



UPDATE

The Newsletter of the Council for Accreditation in Occupational Hearing Conservation

VOLUME 10 • ISSUE 1 • SPRING 1999

Chair's Message

by Susan Cooper Megerson, MA CCC-A

CAOHC Chair, Representative of the American Speech-Language-Hearing Association



1998 was an exciting year for CAOHC as we celebrated the 25th anniversary of incorporation under our current name: the

Council for Accreditation in Occupational Hearing Conservation. We shared with you both retrospectives and special recognition of the many individuals who have contributed to CAOHC's success over the years. I am pleased to report that through these joint efforts, CAOHC's leadership position in hearing conservation is as strong as ever. Our current roster includes over 21,000 certified Occupational Hearing Conservationists (OHCs) and nearly 400 Course Directors (CDs) {see the graph on page 5 for a glimpse of participation in recent years}. As always, CAOHC recognizes our

ongoing responsibility to you, the practicing hearing conservation professional. The Council continues our commitment to enhancing the quality of hearing conservation programs in industry and the military. Planned projects and activities for 1999 include:

- **New Course Director Handbook/Address Listing:** The CAOHC Executive Office staff has redesigned the format of the annual CD Address Listing booklet to be more useful and informative. Although CD contact information is still provided, the new Handbook focuses on serving as a quick reference guide for CDs. Included are such items as OHC Course requirements, course approval process reminders and forms, CD-related policies and procedures, and a new CD "Common Questions & Answers" section.
- **Expanded Website:** The CAOHC website currently provides helpful information about CAOHC, the Council, certification/recertification

requirements and procedures, the *Hearing Conservation Manual* order form, articles previously published in the UPDATE, and listings of approved OHC courses currently available. Also listed are internet "links" to websites of CAOHC's component professional organizations. Upcoming additions in 1999 include: CD listings with contact information and links to their websites. Check out the CAOHC website at: <http://www.caohc.org>

- **Conferences:** In 1999, CAOHC will again participate in key OHC and CD professional conferences. CAOHC is an affiliate of the annual conference of the National Hearing Conservation Association (NHCA), held February 25-27, 1999 in Atlanta. Next, the Council will have an exhibit at the 1999 American Occupational Health Conference (AOHC), being held April 23-30, in New Orleans. Please stop by our booth and visit with Council or staff. {See related article on page 7.}

continued on page 5

International Noise Awareness Day

by Nancy Nadler, Director

Noise Center at the League for the Hard of Hearing

April 21, 1999 will mark the fourth annual International Noise Awareness Day (INAD), sponsored by the League for the Hard of Hearing. The goal of this campaign is to educate the general public about the harmful effects of noise on hearing, health and the quality of life.

For many Occupational Hearing Conservationists (OHCs), the activities of INAD are those which are implemented on a day-to-day basis - free hearing screenings, dissemination of information and hearing protection, and training programs to encourage employees to protect their hearing. But, think about the employee who may resist wearing hearing protection while using garden equipment or while hunting or

continued on page 6

What's Inside?

| Content | Page |
|-------------------------|------|
| Noise in the News | 2 |
| OHC Corner | 3 |
| Pumping Up the Volume | 4 |
| Prof. Supervisor Course | 7-8 |
| Noise in Farming | 9-10 |
| OHC Courses | 11 |



UPDATE

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 \$15. Payment must accompany request:

611 E. Wells Street
Milwaukee, WI 53202-3816
Phone (414) 276-5338
Fax (414) 276-3349

- **Executive Director**
Janet L. Haynes
- **Assistant Executive Director**
Barbara Lechner
- **Administrative Assistant**
Chris Whiting
- **Publications Committee:**
 - Chair**
Merrie Healy, RN MPH
 - Contributing Editor**
Peter Weber, MD
 - Elliott Berger, MS INCE Brd. Cert.
 - Susan Megerson, MA CCC-A
 - Stephen Roth, PE

Opinions expressed in the *UPDATE* are those of the authors, and do not necessarily reflect official CAOHC policy. © CAOHC 1999



Printed on recycled paper

OHC Certification

CAOHC Certification is valid 5 years from the date of the original 20 hour course. Recertification through an 8 hour course must be made by the expiration date of your CAOHC issued certificate. Your application must be filed with the CAOHC office to be valid. Contact CAOHC staff to verify certification or to locate an approved CAOHC course by calling 414/276-5338...or locate courses at CAOHC's website.

