

The THRESHOLD

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

On The Inside

Custom Earplugs
Page 2

Motorsports and Hearing Protection
Page 3

Calls and Emails:
STS on Retest;
Medical Referrals;
Recurring Recordables;
Recordables and Terminations
Page 4



We are conducting a Certification/Recertification class July 27, 28, and 29 2010 in Cherry Valley, IL. If you wish to participate, contact Beth Minnick at (815) 332.3460

OSHA Stepping Up Inspections; *Recordkeeping is but One Emphasis*

If you haven't already, the likelihood of a future OSHA inspection is greater in 2010 and beyond. T K Group has learned of brisk inspection activity, especially in Michigan and Tennessee (under TOSHA).

T K Group's Dave Bennett attended a local American Society of Safety Engineers (ASSE) meeting in early 2010 at which time Nancy Quick, CSP, CIH-Compliance Assistance Specialist with OSHA, presented *OSHA's Goals and Plans for 2010 and Beyond*.

Compared to most recent years, OSHA targets a 10-12 % inspection increase with emphasis on the following hazards and administrative procedures: **Silica, Lead, Food flavorings (Diacytyl), Combustible Dust, Chemical Safety Management, Powered Industrial Trucks, and Recordkeeping.**

Review your 300 Log to see that all work-related injuries are documented. If any OSHA Recordable hearing loss events not reviewed for work relatedness occurred, such events must be posted on the log under the "hearing loss" column.

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20



U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

Establishment XYZ Company

City Anywhere

State MA

Identify the person		Describe the case			Classify the case				Classify the injury or illness		
(A) Case no.	(B) Employee's name	(C) Job title (e.g. Welder)	(D) Date of injury or onset of illness	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe the injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Classify the case based on the most serious outcome for that case				Classify the injury or illness	
						Remained at Work				Days Away from Work or Job Transfer or Restriction	
						Death	Days away from work	Job transfer or restriction	Other recordable cases	(G) Days Away from Work or Job Transfer or Restriction	(H) Job Transfer or Restriction
						(I)	(J)	(K)	(L)	(M) Hearing Loss	(N) Skin
1	Mark Bogin	Welder	5 / 25	basement	fracture, left arm and left leg, fell from ladder	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	15
2	Shana Alexander	Foundry man	7/2	pouring deck	poisoning from lead fumes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	30
3	Sam Sander	Electrician	8 / 15	2nd floor stairroom	broken left foot, fell over box	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	days
4	Ralph Biscella	Laborer	9 / 17	packaging dept	Back strain lifting boxes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	days	days
5	Jarrod Daniels	Machine ops	10 / 23	production floor	dust in eye	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	days	days

Custom Earplugs

A “custom” earplug is one tailor made to match an individual’s unique ear canal anatomy. Custom earmolds are made by taking an impression of the ear canal and the concha—the bowl shaped cavity located just outside the opening to the ear canal.



The process begins by a *properly trained* person inserting a foam obstruction called a “block” fairly deep into the ear canal—this to prevent molding material from getting to the tympanic membrane or other concurrent pathologies that might be present. A mixture, usually silicone or vinyl, is placed into a syringe and injected into the ear canal. This “quickset” material cures in minutes and is removed from the ear canal. Some applications use this impression as the actual earplug while others require that the impression be shipped to a lab for further finishing.

There is a common misconception that “customs” provide greater attenuation than typical off-the-shelf devices such as foam earplugs, when in fact properly inserted foam plugs provide equal or greater attenuation.

The old saying “the best hearing protection is the type that is worn” certainly has merit; in most cases, something is better than nothing; however, “customs” may only be as good

as the impression taken. The part of custom earplug you can see when the device is situated in the ear does little to attenuate noise. Attenuation is gained only by a tight and uniform seal in the canal portion of the device. If the impression taken has any irregularities in the canal portion, or if the impression material did not inject deeply enough into the canal, proper attenuation is compromised.

Not unlike conventional hearing protectors (foam plugs, canal caps, earmuffs, etc), “customs” are susceptible to wear, deterioration, and damage. Over time, the material that comprises “customs” can shrink, crack, become distorted, and even break resulting in poor canal occlusion. “Customs” do not respond well to the washing and drying process after having been left in the pocket of the owner. It happens, and this is but one aspect to consider when weighing the “custom” versus off-the-shelf cost analysis. No hearing protector lasts forever.

