



Occupationally Related Determinations for Marginally Noise Exposed Employees

Employees exposed to noise equal to or greater than 85 dB (8 Hr. TWA) require posting to the OSHA 300 log when it is determined that an OSHA Recordable hearing loss event is occupationally related. As per CFR 1904 (*Recording and Reporting Occupational Injuries and Illnesses*), OSHA Recordable hearing loss events are to be presumed work-related unless non-work related exposures or medically related pathology can be determined the probable cause with a reasonable degree of professional certainty. As such, potentially Recordable hearing loss events may be reviewed by a qualified professional (Audiologist or qualified Physician) to determine Work Relatedness

Many corporations proactively include marginally exposed employees (i.e. less than 85 dB TWA) in their Hearing Loss Prevention Program since such “non-regulatory” inclusion is beneficial on several levels. Annual audiometric monitoring may identify non-noise related pathology in need of medical attention; annual monitoring can also improve employee-employer relations. We also know that marginally noise exposed populations can still sustain noise-induced hearing loss especially when impulse/impact noise is present in the work environment. The National Institute for Occupational Safety (NIOSH) has long recognized the risks associated with marginal, unprotected noise exposure. It is believed that workers exposed to unprotected noise levels of 85 dB 8 Hr. TWA (the Action Level) over a 40 year working career carry an 8% excess risk (above aging) of sustaining noise-induced material hearing impairment. Workers exposed to 80 dB 8 Hr. TWA carry a 1% risk of sustaining noise-induced cochlear damage, thus risk to marginally noise-exposed populations is not eliminated.

T K Group frequently receives requests to determine work relatedness for marginally noise exposed workers and the reviewing Audiologist may return an occupationally related determination. Technically, workers exposed to noise levels 84.9 dB 8 Hr. TWA do not fall under the OSHA noise standard umbrella and hence their posting to the OSHA 300 log is not required. When an occupationally related determination is returned for marginally noise exposed employees, it was so done because the reviewing Audiologist is ethically and professionally obligated to do so when a noise-induced loss pattern is indicated in the absence of reported off the job noise exposure and/or when no potential underlying pathology is apparent. In the end, the decision to post or not post the event to the OSHA 300 log must be left to the discretion of client management. If any doubt surrounds the accuracy, validity, or reliability of an employee’s noise exposure, T K Group suggests that occupationally related determinations on marginally exposed employees be posted to the OSHA 300 log.

Authored by: Robert Williams, Au.D. | Director Audiology | T K Group, Inc.