Noise in the News: Public Health Awareness Campaign in the Works

by Lee Hager, Executive Vice President
James, Anderson & Associates, Inc.

Noise-induced hearing loss (NIHL) remains the most common occupational injury/illness. One of the reasons that efforts to reduce NIHL have been stymied is a general lack of awareness about the preventability of NIHL and the effect that hearing loss has on quality of life. A large scale national effort is underway to change these perceptions and to raise the awareness of NIHL.

Over three days in late November and early December 1998, more than 100 concerned professionals were called together in Washington, DC by the National Institute on Deafness and Other Communication Disorders (NIDCD), National Institute for Occupational Safety and Health (NIOSH) and the National Institute on Environmental Health Sciences (NIEHS). This working group laid the ground work for a national public health awareness campaign to change the way America thinks about hearing and the risks imposed by noise exposure.

The meeting was divided into three days, each with a different purpose. The first day was spent discussing the occupational aspect of the problem, with NIOSH hosting a meeting of about 50 stakeholders. The second session was the full Communication Planning Meeting, with discussion centered on who needs the hearing loss prevention message and

how the message should be framed for different "audiences," including workers, youth, hearing health professionals, and other populations.

On the final day, consensus results from the Communication Planning Meeting were compiled by a writing group comprised of selected representatives of the assembled professionals. The results and outline developed by the Writing Group will serve as the basis for the public health awareness campaign to be orchestrated by NIDCD and NIOSH, with specific message format and content to be developed by public health communication specialists.

Currently, the government agencies involved with the campaign are seeking proposals from public relations firms to help prepare and distribute the message. Representatives of both NIOSH and NIDCD provided up-to-the-minute status of the campaign at the National Hearing Conservation Association (NHCA) conference February 25-27, 1999 in Atlanta, Georgia. For further information, contact NHCA at 303/224-9022, or check out their website at <http://www.hearingconservation.org> or <http://www.safe-at-work.com>.

Letter to the Editor

This letter was received from Elizabeth Maples, an OHC in Birmingham, Alabama Deep South Center for OH & S

"Just a brief note of thanks for producing such a wonderful newsletter. They are always informative. I thought the Winter Issue was packed full of useful, applicable information on hearing conservation.

One brief note, the Chair's message on various agencies: NIOSH - In addition to research - does a great deal in training - on professional and academic levels. This is a very important component of NIOSH - even in the field of hearing conservation ... physicians, occupational health nurses, industrial hygienists and safety engineers may get their first exposures to hearing conservation through NIOSH academic programs at Education and Research Centers (ERCs). Also, many of the ERCs offer professional development programs on Noise and Hearing Conservation.

Again, thank you for such an excellent newsletter!"

OHC Corner

Hearing Protection Hygiene

Linda S. Frye, MPH RN COHN-S

CAOHC Representative of the American Association of Occupational Health Nurses

Editor's Note: Linda Frye as new Chair of the CAOHC OHC Committee will author the 'OHC Corner' for the UPDATE. Linda has served as faculty on CAOHC OHC courses and has been actively involved with hearing conservation programs in the workplace.

The National Institute for Occupational Safety and Health (NIOSH) estimates approximately 30 million American workers experience exposures that may be hazardous to their hearing. It is often a challenge as an Occupational Hearing Conservationist (OHC) to convey the importance of prevention in the workplace to managers and employees. We perhaps can be more effective if training is ongoing and consists of a variety of presentation techniques. It may be beneficial to personalize the cost of hearing loss to the employee in terms of their not being able to communicate with their children, enjoy music, or understand conversation at a social gathering. Hearing is one of the senses that adds to the quality of our life. We must make every effort to promote hearing conservation in the workplace, and at home.

