



UPDATE

VOLUME 14 • ISSUE 3

The Newsletter of the Council for Accreditation in Occupational Hearing Conservation

OSHA'S Final Rule for Recording Occupational Hearing Loss



By Susan C. Megerson, MA CCC-A
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Intercampus Program in Communicative Disorders

For those professionals working in occupational health and safety settings, one of the most complicated responsibilities has traditionally been the reporting of work-related injuries and illnesses as required by the Occupational Safety and Health Administration (OSHA). Occupational Hearing Conservationists (OHCs) have been particularly frustrated by the long-standing ambiguity surrounding recording work-related cases of hearing loss. For a historical perspective of related OSHA rulemaking activities on both federal and state levels, see Megerson (1995, 1997, 2001 and 2002) and CAOHC (2000).

With its recent release of a Final Rule for recording hearing loss on the new Form 300, OSHA has at last attempted to clarify the controversy. In a press release dated June 28, 2002, the Agency announced that beginning January 1, 2003, employers will be required to record work-related cases of Standard Threshold Shift (STS), but only when the employee also "shows a marked decrease in overall hearing" (OSHA, 2002a) (to review the press release, access the CAOHC website at www.caohc.org). At the same time, OSHA announced that it is seeking further comment on whether to include a separate hearing loss column on the Form 300 Log of Occupational Injuries and Illnesses.

Summary of the Final Rule

Nearly twenty years following implementation of the Hearing Conservation Amendment, 29 CFR 1910.95, OSHA's new recordkeeping rule for hearing loss was finally issued July 1, 2002 with an effective date of January 1, 2003 (OSHA 2002b). Hearing loss requirements are now part of a separate section of the rule, entitled 1904.10: "Recording criteria for cases involving occupational hearing loss." The keypoints are summarized in Table 1. Highlights are as follows:

- (1) **Basic recording criterion:** Employers must record work-related STS (an average change of 10 dB at 2000, 3000, and 4000 Hz in either ear, compared to baseline; age-adjustments allowed) **provided that** the employee's average hearing level at the same frequencies in the same ear is 25 dB HL or greater (an average hearing level of 25 dB or more in comparison to audiometric zero; no age adjustments allowed¹). OSHA explained that it chose the new "two-part criterion" in the final rule because (1) STS is a sensitive measure of noise exposure at the employee's current place of employment and (2) overall hearing levels in excess of 25 dB "assures that all recorded hearing losses are significant illnesses."

Here's an example: An employee's annual audiogram shows an age-adjusted shift of 10 dB compared to the original baseline audiogram at 2000, 3000 and 4000 Hz (STS). Next, for the same ear, let's say the current test results (thresholds) are 15 dB, 20 dB and 25 dB HL (hearing level) as measured on the audiometer (actual levels, no comparison to baseline, no age adjustments included). The average hearing level is therefore 20 dB HL, less than OSHA's cutoff for normal hearing status (25 dB HL). Although the employee has demonstrated STS on this year's audiogram, because overall hearing levels are "within normal range", the event is not considered serious enough to be recordable.

Table 1: Example Protocol for Determining STS Recordability

If at any step a "no" is encountered, the process ends and the hearing change is not recorded on Form 300 as a recordable event.

- **Step 1:** Compared to the original baseline audiogram or last audiogram showing a recordable shift in hearing, is there an STS in either ear (age adjustments allowed)? If yes, continue to step 2.
- **Step 2:** Is the average hearing level on the current hearing test at 2000, 3000, and 4000 Hz in the same ear greater than or equal to 25 dB HL (no age adjustments allowed¹)? If yes, continue to step 3.
- **Step 3:** Is the STS confirmed upon 30-day retest (or was a retest not conducted)? If yes, continue to step 4.
- **Step 4:** Has a qualified health care professional determined that the shift in hearing is more likely than not work-related? If yes, continue to step 5.
- **Step 5:** Record the case on Form 300 within 7 days of retest (or within 37 days of test if retest not conducted).

See footnote ¹ on page 3.

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Published by the Council for Accreditation in Occupational Hearing Conservation, a not-for-profit organization dedicated to the establishment and maintenance of training standards for those who safeguard hearing in the workplace.

Articles should be submitted, with a black and white photograph of the author. The UPDATE is available to individuals not certified by CAOHC at an annual subscription rate of \$20. Payment must accompany request:

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CAOHC Approved OHC Courses

When you are registering for a recertification course (or if your fellow staff member is registering for the first time at a certification course), please confirm with the registrar that "this is a CAOHC approved" course. Only certified Course Directors, who have received a course approval certificate from the CAOHC Executive office, can conduct an occupational hearing conservation course that leads to CAOHC certification. Course Directors must display this certificate of approval in view of their students. If you don't see it, please ask your Course Director.

If you are uncertain whether the course you are planning to attend is certified by CAOHC, please contact Chris Whiting at the CAOHC office at 414/276-5338 or e-mail info@CAOHC.org



Chair's Message

By Theresa Y. Schulz, PhD
Representative of the Military Audiology Association

As Occupational Hearing Conservationists (OHCs) and CAOHC Course Directors (CDs) we focus on noise in the workplace. But noise is everywhere! And not only *workers* are exposed to hazardous noise – just about everyone is! As hearing conservationists we want to prevent noise-induced hearing loss whenever we can. A good way to do that is to teach young children about the dangers of loud noise. It is really fun to teach young folks – it is somehow invigorating despite the work it takes to do it. And with a little planning it's really not that much work. There are several programs and resources that can educate even the youngest kids up to young adults.

