



Service Priorities and Programmes
Electronic Presentations

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Heat Stress Evaluation (HSE) program in Central Sterile Supply Department (CSSD) of AHNH

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Introduction

To address staff's health concern of working in a hot environment during summer time in CSSD, AHNH & TPH OSH team provided an occupational hygiene service to assess the risk of heat stress and recommend possible improvement measures to CSSD.

Objectives

1. To evaluate staff's exposure to heat stress in CSSD. 2. To identify potential hazard and recommend improvement plan. 3. To demonstrate management's commitment in maintaining workplace safety and staff health.

Methodology

1. Pre-assessment survey was performed to understand the operation of CSSD and the necessary information was collected for the heat stress assessment. 2. A walk through survey with Engineering Department manager and user department head was performed on 2/8/2017. Heat stress assessment was performed on 10/8/2017. 3. The American Conference of Governmental Industrial Hygienists (ACGIH) screening criteria for Action Limit (AL) and Threshold Limit Value (TLV) for Heat Stress Exposure (2016) were adopted as a screening tool. 4. Six zones were chosen for measurement: 1) Decontamination; 2) Packing; 3) Sterilization; 4) Storage; 5) Nurse Station and 6) Staff Pantry. 5. The result was discussed with the relevant personal and recommendations were provided to tackle the physical hazard.

Result

1. Two debriefing sessions were conducted to communicate with the frontline staff. 2. For all zones except sterilization zone. The risk of exposure to heat stress was low. 3. The result indicated that heat stress was present in sterilization zone and may affect new staff. Acclimatization program should be arranged for new staff working in the sterilization zone. 4. Administrative control such as reducing staff exposure in

sterilization zone by re-arranging activity outside the zone and segregation of the sterilized hot objects were suggested. 5. Personal protective equipment such as cooling vest could be an option to improve thermal comfort of the staff. Also, the importance of drinking regimen was reinforced. 6. For long term improvement measures, the feasibility and cost of installing air conditioning would be considered by management. Through implementation of HSE program, the hospital management demonstrated commitment in OSH and also alleviated frontline staff's health concern via direct communication.