When considering what to include in your training program, one issue related to hearing conservation which

may warrant attention in your workplace relates to personal hygiene and associated health related issues. The following common sense approaches may be beneficial:



For Employee Training:

- Instruct the employee to keep hands clean and dry when inserting earplugs. Moisture and dirt may increase risk of infection.
- The employee should wash reusable earplugs with soap and water daily or follow the manufacturer's instructions if different. Allow plugs to dry thoroughly before reinserting.
- Encourage employees to replace cracked and worn plugs.
- Discourage the sharing of ear protection.
- Be sure the plugs worn are the correct size. Improperly fitted plugs may not afford proper protection, not be worn because of discomfort or may traumatize the ear canal and/or drum.
- Keep ear protectors in a case when not in use so they won't attract lint or dirt from clothing pockets or become contaminated with irritating substances.
- The cushions in ear muffs should be cleaned as instructed by the manufacturer and replaced when they become hard or cracked.
- Store muffs properly so they will not be at risk of being knocked to the ground or subject to dirty environments.
- Encourage employees to clean their outer ear but to avoid scratching or digging in the ear canal with small objects with the intent of cleaning.
- Assure employees that a small amount of ear wax actually helps protect the ear from dirt and is not a sign of poor hygiene.

For the Occupational Hearing Conservationist:

- Drainage, pain, or obstructed ear canals should be evaluated by a doctor.
- Be sure to clean the audiometer headset between appointments during the

- testing process. There are commercially available products similar to a wet wipe that are handy to use and do not damage the cushions. Your medical supply vendor or the manufacturer of audiometers should be able to assist you with the purchase of the product. Alcohol may also be used for cleaning the headset, but this may affect the longevity of the cushions.
- Change the specula on the otoscope after every visual client exam.

Employee involvement is a vital part of any hearing conservation program. By working together we can prevent hearing loss.

Author's note: The goal of the 'OHC Corner' is to assist in meeting the ongoing needs of those working with employees on a regular basis. If you have questions, please forward them to the CAOHC office (address on page 2). Every effort will be made to respond to your concerns in future issues of the UPDATE.

NOTE FROM CAOHC STAFF

At the Council meeting held October 6, 1998, it was decided by unanimous vote that all certifications or recertifications received by the CAOHC office for Occupational Hearing Conservationists received January 1, 1999 and forward will have the designation COHC (Certified Occupational Hearing Conservationist) imprinted on their certificate.

Pumping Up the Volume

Movie sound has been getting better—and louder

by Ray Sawhill with Corie Brown and bureau reports

If the Oscar were presented for most rather than best sound, "Armageddon" would certainly be a prime contender. Rocket launchings, asteroid explosions and toppling



buildings push sound to rib-rattling extremes. In fact, volume levels at the movies generally are soaring.

Thanks to advances in digital technology, filmmakers can now inflict about 20 more decibels on audiences than they could five years ago. Should they choose to inflict them, that is. Many do. "Sound is 50 percent of the movie," says "Armageddon" director Michael Bay. "I like feeling the rumbles. I like feeling the rides. You got to give them a sensory experience."

Lately, directors have just been knocking them senseless. "Who wants to be blasted out of their seats?" said Barbara Carpenter of Delray Beach, FL., walking out of "Bulworth" after only 20 rap-filled minutes. Theater managers are fielding more complaints than ever about aching ears, and New York's Noise Center reports a sharp increase in the number of inquiries about the potential dangers of movie noise levels. At the recent Cannes film festival, a panel convened to discuss the perils of excessive volume. The dialogue, the story line—everything's been getting drowned out by the Big Bang. "There's a real danger of making the public feel that going to the movies is no longer pleasurable," says Peter Cowie, international publishing director of Variety.

Six years ago, only a few hundred theaters were equipped to play ear-blasting digital sound. Then "Jurassic Park" was offered to theaters on condition that they upgrade their sound equipment. Today nearly 20,000 can handle state-of-the-art digital. The result has been a kind of free market

Splitting Ears

A Radio Shack decibel meter—and an old Guinness Book of World Records—confirm that movies are plenty loud.

