

Construction Worker Mortality Rises with Hearing Loss

Hearing Loss is Associated with Increased Mortality in a Cohort of Older Construction Trades Workers

John Dement, Knut Ringen, Marianne Cloeren, Sammy Almashat, William Grier, Patricia Quinn, Kim Cranford, Anna Chen, Scott Haas. American Journal of Industrial Medicine, 2024.

Overview

Hearing loss is a common condition that tends to worsen with age. Construction workers, who are often exposed to high levels of noise on the job, are especially prone to noise-induced hearing loss. The Building Trades National Medical Screening Program (BTMed), managed by CPWR, provides health examinations for workers formerly employed in construction activities at U.S. Department of Energy (DOE) nuclear weapons facilities. BTMed participants receive an initial exam and can return for a re-exam every three years. An audiometry test is included in the initial exam but not in a re-exam unless the participant requests it. This study focuses on 19,379 BTMed participants with audiometry data. Of those in the study participants, 8,081 (41.3%) had hearing loss in the frequency ranges of speech and 2,228 (15.3%) reported the use of hearing aids.

Key Findings

- There was a significant association between hearing loss and all-cause mortality. The risk of mortality increased for those with more severe hearing loss compared to those with mild hearing loss.
- Participants with speech frequency hearing loss who used hearing aids had a 30% reduced risk of mortality compared to those with hearing loss who did not use hearing aids.
- Efforts to prevent occupational noise exposures should be given greater priority. Prevention should not be limited to the use of hearing protection but should also include engineering and other mitigation measures to reduce noise.
- Workers' compensation should offer better coverage for occupational hearing loss caused by chronic noise exposure. Most occupational hearing loss is not compensated due to factors such as a lack of recognition of it being connected to work, complicated eligibility rules, and time limitations for filing a claim (statutes of limitations).
- The substantial impact of hearing aids in reducing premature mortality deserves more recognition, and hearing aids should be universally covered under health insurance.

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Read the abstract:

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