You requested a Work Relatedness Determination and an occupationally related determination was returned. What should you do now?

First, document the hearing loss event on the OSHA 300 Log under the hearing loss column. Case closed? Not really.

If this is the employee’s first shift event in his/her test history, it is best to determine what course of events in the workplace may have contributed to the loss:

- Was the employee wearing hearing protection inconsistently?
- Are the hearing protectors offering insufficient attenuation for that employee’s given noise exposure?
- Are administrative controls, such as limiting exposure duration, being overlooked?
- Should engineering controls be revisited to further reduce noise levels?

All of these questions are valid and ones that should be considered in your effort to not only to prevent further hearing loss for that employee but for all others as well. At the very least, and pursuant to regulations stated in 29 CFR 1910.95:

1. The employee’s hearing protectors must be checked to assure that the devices are in good condition.
2. The employee’s hearing protectors must be checked to assure that they fit properly.
3. The employee must demonstrate proper insertion of ear plugs (or proper placement of ear muffs).
4. The employee must receive additional supplemental hearing loss prevention training in addition to that received annually.
5. Finally, document all of the above actions.

While an occupationally related determination is unpleasant to receive, it can serve to initiate review of “problem” situations that in the end result in a safer workplace.
Hearing Loss Prevention Program Audit Checklist Now Available From T K Group

So you think your Hearing Loss Prevention Program is tight and compliant? 29 CFR 1910.95 has numerous follow-up and documentation demands that can test even the most meticulous program managers.

To assist in making sure you have dotted your “i”s and crossed your “t”s, T K Group has developed a Hearing Loss Prevention Program Audit Checklist that addresses all mandated requirements associated with 29 CFR 1910.05 and 29 CFR 1904 (Recording Occupational Injuries and Illnesses).

Whether your facility conducts in-house testing throughout the year or you receive mobile services once a year, it is good practice to audit your program at least once a year.

Within coming weeks, clients of T K Group will receive an email with instructions on how to download the checklist.
TK 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. Additionally, we have a new employee data history format called the Individual Audiometric Record (IAR).

The IAR has numerous enhancements.

1. Revised baselines are easily determined by looking in the far left hand column.
2. Shift events are clearly listed as “STS” and “Recordable” (if applicable) along with the date of that shift event. Whether on retest or the next test, the initial shift status is described as “Persistent” or “Non-Persistent”.
3. Medical Referral status is listed by code on the far right hand column.
4. Comparison calculations are listed on the bottom for each test in the record.

**Individual Audiometric Record**

Customer No.: SEE_DP-999

Bogus Database
Rockford, IL 61101

Branch: 0

Alloway, Richard
Job: SAFETY
Shift: Noise Exp: 87.00

Ehho No.: 0001010294
Cnok Id: Birth Date: 09/06/77
Hire Date: 08/09/77
Gender: M

<table>
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</tbody>
</table>

Medical Referral Codes:
1. Medical condition; see Case History above for details
2. Difference between 0.5, 1.0K avg. of right and left ears > 15dB
3. Difference between 0.5, 1.0K avg. of right and left ears > 30dB
4. Avg. of 0.5, 2.0K thresholds for right ear > 35dB
5. Avg. of 0.5, 2.0K thresholds for left ear > 35dB
6. Avg. of 0.5, 1.2K thresholds for right ear > 35dB
7. Avg. of 0.5, 1.2K thresholds for left ear > 35dB
8. Avg. of 0.5, 2.0K thresholds for right ear > 35dB
9. Avg. of 0.5, 2.0K thresholds for left ear > 35dB
Wind Turbines Causing Health Concerns

Given the high cost of energy, countries worldwide have stepped up their use of wind powered turbines to produce electricity.

In a recent article entitled *Wind farms whip up health fears for Oregon residents near turbines*, many Oregon residents have voiced concerns after “wind farms” have recently been constructed in close proximity to their homes.

Low frequency noise and vibration generated by such turbines are theorized to be behind several unexplained health effects related to the inner ear according to Dr. Nina Pierpoint, a Johns Hopkins University graduate. Dr. Pierpoint has coined the term “Wind Turbine Syndrome” and such complaints include headache, equilibrium (balance) issues, Tinnitus, sleep disorders, and various psychological disorders.

Concerns of the effects of “infrasonic” low frequency vibration on the human ear are not new. Numerous studies have suggested correlations between low frequency stimulation and resulting health difficulties thought to be inner ear related. The World Health Organization in fact recognizes potential infrasonic risks as well.

What You Need To Know About Dual Hearing Protection

There is a common misconception that use of dual hearing protection (e.g. ear plugs and earmuffs) doubles attenuation.

While use of dual hearing protection may offer some degree of additional attenuation, only an additional 5 dB of attenuation is generally gained. If for example the earplug used purports a Noise Reduction Rating (NRR) of 22 dB, and the earmuffs suggest a NRR of 19 dB, the overall combined attenuation provided by dual use of the plug and earmuff can be expected to be 27 dB since you simply add 5 dB to the higher rated device being used to estimate combined dual attenuation. Users of dual protection should not make the mistake in thinking that a 22 dB (NRR) earplug combined with a 19 dB (NRR) earmuff provides 41 dB of attenuation. Additionally, given what we know about “real world” hearing protector performance, any real world attenuation depends on proper insertion and use of the device.

Furthermore, the type of noise—specifically the noise’s frequency make-up, is very important to consider when selecting the earplug to use with earmuffs. If the noise field is heavily comprised of low to mid frequency energy, foam and deeply insertable earplugs offer the best attenuation (again if properly inserted) and the selection of earmuffs is essentially inconsequential.

Dual hearing protection is generally recommended in noise environments that equal or exceed 105 dB (A), however be advised that because noise can stimulate the cochlea via bone conduction, dual hearing protection at some point becomes ineffective; it is at this time when duration (exposure) management (i.e. Administrative Controls) becomes necessary. The noise level at which bone conduction initiates is difficult to determine and may vary from person to person depending on his/her unique physical characteristics and/or other variables.

A second caution is not to over-protect by dual hearing protection (or single device protection for that matter). If properly used, inserted, and of adequate attenuation value, single device protection can in most cases provide adequate attenuation in moderate to high noise environments. If an employee is hearing impaired and works in moderate to high noise, dual protection may over-protect to the extent that needed communication ability may create safety concerns.