- 73 decibels A normal office conversation
- 114 decibels Godzilla shrieking at the edge of Central Park
- 117 decibels The shuttle taking off from the asteroid in 'Armageddon'
- 120 decibels The Who in concert at London's Charlton stadium, 1976

of noise, with filmmakers competing for sounds grabby enough to match their eye-popping visuals. "Sound carries you through moments when the action doesn't," says producer Jerry Bruckheimer. "Take away the sound and it's dead."

Males in their teens and 20s flock to movies that are essentially rock concerts with screenplays. "I like the experience," say Julio Rosso, 22, of Chicago. "The shrieking, the explosions, the way you can feel them." But even sound technicians are sick of bringing in the noise. "I can't tell you how many times I've said to a producer or director, 'This is way too loud'," says sound editor Bruce Stambler. (Technicians found "Air Force One" and "Batman & Robin" particularly obnoxious; one calls "Godzilla" "sound abuse.") What producers and directors tend to forget, says sound designer Gary Ryderstrom, is the virtue of contrast: "Quiet moments can sometimes draw you in, and loud moments can sometimes force the audience away." If we shiver with pleasure when remembering movie sounds from long ago—the newspapers rustling during the breakfast montage in "Citizen Kane," or the recalled waltz music in "Shadow of a Doubt" -- it isn't because they were loud, it's because they were pregnant with atmosphere and character.

How to resist temptation? The companies that supply the technology—Dolby, Digital Theater Systems and Sony -- are urging movie people to show some restraint. Dolby is even introducing a

monitoring device filmmakers can use while editing. In the meantime, consumers can always skip the deafening action movie of the moment -- or wait to watch it at home, where they can get their own hands on the controls. After all, if it's called "Armageddon," it's sure to sound like the end of the world.

From NEWSWEEK, (July 6) © (1998) Newsweek, Inc. All rights reserved. Reprinted by permission.

TWO COURSES PLANNED FOR COURSE DIRECTOR CERTIFICATION

Dallas, Texas is the site of the Spring, 1999 Course Director Workshop. This one day, eight hour course will be held at the Dallas Regency DFW Hotel on Friday, April 16, 1999.

Atlanta, Georgia will host the CD Workshop on Monday, November 8, 1999 at the Atlanta Airport Hilton and Towers.

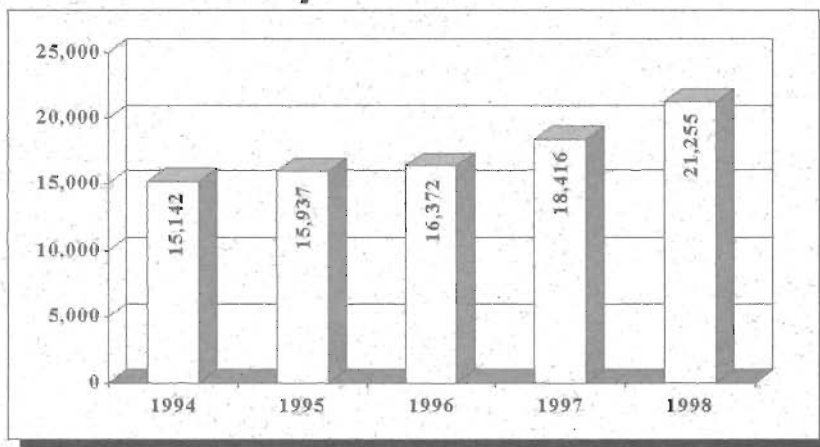
These Workshops are for Course Directors who are initially planning to certify, or are using the workshop method to recertify. Applications can be obtained by contacting Barbara Lechner at the CAOHC Executive office at 414/276-5338, or accessing the CAOHC website at www.caohc.org.

