



Safety of exposures to noise/music in the entertainment venues in Poland (bars, pubs, music clubs)

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Introduction:

Noise in the entertainment industry often reaches high sound pressure levels. In response to the increased risk of noise-induced hearing loss (NIHL) in this group of employees, the European Commission Directive (Directive 2003/10/EC) introduced provisions for the implementation of the same hearing protection programs in the entertainment industry as in industrial establishments. However, nowadays in Poland hearing protection is very rarely implemented by the workers of this sector.

Objectives:

The aim of this study was to analyse the relationship between noise exposure and temporary threshold shifts (TTS) among people working as bartenders or fitness instructors.

Material and methods:

The study group comprised 18 bartenders (aged 257 years) and 29 fitness instructors (aged 336 years). None of them, but one bartender, used hearing protective devices at their workplace. Full-day measurement strategy according to PN-EN ISO 9612:2011 was applied for noise exposure assessment. To assess temporary changes in hearing the standard pure tone audiometry (PTA) was performed before and after noise exposure.

Results:

Typical fitness exercises lasted from 1 to 2 hours and corresponding them an A-weighted equivalent-continuous sound pressure level (LAeq,T) ranged from 76 to 96 dB. The time between PTA tests among bartenders varied from 4.5 to 9 hours, while LAeq,T was found to be 81-103 dB. Statistically significant post-exposure TTS at 4 kHz was observed in 41% and 61% of fitness instructors and bartenders, respectively.

Conclusions:

The aforesaid employees constitute a population at higher risk of NIHL. Raising awareness of this fact and implementing hearing conservation programs in bartenders and fitness instructors are urgently needed.

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