

**Evaluation of Occupational Noise Exposure among Workers in Metal Fabricating  
Sector in Kamukunji Area Nairobi.**

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## ABSTRACT

The effect of noise exposure on the auditory system is well known. The purpose of the present study was to determine the level of hearing loss, noise exposure levels and awareness towards noise induced hearing loss among the workers in metal fabricating sector in Kamukunji, Nairobi. A structured questionnaire was administered to 384 systematic, randomly selected workers to collect information relating to their awareness toward hazardous occupational noise and preventive measures. Noise mapping using sound level meter was carried out in various Kamukunji *Jua Kali* sheds and audiometric testing at frequencies 0.125-8 KHz were carried out.

The overall measured noise levels in the study area ranged from 72.0 dB (A) to 113.8 dB (A) and 93.8% of the workers were exposed to noise levels of 90 dB (A) and above for more than 8 hrs daily. From the study, it was established that 90.6% of the workers were aware that noise can cause deafness and 88.8 % of the workers were aware that it can be prevented, but only 2.9% of the workers possessed hearing protectors. The study also found that 35.2% of the workers had impaired hearing and 83% of those with impaired hearing had worked for more than 6 years. From the study, it was established that workers are exposed to hazardous noise levels and they recognize noise as a hazard, but they do not use hearing protective equipment.

From the results of the study, it was recommended that training programmes in occupational health and safety be made mandatory plus also the enforcement of occupational health and safety regulation in this set up. The study also recommended

waving of taxes imposed on imported hearing protective equipments and a link between awareness and noise preventive strategies be further investigated.