Chair's Message

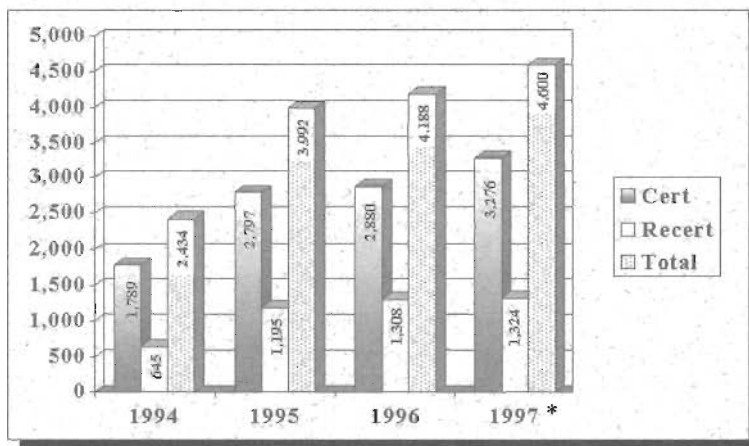
continued from page 1

- **Course Director Survey:** In 1998, CAOHC completed an extensive survey of OHC opinions and needs (see *Summer 1998 UPDATE for the summary of responses*). This year, our focus turns to CDs. A questionnaire will be mailed to all CDs this Spring. We encourage CDs to take a few moments to provide the Council with your feedback by completing this survey. Thank you in advance for your participation.
- **Expanded Professional Supervisor Course:** A few years ago, CAOHC initiated a special committee to develop a curriculum for training supervising professionals of Hearing Conservation Programs (audiologists and physicians). The committee presented its first introductory seminar entitled "The Role and Qualifications of the Professional Supervisor in the Occupational Hearing Conservation Program" at the American College of Occupational and Environmental Medicine's (ACOEM) STATE OF THE ART CONFERENCE in Phoenix, October 1998. This half day seminar received outstanding reviews from the 60+ occupational physicians in attendance. The program has now been expanded to a full day format and will next be offered at the annual conference of ACOEM on April 26th in New Orleans {see *announcement on page 7 for further information*}.
- **Course Director Course Materials:** An Ad Hoc committee is currently reviewing and developing new training materials which will assist CDs with improving the consistency and quality of their OHC courses. More information will appear in future issues of the UPDATE as this committee progresses.
- **Course Director Workshops:** Two certification opportunities are

OHCs Currently Certified



Annual OHC Certifications



*Not all 1998 applications have been received at time of graphic report.

available in 1999 for prospective CDs and current CDs in need of recertification: April 16, 1999 in Dallas; and November 8, 1999 in Atlanta. Please contact Assistant Executive Director, Barbara Lechner at 414/276-5338 for information on CD certification and/or a copy of the application form. {*These forms can also be obtained on the CAOHC website.*}

- **Publications:** CAOHC's Publications Committee and Executive Office continue to bring you professional development and technical support for your Hearing Conservation Program through quality publications for OHCs: the UPDATE, quarterly newsletter, and the CABLE,

published in the Spring and Fall for Course Directors.

- **Long Range Plan:** Approximately every 5 years, CAOHC holds a special meeting to examine our mission, focus and goals. This next strategic planning session will be held November 9 and 10 in Atlanta. Please forward any suggestions you may have to our Executive Office {*address on page 2 of this edition*}. We welcome your input in this planning process!

Once again, we appreciate your dedication to preserving the hearing health of those in your care. Have a great 1999!

International Noise Awareness

continued from page 1

snowmobiling? Or can we expect this employee to listen to music at safe listening levels? INAD supports the daily activities of CAOHC and, in addition, offers materials to motivate the worker and his or her family both in and out of the workplace.

On International Noise Awareness Day, a variety of activities are implemented by participants worldwide to heighten awareness about the dangers of excessive noise. Participants offer free hearing screenings to the public and provide hearing protection, generously donated by E•A•R/Aereo Company. Other activities include anti-noise programs for school children, school poster contests, town meetings to analyze noise codes and enforcement procedures, and a corporate e-mail program to inform the business community about the hazards of noise.

There has also been tremendous national media attention such as segments on the *Today* show, *NBC Nightly News*, *CNN*, *20/20*, *WNPR*, *CBS* and numerous print stories in *The New York Times*, *Chicago Tribune*, *Newsweek*, and the *Weekly Reader*.

OHCs can participate in International Noise Awareness Day by:

- **Requesting an INAD packet** (see below for "how to")
- **Displaying an INAD poster**
- **Providing hearing screenings to employees & family members**
- **Securing a local community service spot with the media**
- **Distributing the League's corporate e-mail Education Project to fellow workers**

A six-part packet providing your company with information about the impact of noise on hearing in a fun and easy to understand format. The program begins with "Top Ten Reasons to Protect Your Hearing" (David Letterman style).