Before an impression is made, an extensive case history should be made; a proper otoscopic examination is a must to identify pathologies and most importantly to verify the integrity of the tympanic membrane; impression material injected on or behind the eardrum is a bad situation. Extra caution should be taken when generating impressions in Diabetics; persons with Diabetes are very susceptible to infection and more serious disease caused by any irritation or abrasion to the ear canal.

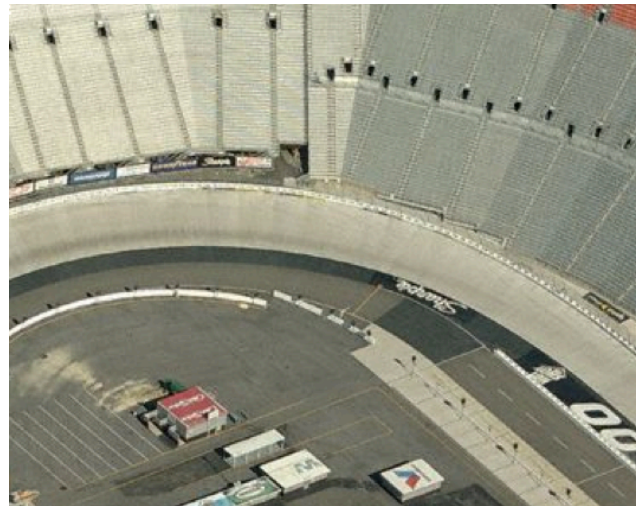
Motorsports and Hearing Protection

Either as a participant or observer, motorsport events are loud. With Spring comes a new motorsport season. The popularity of stock car racing continues to grow attracting thousands of race fans around the country. Not unlike many basketball and football venues, event noise may rise and even exceed 130 dB-a level certainly capable of causing noise induced hearing loss.

Racing events are unique in the fact that races tend to be long in duration. A 4 to 5 hour exposure duration to 130 dB is significant and the closer you are to the track, the higher the risk of sustaining noise induced hearing loss if unprotected.

If you plan to attend a race or any other event known to be loud, take the time to prepare and take along appropriately attenuating hearing protection.

Jet Skis, motorcycles, and go-carts offer users similar risks of hearing loss. While a Jet Ski does not produce 130 dB, 110-115 dB levels are not uncommon and use duration is often numerous hours.



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.

Clients and associates of T K Group are permitted to reproduce all or part of this publication for private or corporate use. Parties not associated with T K GROUP, INC without the expressed written consent of T K GROUP, INC may reproduce no part of this publication. For reprint permission, please contact Dr. Robert Williams at robertwilliams@tkontheweb.com

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

Calls and Emails

STS on Retest

“What do we do when a 10 dB STS/or Recordable is triggered in the other ear?”

Your options are twofold: 1. Retest one more time to confirm shift persistency. 2. If the shift is potentially Recordable, submit an Extended Questionnaire for determination of Work Relatedness.

Recurring Recordables

“An employee of ours sustained a potentially OSHA Recordable hearing loss event last year; after review, it was determined non-occupationally related. This employee indicates a new Recordable shift event this year. Does (he) need a new determination this year?”

The answer is yes. All new Recordable events require a new determination. Since case history and exposures can change from year to year, a new determination is needed.

Medical Referrals

“An employee received a Medical Referral recommendation. Does my company need to pay for his/her doctor visit?”

The answer is no. Unless your company’s policy differs, employees receiving a Medical Referral recommendation may choose on their own accord to follow-up with a physician. If the physician determines that discovered pathology is work related, your company would then be obligated to cover associated costs.

Recordables and Terminations

“We have an employee that sustained a Recordable, but he was terminated and we cannot submit an Extended Questionnaire (EQ) for determination. What can we do?”

First, be sure that employee is on the OSHA 300 Log. Secondly, contact Dr. Robert Williams to request a Work Relatedness Determination that will be based upon available test data only. Many times, a loss pattern is easily determined without an EQ if that loss configuration is clearly inconsistent with that associated with noise exposure (i.e. pathology, presbycusis).