Operation SHHH	Workbook, notes, brochures	http://www.shhh.org/pubscat/shhhpubs.cfm
Listen to the Raindrops	Children's book	http://www.lhh.org/noise/raindrops.htm
Wise Ears!	Brochures for kids, parents, teachers, the public and media info; Activities guide	http://www.nidcd.nih.gov/health/kids/index.htm
I love what I hear!	Video, teacher's guide	www.aerie.com/samplebox/nidcd/video/video.html
HIP Talk	Lesson guide, video, activities guide	http://www.lhh.org/noise/children/hc.htm
Operation BANG (Be Aware of Noise Generation).	Curriculum and guidance	http://www.militaryaudiology.org/bang/index.html
International Noise Awareness Day	Grass roots community activities	http://www.lhh.org/noise/kit/index.htm
Stop That Noise!	Video, audio tape of unfair hearing test, teacher's guide	www.lhh.org/noise/
Know Noise	Video, cassettes, teacher guide	http://www.sightandhearing.org/
Hearing Education & Awareness for Rockers (H.E.A.R.)	Video, products, programs,	http://www.hearnet.com/index.shtml
Crank it Down!	Curriculum package, video and audio	http://www.hearingconservation.org/resources/public.html
Dangerous Decibels	Museum exhibit, outreach program	http://www.dangerousdecibels.org/

I initiated a program back in the 1980's called Operation BANG (Be Aware of Noise Generation). It was great fun and accomplished the goal of educating not only the kids I worked with but because we got good media coverage, the message was spread beyond that one classroom. Other colleagues took this idea and improved upon it to include whole school districts, and other venues.

You can get many of the materials you need free or very inexpensively. Hearing protection companies will often donate earplugs for these activities. You can plan them in conjunction with Noise Awareness day (30 April, 2003), Better Hearing and Speech Month (May). There is an excellent article "Why Aren't Hearing Conservation Practices Taught in Schools" on the web which includes a through list of programs and a review of the literature. http://www.healthyhearing.com/healthyhearing/newroot/articles/arc_disp.asp?id=151&catid=1073

Whether you choose to share your passion for hearing conservation in a classroom setting, with Boy Scouts or Girl Scouts, church groups, or youth shooting clubs, you can make a difference. I encourage you to get involved in your community, share your knowledge – it will energize you and could make a difference in the attitude of those future noise-exposed workers!

OSHA'S Final Rule continued from page 1

- (2) **Baseline/reference audiogram:** To determine whether a STS has occurred, the employer must compare the current hearing test results to the employee's baseline audiogram. If the employee has never experienced a recordable shift in hearing, then the original baseline is used as a reference. However, if the employee has previously experienced a recordable hearing loss, then the employer must compare the current test results to the audiogram which was previously designated a recordable case (i.e. the employee's "revised baseline" for recordability purposes).
- (3) **Retest/confirmation of STS:** If the annual audiogram shows an STS, a hearing retest may be performed within 30 days. If the retest does not confirm the STS, then the case need not be recorded. However, if the retest confirms the STS, then the STS (if work-related) must be recorded within 7 calendar days of the retest. In the event that a retest is not performed, then the case (again, if work related) must be recorded within 7 calendar days of the end of the 30-day retest period.
- (4) **Results of subsequent testing:** If later testing performed as part of the hearing conservation program indicates that the STS is not persistent, then the employer may erase or line-out the recorded entry. OSHA explained that it added this language to the Final Rule "to minimize the recording of temporary hearing loss cases while capturing complete data on the incidence of hearing loss disorders."
- (5) **Determination of work-relatedness:** In the Final Rule, OSHA stresses the importance of case-by-case review, and states that hearing loss work-relatedness must be determined according to specifications of section 1904.5. That is, if an event/exposure in the workplace caused or contributed to the shift in hearing or "significantly aggravated" a previously existing hearing loss, then the STS is recordable. In addition, OSHA specifically states that a case need not be recorded if a physician or other licensed health care professional determines that the hearing loss is not work-related or not significantly aggravated by occupational noise exposure. It is also worth noting the significance of last year's lawsuit brought against OSHA by the National Association of Manufacturers (NAM) following promulgation of the general recordkeeping rule. One of the main issues raised by NAM was the definition of a work-related injury. As part of a settlement agreement between OSHA and NAM filed in U.S. District Court in November 2001, OSHA clarified that when it is not obvious whether the event or exposure occurred in the work environment or elsewhere, the employer must make a determination of "whether it is more likely than not that work events or exposures were a cause of the injury or illness, or of a significant aggravation to a pre-existing condition. If the employer decides the case is not work-related, and OSHA subsequently issues a citation for failure to record, the Government would have the burden of proving that the injury or illness was work-related" (OSHA, 2001).
- (6) **Forms:** Although OSHA has also updated its recordkeeping forms (now OSHA Form 300, 300A, and 301), designation of a separate column for recording hearing loss is still under review. When OSHA issued its final hearing loss recording criteria on July 1, 2002, the agency also announced a delay in finalizing a separate column (OSHA 2002c). A response in strong support of a separate column was filed August 23,

2002 by the Coalition to Protect Workers' Hearing, a consortium of professional organizations of which CAOHC is a member (to review the comment document, access the CAOHC website at www.caohc.org).

(7) **Additional considerations:**

- **State plans:** Although state-run OSHA plans are allowed to continue utilizing more stringent enforcement criteria during 2002, all are required to adopt the final federal rule for hearing loss recordability, effective January 1, 2003.
- **Applicable industries:** Certain industries are not covered under the hearing conservation amendment 29 CFR 1910.95 (construction, agriculture, oil and gas drilling, etc.), but are included under 1904. If such employers choose to conduct audiometric testing programs, then the hearing loss recordability provisions of 1904.10 will apply.
- **STS follow-up:** And of course, the new recordkeeping provisions in no way change an employer's obligations under 1910.95. All employees showing STS must receive appropriate follow-up as defined by the hearing conservation amendment, whether the shift in hearing is recordable or not.

