

T K GROUP, INC.  
NEWSLETTER  
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## 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 proac-

tively 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

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## Test Refusals

For any number of reasons, Hearing Loss Prevention Program coordinators may at some point be confronted with an employee (or employees) who either

kindly or not so kindly elect not to participate in annual hearing testing as part of your company’s effort to comply with the OSHA noise standard

(29 CFR 1910.95).

All employees exposed to noise levels equal to or

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YEARS OF EXCELLENCE

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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.



“...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.”

## Does Presbycusis Cease at Age 60?

OSHA permits age correction to offset the potential hearing loss attributed to the normal process of aging (Presbycusis). Does Presbycusis cease at age 60? To look at the age correction values in Tables F-1 (Male) and F-2 (Female) in the OSHA noise standard, one might receive that impression.

The *estimated* age correction values currently permitted in annual test comparisons (except in Washington and Oregon in 10 dB shift analysis) were adopted in the Hearing Conservation Amendment of 1983. These values resulted from a cross sectional (a one time “snapshot”) analysis of test

data from persons ranging between 20-60 years of age. NIOSH, in their paper entitled *Criteria for a Recommended Standard Occupational Noise Exposure*, reminds us that longitudinal hearing loss data (data collected over an extended time period of time) was simply not available in the years leading up to the adoption of the currently implemented age correction estimates and thus these estimates were derived by looking at hearing data of 20 year olds compared to that of 60 year olds to provide loss rate estimates as a function of ageing. NIOSH does not adopt use of age correction in occupational

Hearing Loss Prevention Programs.

It can be argued that the current age correction values are unreliable but nonetheless their use continues mostly because no one has cared to update the research combined with the fact that such a major amendment to the noise standard would entail a great deal of legal and monetary resources. NIOSH points out that the reliability of the age correction data is questionable since social and health related circumstances differ greatly between ages (e.g. a 20 versus a 60 year old). Additionally, the world today is inarguably louder

...So back to the original question: Does Presbycusis cease at age 60? No, it does not. The magic “60 and older” cut-off was arbitrarily adopted and it was common (at that time) for many workers to retire at age 60.



Test Refusals (continued Page 1)

greater than 85 dB 8 Hr. TWA must at a minimum be offered annual hearing testing. While OSHA does not mandate test participation, companies may require participation as a condition of continuing employment.

When an employee refuses or declines to take an annual hearing test, T K Group strongly advises that every attempt be made to document the refusal. When a company possesses documentation that a test was in fact offered but that the employee declined, OSHA may be less inclined to levy a citation. If, however, OSHA finds a significant non-participation rate with no refusal documentation, consequences could be severe.

In an effort to assist our clients when confronted with test refusals, a "Test Refusal" form is available online in our Document Library (T K Support forms) at the following address:

<http://www.tkontheweb.com/libraryforms.htm>

Our mobile test vans also carry this form should clients require it.



**Test Refusal Form**


By signing this document, I, \_\_\_\_\_ (Employee Name) acknowledge my voluntary refusal to participate in the Hearing Loss Prevention Testing Program offered to me this day \_\_\_\_\_ (Date) by \_\_\_\_\_ (Company Name) in an effort to comply with (OSHA) 29 CFR 1910.95.

Signed Witness (Site Supervisor): \_\_\_\_\_

**HEARING LOSS MAY COST YOU**

The Better Hearing Institute (BHI) recently published findings of a survey which suggest working Americans loose nearly \$100 Billion in earnings due to hearing impairment.

BHI goes on to suggest that hearing aid candidates (i.e. those with significant but "aid-able" hearing loss) not yet aided may stand to loose between \$1000-\$12,000 a year depending on the severity of loss. BHI suggests, however, that loss of income may be lessened by half if hearing aids are fitted.

**T K Group conducts periodic CAOHC Certification and Recertification courses. Our next course is tentatively set for January 2008. If you wish to participate, please contact Beth Minnick at (815) 964-5445**

**ATTENTION!**

In an effort that we provide this newsletter electronically as well as to inform you of immediate professional announcements, please email us your email address to:

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