

Noise and Hearing Protection Use in Construction

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Noise exposures in construction are highly variable and often unpredictable. Furthermore, hearing conservation programs in the construction industry are rare, and often rely on workers' use of hearing protection devices (HPDs) to reduce exposures below 85 dBA. This reliance on HPDs for protection from high noise is problematic, as the risk of noise-induced hearing loss from noise exposure depends not only on the level of noise workers are exposed to and the attenuation provided by HPDs, but also on the amount of time HPDs are actually used during high noise.

This presentation details the results of an extensive noise exposure assessment campaign on construction workers from various trades. Noise exposure levels from both occupational and non-occupational activities will be discussed. Field measurements of the amount of HPD attenuation achieved by construction workers will be described, as will the actual amount of time that HPDs are used by workers in the various trades. Finally, noise exposure levels, HPD attenuation, and HPD use time will be combined to evaluate the effective protection from noise received by workers in the trades assessed. Implications of this research for training and hearing conservation efforts in construction will be reviewed.

Biography

Rick is a Research Scientist in the UW Department of Environmental and Occupational Health Sciences. He serves as Director of Communications for the National Hearing Conservation Association and sits on the Noise Committee of the American Industrial Hygiene Association. He is a Certified Industrial Hygienist, and is also pursuing a PhD in Environmental and Occupational Hygiene at the University of Washington.