Implications for the OHC and the Hearing Conservation Program

Although there may be a general sense of relief among OHCs that the issue of hearing loss recordability is now "settled," there are still many details of application yet to be worked out. Importantly, individual case review remains an essential aspect of managing occupational hearing loss recordability. Each "potentially recordable shift" that meets the specified OSHA criterion, and any other suspected work-related hearing loss, should receive careful review by an audiologist or physician knowledgeable in the effects of noise and in hearing conservation programs. "Professional supervisors" reviewing audiometric data should clearly understand the issues associated with hearing loss recordability, as well as hearing conservation program regulations and matters of workers' compensation (all distinct and separate rules with different purposes and requirements). See **Table 1** for an example protocol for processing potentially recordable cases under the new Final Rule. However, keep in mind that OHCs will need to check with their audiometric program professional supervisor for specific guidance on how potentially recordable cases will be reviewed for each employer. Following are a few of the details to be considered:

- **Designation and maintenance of "recordability baseline:"** Although OSHA has clarified that the employer must compare current audiograms to the original baseline or a previously
- ¹ There has often been confusion (and professional disagreement) over the use of age adjustments in audiometric data analysis. Generally, the use of age adjustments is considered appropriate when calculating shifts, or changes, in hearing compared to a baseline/previous hearing test. The intended purpose of the age adjustment is to attempt to factor out changes in hearing that might be related to the aging process over time rather than the noise exposure. In contrast, age adjustments are generally considered to be inappropriate when calculating existing hearing level, or hearing loss. That is, the purpose of this analysis is to predict whether the individual will exhibit some type of functional impairment (i.e. hearing difficulty) compared to a reference standard or norm (i.e. 25 dB HL). This calculation is therefore usually considered unrelated to age. As an example, an individual with a mild hearing loss is expected to experience occasional hearing difficulties in everyday listening situations, whether that individual is 6 years, or 60 years, of age.*

continued on page 10



Thompson Joins Council

Marcella R. Thompson, CSP, RN, COHN-S, Sr. joined the CAOHC Council at their semi-annual meeting in Rosemont, IL, on October 17, 2002, as the first of two representatives for the American Society

of Safety Engineers (ASSE).

She has twenty years experience in occupational health and safety, and is currently safety engineer for ON Semiconductor Corporation, East Greenwich, Rhode Island with responsibility for the safety and health of over 500 employees. Ms. Thompson initiated a "Safety Help-Desk" for employees to report safety concerns and has authored several training videos and books. She is co-founder, Thompson Scholarship for Women in Safety, ASSE Foundation.

Thompson holds MS (Occupational Health) Harvard School of Public Health; MS (Occupational Health Nursing) Boston University; BS magna cum laude (Nursing) Salve Regina University.



Acoustics and You: Learning about the "Science of Sound" Activity Handout (not just for kids!)

By Beth A. Cooper, PE INCE, Bd.Cert.

Representative on the CAOHC Council for the Institute of Noise Control Engineering

As an OHC, you are undoubtedly always on the lookout for hearing conservation related handout materials that you can incorporate into your training and outreach programs. Materials that are educational, fun, and *interactive* are especially exciting. When employees are able to share handouts with their families, particularly their kids, your investment pays for itself many times. Believe it or not, materials geared for late elementary school age students are even intriguing for adults who have five minutes to kill while waiting for their audiometric exam or for a training class to start.

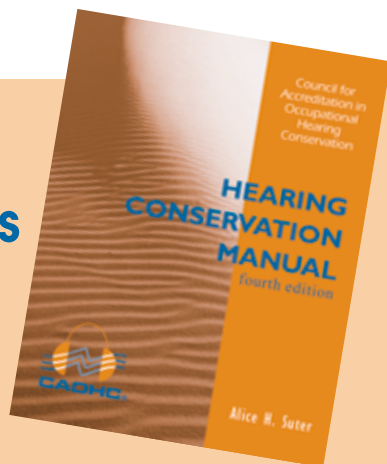
One such kid-friendly activity sheet filled with crossword puzzles, word scrambles, mazes, and word search activities was published in the Fall 2000 issue of *UPDATE*. *Noise and Your Ears: Worth Hearing About* continues to be a big hit with employees in occupational hearing conservation classes, elementary and middle school classrooms during career-education talks, professionals attending continuing education and in-service training in hearing conservation, and the general public when it is distributed at health fairs and other community outreach events.

As a follow-on to this popular handout, the NASA Glenn Research Center at Lewis Field has developed another activity sheet on the subject of acoustics. The four-sided 11x17 pull-out you will find in the center of this issue of *UPDATE* covers the fundamental vocabulary and definitions in acoustics that are helpful in understanding important concepts in hearing conservation. This hand-out was developed to accompany the compact disc also distributed by NASA, *Auditory Demonstrations in Acoustics and Hearing Conservation*. This CD is available free on request to OHCs and others who are engaged in hearing conservation training and other educational or outreach activities that could benefit from auditory demonstrations of acoustical concepts and hearing loss.

I hope you enjoy *Acoustics and You: Learning About the Science of Sound*. Please feel free to reproduce the activity sheet in its entirety and use it for all of your training and outreach activities. Both activity sheets are also available in PDF format on the NASA Glenn Research Center Acoustical Testing Laboratory website at <http://acousticaltest.grc.nasa.gov>. I'd welcome your comments on either, as well as requests for single copies of the *Auditory Demonstrations* compact disc, at beth.a.cooper@grc.nasa.gov and would like to hear about any successful educational outreach materials you have developed and are willing to share with other OHCs.