- **Providing hearing conservation education community wide**

Have You Checked Your Audiometer Today?

by Susan Cooper Megerson, MA CCC-A

Evaluation of the effectiveness of your Hearing Conservation Program depends upon the accuracy of your audiometric testing efforts. In turn, the validity of the audiometric testing results is dependent upon several factors, one of which is the adequate functioning of your equipment. As the OHC performing the audiometric test, you are responsible for proper calibration and appropriate documentation of your audiometer. As discussed in your CAOHC training course, the Occupational Safety and Health Administration (OSHA) and good practice require that three types of audiometer calibration be conducted:

- **Functional Check:** The operation of the audiometer must be checked **daily** - *prior to audiometric testing*. First, the output of the audiometer is checked by conducting an audiometric test for a person with known, stable thresholds or utilizing a "bio-acoustic simulator" device. Next, the tester must listen to the output of the audiometer to make sure it is free from distorted or unwanted sounds. Deviations of 10 dB or greater on the output check or detection of static or unwanted sounds on the listening check require that an acoustical calibration be performed prior to use.
- **Acoustical Calibration:** The acoustical calibration must be performed at least **annually**. This is a more objective form of the functional check conducted using an acoustic calibration system. Output deviations of greater than 10 dB or any other unusual variations require that an exhaustive calibration be performed.
- **Exhaustive Calibration:** An exhaustive calibration must be conducted at least **every two years** in accordance with specifications of the American National Standards Institute (ANSI). As the name implies, this calibration entails a more in-depth analysis of the audiometer's function and may include adjustments according to ANSI specifications.

There are many resources available to you should you need assistance or guidance in maintaining your audiometric equipment:

- **CAOHC's HEARING CONSERVATION MANUAL:** See Chapter VII for a more detailed description of calibration requirements and recommended protocols. Appendix VII includes samples of various audiometer calibration forms, courtesy of a number of CAOHC Course Directors, which may be useful in your day-to-day documentation.
- **Your Course Director or Professional Supervisor:** Be sure to review calibration procedures and documentation with your professional supervisor (the audiologist or physician responsible for reviewing audiograms and determining referrals/follow-up). It's best to identify your "quality control" procedures in advance, so that equipment problems are detected and resolved *prior* to testing. As we all know, a few minutes spent on prevention is well worth avoiding the costly consequences of following-up on inaccurate results and retesting employees.
- **Calibration Service Provider:** Ask your professional supervisor or audiometer supplier if acoustic/exhaustive calibration services are available. Many will come to your location and provide the service on-site. If you must ship your audiometer for annual calibration or repair, pack carefully, and don't forget to include earphones, the response switch and all connecting cords, so that the complete system can be evaluated.

The League can provide age appropriate information for OHCs to distribute to schools and community groups.

- **Encouraging fellow employees to follow the "Recipe for the Quiet Diet"** Suggested activities to reduce noise levels during the day, highlighted with 60 seconds of "No Noise" from 2:15

PM to 2:16 PM on April 21, 1999 ... regardless of location.

For more information about INAD, contact Nancy Nadler, Director, Noise Center at the League for the Hard of Hearing at 888/NOISE-88 or e-mail NoiseCtr@aol.com. You may visit their website at <http://www.lhh.org/noise>.

CAOHC Exhibiting at AOHC

The American Occupational Health Conference (AOHC) will be held in New Orleans, LA., April 23-30, 1999 at the Morial Convention Center. This meeting of the American Association of Occupational Health Nurses and the American College of Occupational & Environmental Medicine is the premiere meeting for occupational health nurses, physicians and allied health professionals. Five thousand attendees are expected. Over 50% of attendees are occupational health nurses.

CAOHC has been exhibiting at this conference for several years and will be there again in April at **Exhibit #162** (just left of the AOHC cafe). Barbara Lechner, of the CAOHC Executive staff,



will have computer look-up capability to check your certification number, expiration date, or mailing address. So...stop by and introduce yourself, we always look forward to meeting you personally!

