

 Current Issue

 Browse Issues

 Search



 About this Journal

 Instruction to Authors

 Online Submission

 Subscription

 Contact Us



 RSS Feed


## Acta Medica Iranica

2009;47(4) : 124-131

### Original Article

#### Occupational Noise Exposure Evaluation in Drivers of Bus Transportation of Tehran City

Department of Occupational Health Engineering, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

 Corresponding Author:

Ebrahimi H

Received: February 22,2009

Accept : August 11,2009

Available online: August 31,2009

#### Abstract:

**Backgrounds and Objectives:** Noise in large cities is considered by the World Health Organization to be the third most hazardous type of pollution. Buses are an interesting object of study in the theme of noise pollution. They are at the same time a source of urban environmental (traffic) noise and occupational noise exposure source for drivers. The object of this study is Occupational noise exposure evaluation in drivers of bus transportation of Tehran city.

**Materials and Methods:** Noise levels in 90 buses were sampled in three separate sub-sample including (1)30 Ikaros buses (2)30 Man buses (3)30 Shahab buses, which were selected by simple random sampling. Noise exposure level was normalized to a nominal 8-h working day (*LEX, 8h*). Simultaneous Octave Frequency Analysis were measured and sound intensity level (SIL) for bus drivers were calculated. Results, which are obtained from separate buses were compared together and too with standard levels.

**Results:** the normalized noise exposure levels (*LEX, 8h*) in Ikaros bus drivers(82dB A) were higher than that of in Man bus drivers (77/6dB A) and this Values were higher than that of in Shahab bus drivers(75dB A).SIL values for Ikaros bus drivers were higher than other that of other bus drivers. Results obtained of Frequency Analysis showed that age of buses in mid frequencies ws a meaningful on noise increase.

**Conclusion:** Results showed that type and age of buses were effective factors in drivers. noise exposure levels (*LEX, 8h*), which was consistent with previous studies in this field.

#### Keywords:

[Bus drivers](#) , [Noise](#) , [Noise pollution](#) , [Occupational noise](#)

TUMS ID: 14167

Full Text HTML  Full Text PDF  515 KB

top ▲

[Home](#) - [About](#) - [Contact Us](#)

TUMS E. Journals 2004-2009  
Central Library & Documents Center  
Tehran University of Medical Sciences

Best view with Internet Explorer 6 or Later at 1024\*768 Resolutions