Beth Cooper is an acoustical engineer and Manager of Acoustical Testing Services at the NASA John H. Glenn Research Center at Lewis Field, where she provides noise control engineering support to help Glenn Research Center's science experiment payloads meet International Space Station hearing conservation goals. Under her direction, the Glenn Research Center's Acoustical Test Laboratory also offers a comprehensive array of design, test and consulting services for other NASA and external customers. Ms. Cooper also serves as a consultant to the NASA Johnson Research Center's Flight Crew Hearing Conservation Program.

CAOHC Announces New Hearing Conservation Manual!



It's been nine years since the last revision of the *Hearing Conservation Manual*, and you've been asking us "when will a new manual be available?" We're pleased to announce that the *Hearing Conservation Manual, 4th Edition*, by Alice Suter, PhD is off the press.

This fourth edition is easier to use, more comprehensive as a learning tool, and an excellent resource & reference book for your daily work in preventing hearing loss. The author, Alice Suter, has again provided her extensive knowledge and experience in the field of hearing conservation in the writing of this manual.

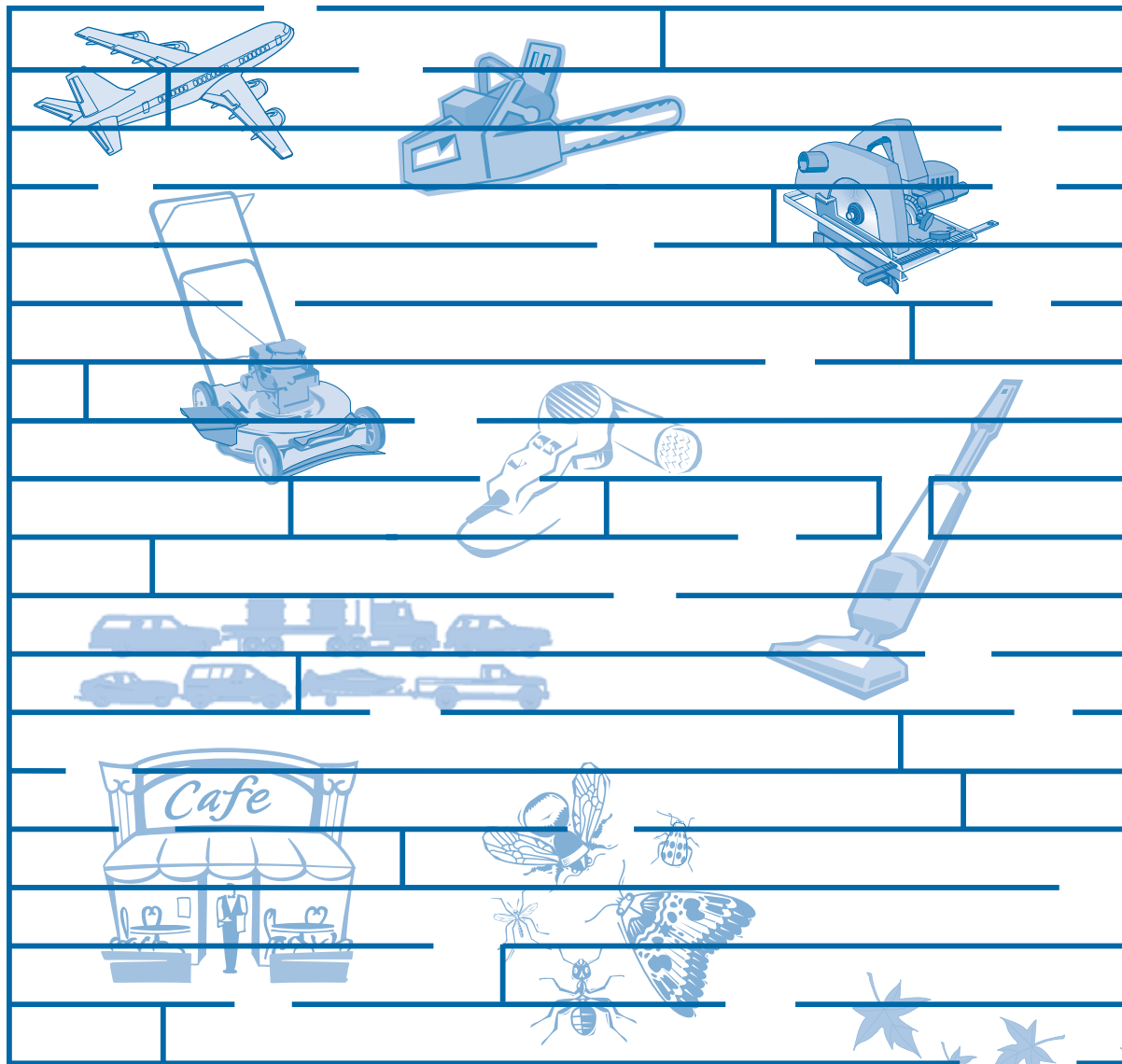
This edition includes the latest on OSHA's regulatory changes, MSHA's Noise Regulation 30 CFR Part 62, and among many new features are reference tables, guidelines for revision of baseline audiograms, updated photos & graphs, and 2 American National Standard Institute documents and an ANSI technical report — these alone are worth more than the cost of the manual!

There's an order form on **page 11** for you to photocopy or tear out of this issue, and we've made it easier for you to order single or multiple copies by including shipping and handling in one price! Order one for everyone on your hearing conservation team — including your professional supervisor. Mail or fax the order form, or go on-line to <http://www.caohc.org/manual.html>.

