

Occupational Hygiene Technical Conference 2014

12 April 2014

Lecture Theatre E,

Hong Kong University of Science & Technology



Health, Safety & Environment Office
The Hong Kong University of Science and
Technology



Hong Kong Institute of
Occupational and Environmental
Hygiene

Occupational Hygiene Technical Conference 2014

Programme

- 9:00 – 9:30** **Registration**
- 9:30 – 9:45** **Welcome and presentation of souvenir to speakers**
- 9:45 – 12:30** **Morning presentation**
Convener: Mr. Percy To
- 9:45 – 10:45** **Keynote presentation**
Prof. Ignatius TS Yu (School of Public Health and Primary Care, The Chinese University of Hong Kong)
Noise Exposure and Hearing Impairment among Chinese Restaurant Workers and Entertainment Employees in Hong Kong
- 10:45 – 11:15** **Tea break**
- 11:15 – 11:45** **Technical presentation**
Ms. Christine SM Chiu (Senior HSE Specialist, HSEO, HKUST)
IMDG code, GHS & local DG classification
- 11:45 – 12:15** **Technical presentation**
Ms. Karen HY Yu (Senior Industrial Hygiene Specialist, Dow Chemical Company)
Qualitative Exposure Assessment for Hazardous Chemicals in Chemical Plants
- 12:15 – 12:30** **Q & A and Wrap Up for Morning Session**
- 12:30 – 14:00** **Lunch**
- 14:00 – 17:00** **Afternoon presentation**
Convener: Mr. T. W. Tsin
- 14:00 – 15:00** **Keynote presentation**
Mr. OH-TAEK SON (APAC Technical Service Engineer, 3M Personal Safety Division)
Asbestos Removal Reference in Korea
- 15:00 – 15:30** **Technical presentation**
Mr. Chow Chung-fat (Environmental Protection Officer, Environmental Protection Department)
Air Quality Health Index of Hong Kong
- 15:30 – 16:00** **Tea Break**
- 16:00 – 16:30** **Technical presentation**
Mr. Ng Chi Fan (Occupational Hygienist, Labour Department)
Risk Assessment of Outdoor Work Under High Air Pollution Levels
- 16:30 – 16:45** **National Accreditation for Occupational Hygienists and Registered Professional Hygienist**
Mr. Tsin Tai-wa
- 16:45 – 17:00** **Wrap Up for the Afternoon Session and Closing Remarks**

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Noise Exposure and Hearing Impairment among Chinese Restaurant Workers and Entertainment Employees in Hong Kong

Prof. Ignatius TS Yu (School of Public Health and Primary Care, The Chinese University of Hong Kong)

Abstract

Background: Noise-induced hearing loss (NIHL) is a major concern in the non-manufacturing industries. This study aimed to investigate the occupational noise exposure and the NIHL among Chinese restaurant workers and entertainment employees working in the service industry in Hong Kong.

Methods: This cross-sectional survey involved a total of 1,670 participants. Among them, 937 were randomly selected from the workers of Chinese restaurants and 733 were selected from workers in three entertainment sectors: radio and television stations; cultural performance halls or auditoria of the Leisure and Cultural Services Department (LCSD); and karaoke bars. Noise exposure levels were measured in the sampled restaurants and entertainment sectors. Each participant received an audiometric screening test. Those who were found to have abnormalities were required to take another diagnostic test in the health center. The “Klockhoff digit” method was used to classify NIHL in the present study.

Results: The main source of noise inside restaurants was the stoves. The mean hearing thresholds showed a typical dip at 3 to 6 KHz and a substantial proportion (23.7%) of the workers fulfilled the criteria for presumptive NIHL. For entertainment sectors, employees in radio and television stations generally had higher exposure levels than those in the halls or auditoria of the LCSD and karaoke bars. The mean hearing thresholds showed a typical dip at 6 KHz and a substantial proportion of the employees fulfilled the criteria for presumptive NIHL (38.6%, 95%CI: 35.1–42.1%). Being male, older, and having longer service and daily alcohol consumption were associated with noise-induced hearing impairment both in restaurant workers and entertainment employees.

Conclusion: Excessive noise exposure is common in the Chinese restaurant and entertainment industries and a substantial proportion of restaurant workers and entertainment employees suffer from NIHL. Comprehensive hearing conservation programs should be introduced to the service industry in Hong Kong.