

**UNIVERSITI TEKNOLOGI MARA**

**NOISE INDUCED HEARING LOSS (NIHL) AMONGST  
ELECTROPLATING WORKERS**

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**Project paper submitted in partial fulfilment of the requirements for  
the degree of Bachelor in Environmental Health and Safety (Hons.)**

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**Declaration by Student**

Project entitled "NOISE INDUCED HEARING LOSS (NIHL) AMONGST ELECTROPLATING WORKERS" is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussion. This project was done under the guidance of Mrs Siti Rohana Mohd Yatim as Project Supervisor and Mr Abdul Mujid Abdullah as Co-supervisor. It has been submitted to the Faculty of Health Sciences in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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## ABSTRACT

### NOISE INDUCED HEARING LOSS (NIHL) AMONGST ELECTROPLATING FACTORY WORKERS

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#### **Introduction:**

Noise Induced Hearing Loss (NIHL) is a well and long recognized occupational hazard. There still ignorance, amongst majority of people working in industries. Overexposure to noise has been known to cause occupational hearing loss. Besides, resulting injury of occupational hearing loss is well recognized and global problem.

#### **Methodology:**

A cross sectional study was carried out and 100 questionnaires have been distributed. This study was conducted at the electroplating factory that has the noise exposure exceeded exposure limit. There are two groups involve which are unexposed to noise (n=30) and exposed to noise (n=30). Sound Level meter was used to measure the noise level and Noise Dosimeter was used to measure personal noise exposure. Audiometric Test was undertaken to assess the hearing status among the respondents.

#### **Result:**

This study results showed that there was a significant different on hearing level between exposed and unexposed group ( $p < 0.05$ ). The comparison of high frequency hearing loss between 3000Hz, 4000Hz and 6000Hz were significantly different ( $p < 0.05$ ). The association for noise exposure on hearing loss was statistically significant ( $p < 0.05$ ). The association of noise exposure and hearing loss symptom was significantly ( $p < 0.05$ ).

#### **Conclusion:**

The results from the audiometric test suggest that there might be central auditory pathway involvement in the hearing lost. Thereby, occupational hearing conservation programs should have taken noise exposures into consideration.

**Keywords :** *Noise exposure, Hearing Loss*