Find Your Way Out of the Noise

Start here

Be ear-rational! Find your way through the maze, going from loudest to the quietest sound.



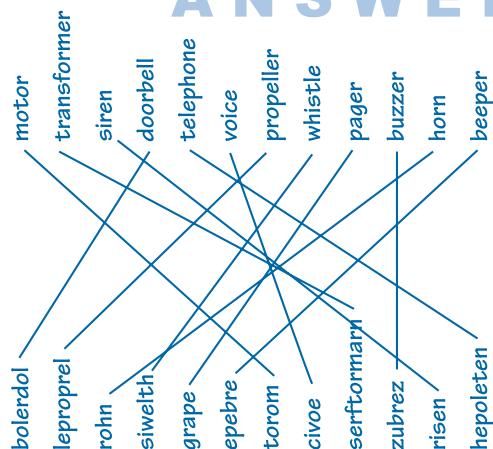
1. spectrum
2. vibration
3. broadband
4. acoustics
5. amplitude
6. decibels
7. octave
8. tone
9. wavelength
10. A-weighting
11. period
12. pitch



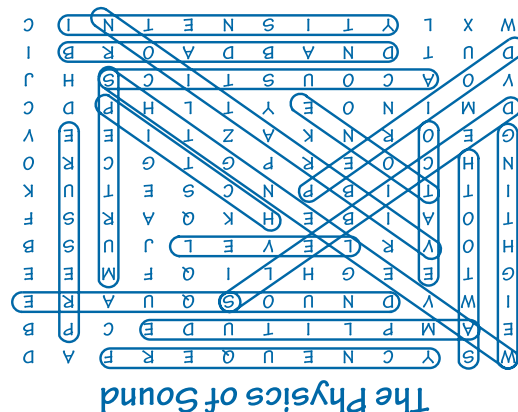
Find the Right Word

1. F
2. L
3. K
4. A
5. G
6. J
7. B
8. D
9. E
10. H
11. L
12. C

Sources of Tonal Sounds



ANSWERS



Find the Right Word

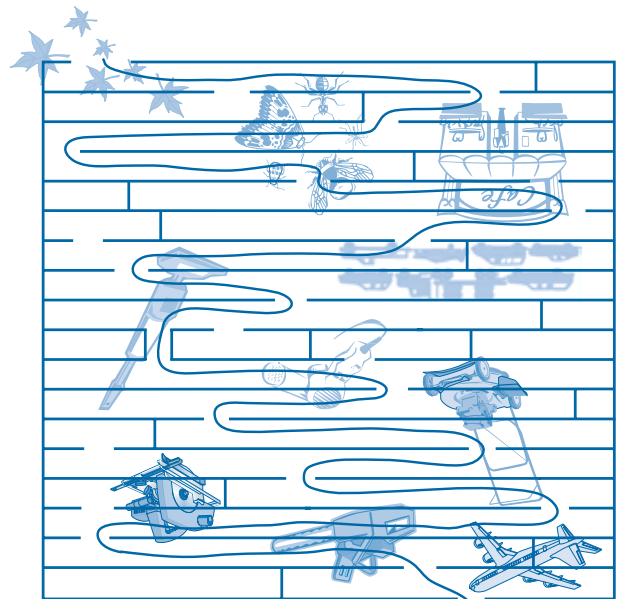
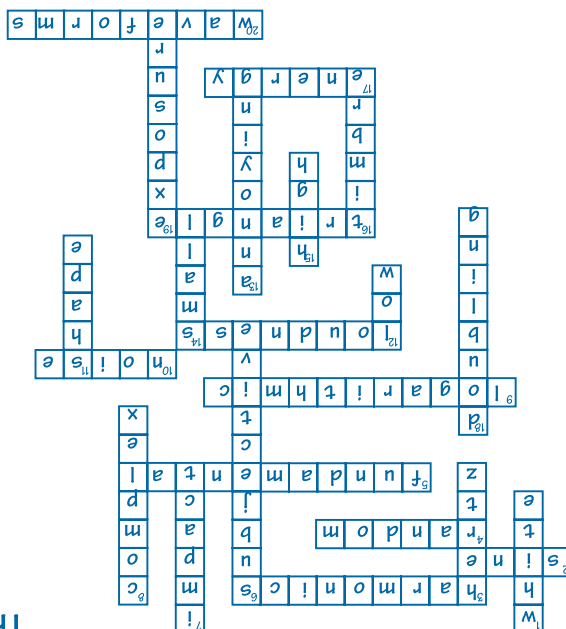
Match these words with their definition.

- A. The science of sound.
- B. Dividing the audible frequency range into sections of this size helps us analyze a broadband sound, much like splitting white light into a rainbow of colors.
- C. A subjective perception of the frequency of a sound.
- D. What we perceive when a sound pressure wave repeats itself many times per second.
- E. This attribute of a sound wave is shorter for high frequency sounds than for low frequency sounds.
- F. Used to describe the magnitude of sound energy at many frequencies.
- G. One of the three dimensions of sound, along with frequency and time variations.
- H. This filter approximates the sensitivity of the human ear to low sound levels.
- I. How sound is produced in an elastic medium such as air, water, or building materials.
- J. Units for expressing sound energy.
- K. Fans, blowers and compressed air hoses all produce sounds of this type.
- L. The time required for one complete cycle of vibration.



