

# The THRESHOLD

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

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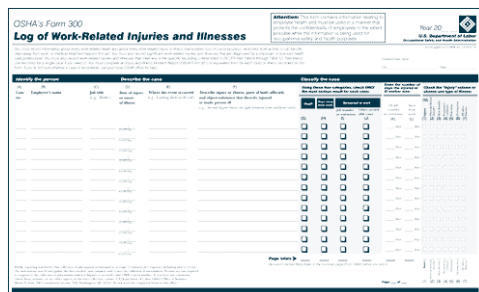
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## Citation Alert

### LOGGING AND LINING-OFF RECORDABLE HEARING LOSS EVENTS

T K Group has recently been apprised of citation activity surrounding improper OSHA 300 Log documentation protocols.



On at least once occasion, OSHA issued a citation for *failing to post* and then line-out a potentially OSHA Recordable hearing loss event that was deemed non-occupationally related after (work relatedness) determination.

When a potentially OSHA Recordable hearing loss event is sustained, you are not required to post that event to the OSHA 300 *if* a 30-day retest is anticipated; however, if a retest indicates a persistent Recordable event, you must enter that event to the OSHA 300 log no later than 37 days from the date of the initial shift. Do not fail to post the

event to the log even if you have requested a determination or have already received a non-occupational determination. *Proper protocol requires posting all persistent Recordable events to the log; if a non-occupational determination is returned, go back and line-out that entry-but do not erase it as if it never happened because OSHA wants to see the paper trail.*

### HOW TO REQUEST A WORK RELATEDNESS DETERMINATION

When a persistent Recordable hearing loss event is indicated, please obtain the Extended Questionnaire form by either downloading it from our website ([http://www.tkontheweb.com/documents/support/tk\\_group\\_work\\_relatedness\\_determination\\_questionnaire.pdf](http://www.tkontheweb.com/documents/support/tk_group_work_relatedness_determination_questionnaire.pdf)) or by emailing Dr. Williams at [robertwilliams@tkontheweb.com](mailto:robertwilliams@tkontheweb.com) to request the form.

Once the form is completed, mail, FAX, or email the form to T K Group and the case will reviewed and a determination returned.

## New Report Format: Get to Know Section V. Historical Recordable Events

T K Group initiated a new reporting format in 2009. The format contains the following core reports: Section I: 10 dB STS; Section II: Potential Recordables; Section III: Retest Results; Section IV: Medical Referrals; **Section V: Historical Recordable Events.**

The purpose of Section V is to notify you of the most previous Recordable event in case for whatever reason it was overlooked and never properly addressed. For example: if an employee sustained an OSHA Recordable in 2008 and that event is persistent in 2009, that employee will be listed in Section V.

Check your records to verify that the event was posted to that year's 300 log. If no determination was requested, you may submit an Extended Questionnaire for a Work Relatedness Determination.

There is no "statute of limitations" associated with determining work relatedness; as such, historical Recordable events may be reviewed for work relatedness.

### HEARING LOSS PREVENTION PROGRAM REPORT

Customer No.: SEE\_DP-999

T K GROUP, INC.



6/11/2009

Bogus Database

Rockford, IL 61101

Regulatory Analysis: OSHA

For Period: 01/01/09 - 06/09/09

### Section V. Historical Recordable/Reportable Events

Employees listed in this section indicate a Persistent (Potential) Recordable/Reportable shift event; the event was first reported at the time of the shift. Please check your records to ensure that a Work Relatedness Determination was made. If no determination was made, verify that the employee is listed on that year's OSHA 300 Log.

*You may still request a determination for a previous year shift event by submitting an Extended Questionnaire (EQ) for determination. Determinations deemed 'non-occupational' may be lined off the OSHA 300 Log.*

Employee Name	Emp. No.	Test Date
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NONE TESTED MEET THIS CRITERIA

## New Noise Reduction Rating Scheme In The Works



It is no secret that Noise Reduction Ratings (NRRs) currently used on hearing protectors today tend to grossly over estimate “real world” effectiveness because they are generated in ideal laboratory conditions. The Environmental Protection Agency (EPA) is expected to soon publish proposed changes to the NRR labelling scheme.

We know that real world attenuation is greatly dependent on proper hearing protector usage. If a foam earplug is not properly inserted, the actual level of attenuation in no way approximates the labeled NRR. Similarly, ear muffs will not live up to labeled attenuation when, for example, they are placed over eyeglasses and fail to properly seal the ear.

The current rating scheme uses a single NRR value. If your noise measurements are A-(scale) weighted, OSHA suggests derating the NRR by 50% and then subtracting an additional 7 dB.

The new scheme is expected to require hearing protection manufacturers to provide a range of expected attenuation based upon the user’s level of training and motivation. The standard would also

require manufacturers to retest their products periodically to validate product labeling.

The proposed product labelling will likely indicate two Noise Reduction Ratings with a range of potential effectiveness in between. The lower NRR value will estimate the expected level of attenuation on subjects with little or no insertion training; the higher NRR number will reflect expected attenuation for those who receive extensive training and are meticulous and driven users.

While the proposed standard seeks to eliminate the derating confusion, OSHA will in the end determine if the new rating scheme supports eliminating the current derating procedure.

Given what we knew about the NRR (versus real world performance), no one could really know how much attenuation any given protector was providing in the field. While some fit test procedures were developed, their validity and reliability was questioned. Today, technological advances are emerging that allow measurement of sound energy behind the hearing protector.

Regardless of labelling and fit testing, no hearing protector provides protection if not worn or worn inappropriately; “use” compliance must be closely monitored and the physical condition of devices should be checked periodically.

T K Group will update you on any future developments.

## STS?...It Is Always 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 its intention to identify pathology.

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](mailto:robertwilliams@tkontheweb.com) and type “Add to Newsletter” in the subject line.

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The Threshold is written by Robert Williams, A.u.D.

## Diabetes Mellitus Carries Increased Risk Of Necrotizing External Otitis

Persons with Diabetes Mellitus (DM) are known to be at greater risk of developing Necrotizing (malignant) External Otitis (NES).

Commonly called “swimmers ear”, External Otitis is an infection that usually first develops in the lining of the ear canal causing otalgia (ear pain) and otorrhea (drainage). Affected persons also commonly report a feeling of “fullness” in their ear(s).

*Necrotizing External Otitis is an advanced and obviously more significant form of External Otitis.*

If left unchecked, the infection can invade the cartilage within the ear and then continue to the temporal bone and eventually grow into the brain and become a life threatening situation.

Persons with Diabetes Mellitus are often immunocompromised and thus are at greater risk of developing malignant External Otitis.

While this condition is most common in diabetic patients, any condition causing suppressed immunology, like chemotherapy for example, can increase the risk of developing NES.

According to the World Health Organization (in 2000), approximately 170 million persons suffer from diabetes worldwide. 24 million reside in the United States. The Centers For Disease Control considers the prevalence of Diabetes to be at epidemic levels.

With regard to Hearing Loss Prevention Program practices, persons performing otoscopy are urged to be especially careful when inserting the speculum into the ear canal with those affected with Diabetes Mellitus, as the slightest scrape or scratch can potentially develop External Otitis and progress to NES.

When counseling workers with DM, take time to remind them to refrain from sticking damage causing objects in their ears or probing their canals with cotton swabs or any other object capable of initiating dermal irritations.

Because DM patients are more susceptible to ear canal irritations from earplug insertion, they are best fitted with ear muffs-not ear plugs.

When performing otoscopy, refer any subject to a physician if you visualize any drainage, puss, growth, or other visible abnormalities.