

Working with Your Professional Supervisor

Occupational Hearing Conservation

In the real world...



- Audiogram review is NOT the same as serving as PS
- Software can perform audiometric calculations and flag for referral or baseline revision
 - PS should know computer protocols
 - Overrides & closer review are responsibility of PS judgment
- Human Review and judgment are still relevant!

Coordination of OHC with a Professional Supervisor

- OHCs and their professional supervisors “need to come to an understanding about the characteristics of valid audiograms and problem audiograms, as well as the role that each person will play in reviewing the audiograms and coordinating the follow-up”
CAOHC Manual (2002, p. 75)



What can be asked of a PS?

- How do you report findings?
- Do you use software to evaluate data?
- Do you personally review problem audiograms?
- Do you identify slight changes? (even if only "imminent" STS)
- Do you apply age corrections?
- Are you easily accessible by phone?
- How long will it take for replies and report?

What can be asked of a PS?

- Understand our Company's operation
- Become acquainted with our:
 - Noise level data
 - HPD program
 - Audio monitoring program
 - Referral process
- Know our key personnel
 - Nurses, Safety Professionals, HR

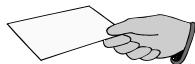
Likely Goals

Company



- Rule out STS
- Avoid entries on OSHA Form-300

Professional Supervisor



- Identify preventable cases of NIHL
- Refer when needed
- Counsel & educate

A Valid Audiogram

- Preceded by "quiet"?
 - 14 hours isn't *magical*
- Examiner qualified?
 - CAOHC – "demonstrate competence"
- Audiometer calibrated?
- Test environment acceptable?
- Test data – all frequencies tested?

A Reliable Audiogram

- Are results consistent over time?
- Test – Retest variability
- Pattern consistent with noise exposure
- Progression of loss consistent with noise exposure

Problem Audiograms

Q. Please define "problem audiograms" in the context of the standard. (letter to OSHA)

A. Examples of problems audiograms are:

- 1) *Audiograms that show large differences in hearing thresholds between the two ears,*
- 2) *Audiograms that show unusual hearing loss configurations that are atypical of noise induced hearing loss, and*
- 3) *Audiograms with thresholds that are not repeatable.*

http://www.osha-slc.ov/OshDoc/Interp_data/119940509A.html

Referral Criteria (AAO-HNS)

BASELINE Audiogram

- 1) Average hearing level (.5,1,2,3k Hz) greater than 25dB in either ear
- 2) Difference in avg. hearing level between ears of:
 - a) More than 15dB at .5,1.& 2k Hz
 - b) More than 30dB at 3,4,& 6k Hz

Referral Criteria (AAO-HNS)

MEDICAL CRITERIA ... within the past 12 months

- Ear pain
- Drainage from the ear
- Dizziness
- Tinnitus (severe or persistent)
- Sudden, fluctuating or rapidly progressive hearing loss
- Feeling of fullness or discomfort
- Other criteria, determined by PS**

www.entlink.net/education/resources/otologicreferral.cfm

Referral Criteria (NHCA)

Low Frequency Hearing Loss

- Average hearing level greater than 25dB at .5, 1, 2 kHz on BASELINE
- Shift of 10dB average at .5, 1, 2 kHz on ANNUAL

Asymmetry

- ≥ 40 dB at any frequency on the baseline

OHC unable to obtain audiogram using standard procedures

Referral Criteria (NHCA)

Improved/Decreased Hearing Levels

+15dB or more at any frequency, either ear, re: baseline

Asymmetry

≥ 25 dB at two consecutive freqs on periodic

Unreliable audiograms

Inconsistent/unreliable thresholds: differences of ≥ 10 dB between annual & follow-up audiograms, or compared to last year's test(s) at the same frequency(ies) in the same ear

www.hearingconservation.org

Audiological/Otologic Referral Procedure

- Referral decision made by PS
- Assemble all tests available
 - Indicate baseline & any revisions
- Assemble all applicable noise data
- Request recommendations from specialist for treatment (if any), job restrictions and precautions
- Notify employee in writing about decision to refer and why

Q. When is the company responsible for paying for the referral to a physician?

OSHA's response:

"The employer is responsible for paying for referrals that are needed to accurately determine an employee's hearing status, or if it is suspected that the provided earplugs are causing or aggravating an irritation or infection of the employee's ear canals."

06/02/1998 - Hearing conservation: referrals, financial responsibility, and documentation.

If an STS...Retest

· OSHA & MSHA allow re-test within 30 days – *not mandatory*

- Noise free prior to test
- identify TTS v. PTS
- decrease required STS follow-ups

· Supervising professional can help determine other re-test criteria (e.g., try re-test on same day)

Age Corrections? *Pros and Cons*



Pro

Reduces "false positives" due to aging
May reduce number of employees identified, often preference of companies
Can compare rates across samples with different ages



Con

Reduces sensitivity of HC program
Allows for gradual loss of hearing without OSHA-mandated actions
OSHA age correction tables may be outdated

Follow-up/Referral (OSHA)

Employee is to be:

- *Informed* of need for otological exam. If medical pathology (unrelated to HPDs) is suspected
- *Referred* to audiologist or otolaryngologist for additional testing, as appropriate

NHCA Guidelines: Baseline Revision

- Revise for ears separately
- Revise for improvement
 - 5 dB average at 2, 3, & 4k Hz
- Revise for persistent shift
 - 6 months between confirming tests

See appendix K, CAOHC Manual, 2002

OSHA Form-300 (29 CFR 1904.35)

- Log of work-related injuries and illnesses
- "Statistical tool only" per OSHA
 - Number of deaths
 - Number of case with lost work days
 - Number of days with job transfer or job restriction
 - Total number of recordable events
- *Mgmt. incentives often tied to log*

Note to CRF 1904.0

- Recording or reporting a work-related injury, illness, or fatality does not mean that the employer or employee was at fault, that an OSHA rule has been violated, or that the employee is eligible for workers' compensation or other benefits