ANSWERS

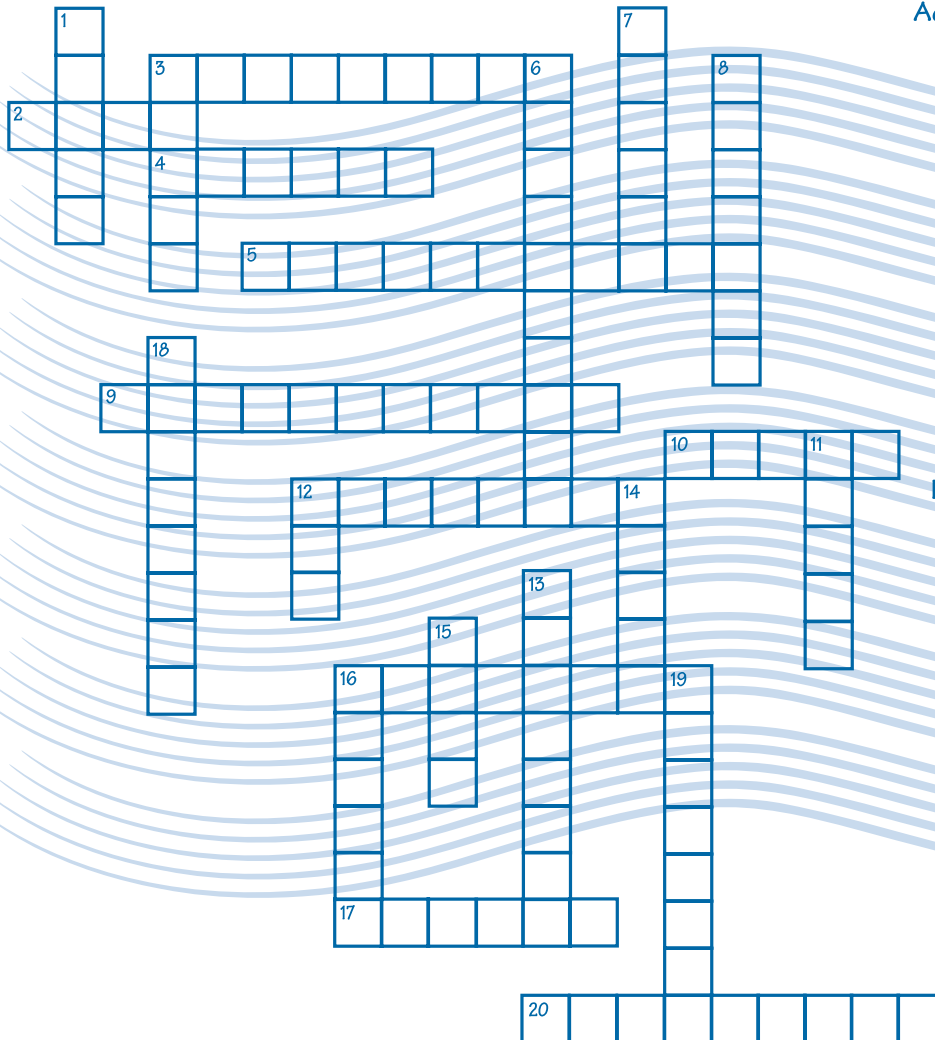
boom
snap
crackle
tap
trill
whir
rumble
thud
ding
clang
bong
roar
whine
hiss



Design and layout by Kelly Shankland

M-1037
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Acoustics and You: Learning About the



- Across
2. When the basic sound pressure pattern is called a pure tone.
 3. Whole-number multiples of the fundamental frequency.
 4. Unlike tonal sounds, broadband sounds do not repeat.
 5. The _____ frequency of a tone determines its pitch.
 9. Decibels are measured on a _____ scale.
 10. Broadband sounds are usually perceived as noise.
 12. The _____ of a sound is related to the amplitude of the sound wave.
 16. A common waveform not mentioned in #1 is the _____.
 17. The smallest or "just noticeable" difference in sound level is _____.
 20. Some examples of _____ are the sine wave, square wave, and sawtooth wave.

- Down
1. A sound with equal energy at all frequencies is called _____.
 3. The unit of frequency is _____.
 6. Pitch is a _____ descriptor of frequency.
 7. Gunshots and explosions are examples of _____ sounds.
 8. A _____ sound is made up of a special combination of frequencies.
 11. The harmonic content of a sound determines its _____.
 12. _____ pitched sound sources are typically found in nature.
 13. The presence of tones in a sound generally determines its _____.
 14. High-pitched sound sources are typically found in nature.
 15. Sounds produced by a violin, piccolo, and flute are _____, while those produced by a tuba, or double bass, are _____.
 16. The shape of a wave has a strong influence on the sound's _____.
 18. An octave represents a _____ of frequency.
 19. A-weighted sound levels are good predictors of the human ear's response to high sound levels.



National Aeronautics and
Space Administration

Acoustical Testing Laboratory

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Find and circle the words in the list.
Each is hidden horizontally, vertically,
or diagonally in a straight unbroken line
of letters that reads forward or backward.

SPECTRUM
VIBRATION
BROADBAND
ACOUSTICS
AMPLITUDE
DECIBELS
FREQUENCY
LEVEL
OCTAVE
SOUND

WEIGHTING
TONE
WAVELENGTHS
PERIOD
PITCH
SQUARE
PRESSURE
SAWTOOTH
INTENSITY

Science of Sound

resembles a _____ function, the wave is often

total frequency are called _____.

consist of a sequence of _____ wave patterns that

etermines the pitch.

scale.

as _____.

the amount of energy in the sound.

