a teaching program domain.