The THRESHOLD©

A T K GROUP PUBLICATION DEVOTED TO OCCUPATIONAL HEARING LOSS PREVENTION AND PROGRAM MANAGEMENT

On The Inside

We are conducting a certification/re-certification class July First, Second, and Third 2013 in Cherry Valley, IL. If you wish to participate, contact Beth Minnick at (815) 332.3460

Don't Believe Everything You Read

This author recently saw an article on hearing loss posted on a MAJOR news website which shall remain nameless.

The article contained the following passage:

"Presbycusis often occurs as a direct result of damage to the inner ear from a head injury or continuous exposure to loud noise, ear wax buildup, ear infections, abnormal growths, circulation problems or damage to the eardrum."

Presbycusis is the loss of hearing due to the normal aging process; while noise can exacerbate a presbycusic loss, it is not associated with conductive impairment (i.e.cerumen or tympanic membrane pathology).

Presbycusis typically presents initial onset of loss at 6000 Hz or 8000 Hz; hearing threshold levels deteriorate progressively with spread to lower adjacent frequencies and are most consistent with a non-noise induced sensory (referring to cochlear outer hair cell dysfunction) and/or a neural (referring to dysfunction originating along certain portions of the eighth cranial [auditory] nerve or subsequent ascending auditory neural pathways). It is usually bilateral.

Noise induced loss presents developed bilateral mid frequency notching. Mid frequency notching is consistent with noise-induced damage to the inner ear characterized by significant mid frequency loss at (3000, 4000, 6000 Hz) with less threshold deterioration at 8000 Hz.

While not always the case, conductive losses present loss in the lower frequencies (500-2000 HZ).

It is also possible to have a "mixed" loss, that being part conductive and part non-noise induced sensorineural impairment.

Determination Requests For Those With A Below 85 dB TWA

T K Group very often receives determination requests (in response to a potentially OSHA Recordable shift event); when an occupationally related determination is returned, we are asked "How can this be occupational if the employee is not noise exposed (i.e 85 dB 8 hour Time Weighted Average).

When T K Group receives a determination and the employee presents noise induced characteristics with no significant off the job exposures, the reviewing Audiologist has no choice but to deem the loss occupationally related. Furthermore, the reviewing Audiologist cannot and will not amend the determination to non-occupationally related if no additional (case history) information is provided

If the employer has recent and reliable dosimetry to show that the employee is exposed to noise below 85 dB, The employer may opt not to log an event deemed occupationally related. T K Group suggests dosimetry collected within the previous two years of the shift event.

If you are new to T K Group, or if you are simply interested in receiving email notification of new newsletter postings, please email robertwilliams@tkontheweb.com and type "Add to Newsletter" in the subject line.

The Threshold is written by Robert Williams, A.uD.

Best Practice: Don't Let Months Go By Before Addressing And Logging OSHA Recordable Shift Events

CFR 1904 (Recording Occupational Illnesses and Injuries) requires that you post OSHA Recordable hearing loss events to the OSHA 300 Log no later than 7 calendar days after receiving official notification of that shift event. You are not, however, required to post that event to the OSHA log if a retest will be attempted within 30 days of the initial shift event.

While OSHA's official stance is that the 7 calendar day posting window begins on the date of the confirming retest, companies that rely on a vendor for analysis do not have immediate analysis on the day of the retest and must wait a short period of time to receive a report (whether on paper, disk, or internet-based reporting) notifying them of a persistent shift event; as such, it is not unreasonable for applicable companies to consider the 7 calendar day period to initiate upon official notification of shift persistency. If, for example, you utilize our web-based reporting portal MYTK Group, the 7 day reporting window initiates once you read the email notifying you that data is posted to the portal for your review.

While you may request a Work Relatedness Determination anytime after the shift event, it is best practice to submit an Extended Questionnaire (EQ) to T K Group immediately after official notification of shift persistency.

If you opt not to obtain a retest or for whatever reason a scheduled retest was not obtained, it is best practice to submit an EQ no later than a month after the initial shift event; in such cases, be sure that you entered the event to the OSHA 300 Log within 37 days of the sate of the initial shift event. If the shift event is later deemed non-occupationally related by determination, you may then line that event off the log.

What you do not want to do, however, is fail to post a potentially Recordable event to the log and/or request a determination of the event months and months later.

STS: Is It Best To Retest?

When a 10 dB Standard Threshold Shift (STS) is sustained, an optional 30-day retest is allowed to determine shift persistency. OSHA allows a retest within a period not to exceed 30 days from the date of the shift.

While optional, T K Group suggests that a retest always be conducted. If the STS is potentially Recordable, a non-persistent shift status upon retest eliminates the requirement to post that event to the OSHA 300 log.

More importantly, obtaining a retest may validate the presence of pathology in such cases where a "problem" loss configuration is initially presented.

If the retest validates a "problem" loss configuration and the loss pattern suggests significant acute, chronic, or potentially emergent pathology, the T K Group reviewing Audiologist will issue a Medical Referral Advisory in addition to the computer general AAO (American Academy of Otolaryngology) medical referral recommendation.

Please be reminded that employees listed on the Medical Referral report do not require a retest based upon their medical referral status alone; it is quite common to sustain a Medical Referral Recommendation in the absence of a concurrent STS.

Due to the inherent variability associated with audiometric assessment, poor attention, resolved pathology, and or lack of interest, 50-80% of shift events prove non-persistent upon retest.

Lastly, do not put off a retest for reason of reported "head cold", allergies, or sinus congestion as these conditions will rarely significantly affect a hearing test; if such conditions are in fact severe enough to affect a test, the test is living up to it's intention to identify pathology.