20 is the _____ wave.

nce in a sound's _____ is about 3 dB.

the wave, sawtooth wave, and square wave.

cies is called _____ noise.

ency.

of _____ noise sources.

lly organized collection of pure tones.

ines the _____ of the sound wave.

typically large in size.

ly makes a sound more _____ than it would otherwise be.

y _____ in size.

soprano voice have more _____ frequency content than

s, and baritone voice.

ce on the _____ or characteristic quality of the sound.

quency.

tors of hearing loss associated with unprotected _____

Sources of Tonal Sounds

These sources produce sounds with strong tones. Match the scrambled sounds.

bolerdol

leproprel

rohn

siwelth

grape

epebre

torom

civoe

serftormarn

zubrez

risen

hepoleten

motor

transformer

siren

doorbell

telephone

voice

propeller

whistle

pager

buzzer

horn

beeper

The Physics of Sound

W S Y C N E U Q E R F A D
E A M P L I T U D E C P B
I W V D N U O S Q U A R E
G T E E G H L I Q F M E E
H O V R L E V E L J U S B
T O A I B E H K Q A R S F
I T T I B P N C S E T U K
N H C O E R P G T G C R O
G E O R N K A Z T I E E V
D M I N O E Y T L H P D C
V O A C O U S T I C S H J
D U T D N A B D A O R B I
W X L Y T I S N E T N I C

The Sounds of Sound

Unscramble these words.

shis _____

hewni _____

raro _____

gnob _____

glanc _____

nigd _____

duth _____

blemur _____

rihw _____

lirtl _____

pat _____

klacrec _____

pans _____

mobo _____

UPCOMING OHC CERTIFICATION AND RECERTIFICATION COURSES* 2002

*The listed dates indicate day one of the scheduled classes; certification courses are 20 hours in length; recertification classes are 8 hours.

Current as of October 15, 2002 (for a complete list of courses visit our website at www.caohc.org);
for the most current list of courses contact the CAOHC office at 414/276-5338.

Begin Date	City	State	Course Director	Phone	Begin Date	City	State	Course Director	Phone
12/2/2002	San Antonio	TX	Robert C. Rhodes	713/468-3201	1/16/2003	Edmond	OK	Roy S. Jackson	405/570-6729
12/3/2002	Santa Clara	CA	Kirsten R. McCall	425/254-3833	1/17/2003	Brighton	MA	Nancy E. Peterson	617/254-7300
12/3/2002	New Orleans	LA	Michael F. Seidemann	504/443-5670	1/22/2003	Irvine	CA	Kirsten R. McCall	425/254-3833
12/3/2002	Waterville	ME	Anne Louise P. Giroux	207/872-0320	1/22/2003	Albuquerque	NM	John H. Elmore	800/357-5759
12/3/2002	Brooks AFB	TX	Robert W. Edris		1/22/2003	Dallas	TX	Dean A. Harris	970/586-0702
12/4/2002	Birmingham	AL	Georgia W. Holmes	205/934-7178	1/29/2003	Oak Park	IL	Robert C. Beiter	708/445-7171
12/4/2002	W. Palm Beach	FL	Herbert J. Greenberg	561/968-3536	1/29/2003	Detroit	MI	John H. Elmore	800/357-5759
12/4/2002	Atlanta	GA	Wolfe, William	770/475-2055	2/5/2003	Jacksonville	FL	Nancy N. Green	904/880-1710
12/4/2002	Bloomington	IL	James J. Jerome	317/841-9829	2/5/2003	Reno	NV	John H. Elmore	800/357-5759
12/4/2002	Chicago/Woodfield	IL	Thomas D. Thunder	847/359-1068	2/5/2003	Salt Lake City	UT	Pamela Cronin	801/566-8304
12/4/2002	Greensboro	NC	George R. Cook, Jr.,	336/931-0178	2/10/2003	Omaha	NE	Thomas W. Norris	402/391-3982
12/4/2002	Morrisville	NC	Andrew P. Stewart	919/544-7500 X255	2/12/2003	Concord	CA	Charles E. Fankhauser	707/746-6334
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12/12/2002	Greensboro	NC	George R. Cook, Jr.,	336/931-0178	5/21/2003	Denver	CO	John H. Elmore	800/357-5759
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					6/16/2003	Omaha	NE	Thomas W. Norris	402/391-3982

Dear Editor:

Can you please clarify CAOHC's requirement for training on a manual audiometer in the OHC course curriculum?

Dear OHC:

Many OHCs use a microprocessor for the hearing testing of their workers. Your CAOHC Course Director will provide instruction in a CAOHC course on BOTH the microprocessor and the manual audiometer. The CAOHC curriculum requires that all OHCs be taught how to test workers on a manual audiometer or in the "manual mode" of a microprocessor. This requirement remains a crucial part of the CAOHC curriculum and is a vital skill for the OHC so that you can test all workers – including those who have difficulty responding to the hearing test on an automatic audiometer (such as those suffering from tinnitus); when there is a software error or other automated equipment problem a manual audiometer may be the only equipment available.

If you are using a microprocessor exclusively, CAOHC suggests that you practice in the "manual mode" occasionally in order to maintain your manual audiometer testing skills over the 5-year span of your certification.

As part of their responsibility for the audiometric testing program the "professional supervisor" (physician, audiologist or otolaryngologist) must ensure that the OHC uses the appropriate method (automatic or manual) to obtain a valid audiogram for each worker.

Editor's note: Contact your audiometer manufacturer for model specific questions.

