



Service Priorities and Programmes Electronic Presentations

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Workplace Safety Enhancement Program: Heat Stress Exposure Assessment and Improvement in Alice Ho Miu Ling Nethersole Hospital (AHNH) & Tai Po Hospital (TPH)

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Introduction

Heat stress is an environmental hazard which may pose health risk to workers, especially those working in catering and laundry departments during summer time. Thus, AHNH and TPH OSH Committee set up a working group to evaluate the heat stress by conducting a 'Heat Stress Exposure Assessment and Improvement Program' at high risk workplaces.

Objectives

1. To evaluate staff's exposure to heat stress in stores, laundry and catering department in AHNH and TPH. 2. To identify potential risk hazard and recommend improvement plan. 3. To enhance management commitment on workplace safety and staff's health issue.

Methodology

1. A working group consisted of OSH Committee and various department managers were set up in August 2014. 2. Interviews with workplace supervisors were conducted to understand the heat-generating tasks, staff work practice and management control in preventing heat stress. 3. Site visits were conducted to identify hot spot area in August 2014. By taking factors including temperature, humidity, heat radiation, air movement, workload and clothing, measurements were captured by a 'Heat Stress Monitor'. The monitor measured Wet Bulb Globe Temperature Index (WBGTi). 4. The result was compared to the guideline developed by American Conference of Governmental Industrial Hygienists. 5. The result and its implication were discussed with different relevant parties. Recommendations were given for short term and long term improvement plans. 6. Measurements at the same workplaces were conducted to evaluate the effectiveness of improvement measures in August 2015.

Result

A total of 10 locations were identified for measurement of WBGTi in 4 workplaces. All of them were below the Thresholds Limit Value despite exceeding the Action Limit. For further improvement, OSH team recommended several measures. The management supported the improvement works by installation of air conditioner, cooling fan, fan and insulated wall. Also, replacement of spot cooling system and pipes insulation were done. Apart from engineering controls, administrative controls including job rotation, regular drinking and rest regimens and acclimatization program for new staff were suggested. In long term, the hospital management submitted a project 'improvement of ventilation system in laundry' to further enhance the environment. Post implementation reassessment showed that only 6 locations exceeded the action limit (a decrease of 40%). The staff also welcomed the changes. To conclude, the workplaces are safe and the management had demonstrated their commitment in enhancing the workplace safety and staff health.