Classified ads for Fall 2002

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OSHA'S Final Rule continued from page 3

recorded case, this may not prove to be a simple task. Depending on which criterion an employer has utilized in the past, it may not be obvious which cases of hearing shifts have previously been recorded: any STS? only 25 dB shifts in hearing? only shifts determined to be work-related? If recordability is tracked via software, how complete and accurate is the documentation of whether or not a case has been previously recorded? Even moving forward, although STS becomes the trigger point for 2003 and beyond, it is clear that not all cases of STS will be deemed to be work-related, and therefore recordable. It will now be necessary to determine a separate "recordability" baseline which can be reset (individually for each ear) when a case is actually recorded on the OSHA Log. This tracking ability will become especially important should an employer wish to utilize the "line-out" option to erase previous STSs recorded over the past five years. Clearly, the OHC and professional reviewer will need to establish a solid line of communication to accurately maintain employee baselines for the purpose of identifying potentially recordable shifts.

- **Importance of 30-day retests:** In the past, employers may not have chosen to aggressively pursue retests for employees who showed STS. After all, in a hearing conservation program, the OHC's emphasis is on prevention and rightly so; individual counseling and hearing protection refitting/retraining are key. Now, however, any case of STS not retested would become automatically recordable if the employee's history indicates that the shift is "more likely than not" considered to be work-related.
- **Documentation of individual background information:** In order for the reviewing professional to make a definitive call on work-relatedness, accurate and up-to-date noise exposure assessments must be available. In addition, the OHC will need to provide the reviewer with medical case history information and documentation of any known off-the-job noise exposures. It is now more important than ever for the OHC to ensure that a complete ear/hearing and noise history are on file for each employee in the hearing conservation program.

Finally, regardless of the criterion used for recording work-related shifts on the Form 300, the OHC should remember that this action is merely a recordkeeping function. Recording a case on the OSHA Log does nothing to protect that employee from further hearing loss. OHCs must therefore remain diligent in their commitment to preventive measures that will truly have an impact on decreasing hearing loss and improving quality of life. This preventive focus ultimately benefits both the noise-exposed worker and the employer.

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Susan Megerson is an Instructor for the University of Kansas Intercampus Program in Communicative Disorders. She has been a CAOHC-certified Course Director since 1984, and has served on the Council, including a term as Chair.

Spring 2003 Course Director Workshop

The Council will conduct the spring Course Director workshop on Friday, March 14, 2003 in Atlanta, GA at the Embassy Suites Hotel Atlanta Airport. This workshop is a requirement for Course Director certification upon application approval by the CAOHC Screening Committee.

Course Directors may also choose the workshop method for recertification. All questions may be directed to Barbara Lechner, Executive Director, at 414/276-5338. Application forms are available on-line at www.caohc.org as well as the workshop registration form.

Spring 2003 Council Meeting

The CAOHC Council will hold their semi-annual meeting prior to the Spring Course Director Workshop on Thursday, March 13, 2002 in Atlanta, GA at the Embassy Suites Hotel Atlanta Airport. The Council is comprised of two representatives from each of the Component Professional Organizations assisting CAOHC in meeting its mission (see outside back cover for these representatives and their organizations). The Council meets twice a year to report on the status of committee projects, discuss tactics for carrying out future tasks, and to review the fiscal activities of CAOHC.

ASSE Joins CAOHC Council

The American Society of Safety Engineers (ASSE) recently was invited to join the CAOHC Council as one of eight Component Professional Organizations (CPO) with representation on the Council.

Throughout its growth, this non-profit organization has dedicated itself to advancing the safety profession and enhancing the knowledge and capabilities of safety practitioners. ASSE has played a key role in the development of many important national programs and standards. In 1997-98 the Society was successful in impacting additional regulations promulgated by OSHA. Effective communication on governmental affairs issues is conducted via publication of monthly columns in *Professional Safety Journal*, the monthly *National Legislative/Regulatory Update*, and regular updates on the ASSE website: www.asse.org

Marcella Thompson, CSP RN COHN-S represented ASSE at the October 17, 2002 Council meeting in Rosemont, IL. (A second representative to be named.)

AAOHN Provides CEUs for Course Directors

The American Association of Occupational Health Nurses (AAOHN) has approved continuing education units (CEUs) for CAOHC Course Director (CD) workshops beginning with the October 18, 2002 workshop held in Rosemont, IL at the Embassy Suites Hotel O'Hare. Any COHN completing their certification or recertification as a course director may apply for 8.7 CEU credits. This continuing nursing education activity was approved by the American Association of Occupational Health Nurses, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.



CAOHC Announces — The 4TH Edition Hearing Conservation Manual

About the Manual . . .

The Hearing Conservation Manual 4th edition is here! If you're a member of a hearing conservation team in industry, military or mining – including occupational hearing conservationists, audiologists, physicians, industrial hygienists, acoustical engineers, safety engineers, and others – this manual will assist you in the front-line defense against hearing loss in your workers.

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- Reprints of valuable articles on hard to test workers; tips for fitting hearing protectors; and noise controls
- Updated photos and graphs
- References to valuable websites and useful documents in print

About the Author . . .

Alice H. Suter, PhD served as a Senior Bioacoustical Scientist in the U.S. EPA's Office of Noise Abatement and Control. As Manager of the Noise Standard at the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA), she was the chief author of the Hearing Conservation amendment to the noise standard (29 CFR 1910.95). Dr. Suter joined the National Institute for Occupational Safety and Health (NIOSH) in 1988 as a Visiting Scientist and Research Audiologist. She is presently a private consultant in industrial audiology and community noise abatement.

About the Editor . . .

Elliott H. Berger, MS, is the Senior Scientist for Auditory Research at E-A-R / Aearo Company, where for over 25 years he has studied noise and hearing conservation, with an emphasis on hearing protection. He chairs the ANSI working group on hearing protectors, has been lead editor for two highly-regarded texts in noise and hearing conservation, and has also presented his research in over 60 articles and other text book chapters.

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