CAOHC Council to Meet in Dallas

The Council will hold its Spring meeting in Dallas, Texas on Thursday, April 15, 1999 at the Dallas Hyatt Regency DFW Hotel. The Council discusses the progress of CAOHC's goals, projects and committee activity; shares industry news from their respective organizations; and develops ways to continue to promote the conservation of hearing by enhancing the quality of occupational hearing conservation programs.

This meeting will be followed by the Course Director Workshop on Friday, April 16, 1999. Council members taking part in this workshop will be instructing new and recertifying Course Directors.

ATTENTION! PROFESSIONAL SUPERVISORS OF HEARING CONSERVATION PROGRAMS

The OSHA Noise Standard, 29CFR 1910.95, specifically states that "the employer shall administer a continuing, effective hearing conservation program." CAOHC is offering a one-day seminar at the American Occupational Health Conference (AOHC) on Monday, April 26, 1999 entitled **The Role and Qualifications of the Professional Supervisor in the Occupational Hearing Conservation Program**.

Upon completion, participants will be able to:

- ★ Define the role of the professional supervisor in an occupational hearing conservation program.
- ★ Explain the standards and regulations that apply to hearing conservation programs.
- ★ Discuss problem audiograms, standard threshold shifts, and the essential elements of a quality hearing conservation program.

The seminar will cover basic knowledge of acoustics and sound physics, anatomy and physiology of normal human hearing, and basic audiometry. Standards and regulations that apply to hearing conservation programs will be presented. The medical-legal aspects of noise-induced hearing loss will be identified.

6 Credit Hours in CME will be awarded for attendance at this seminar conducted by CAOHC Council members Dr. Michael Holthouser and Myrna Stephens, PhD CCC-A.

You may register by referencing Postgraduate Seminar #3 on April 26, 1999 to: AOHC, PO Box 71732, Chicago, IL 60690-1732; phone 847/228-6850 or faxing 847/228-6849. You may also access ACOEM's website at <http://www.acoem.org>

Did You Find an Error or Plan a Change of Address?

CAOHC would like to ensure that your mailing address stays current. If you have (or are going to make) a change in your name, degree, company, address, or phone number please take a minute to notify us.

Mail or fax to:

CAOHC

Attention: Chris Whiting, Administrative Assistant
611 E. Wells Street
Milwaukee, WI 53202-3816

Fax: (414) 276-3349

First CAOHC Course for Supervising Professionals Held

Alex F. Sanchez, Jr., MD

Former CAOHC Representative of the American College of Occupational & Environmental Medicine

The Council for Accreditation in Occupational Hearing Conservation has certified OHCs and course directors for over 25 years to fulfill its mission: the establishment and maintenance of training standards for those who safeguard hearing in the workplace. The government specifically recognizes CAOHC as the major certifying body for occupational hearing conservationists in the U.S. However, one integral component of a Hearing Conservation Program (HCP) has been overlooked ... the training of the supervising professional (an audiologist or physician).

CAOHC sponsored an introductory seminar entitled, "The Role and Qualifications of the Professional Supervisor in the Occupational Hearing Conservation Program" at the American College of Occupational and Environmental Medicine (ACOEM) STATE OF THE ART CONFERENCE (SOTAC) in Phoenix, Arizona on October 18, 1998.

The faculty for this first CAOHC sponsored professional supervisor (PS) course were: Alex F. Sanchez, Jr., MD (former ACOEM representative to the CAOHC Council); Robert A. Dobie, MD (AAOHNS representative to the CAOHC Council & Secretary-Treasurer of the Council); and Rena Glaser, MA CCC-A (past Chair of the CAOHC Council). Some of the topics covered were: basic acoustics, differential diagnosis and medical treatment of hearing loss, elements of an occupational hearing conservation program, the defined role of the professional supervisor in a hearing conversation program, and the medical legal aspects of noise-induced hearing loss (NIHL).

The half-day introductory seminar was attended by sixty-three occupational physicians. A post-conference survey of those who participated revealed that:

- 90% of those attending were involved in hearing conservation in their practices.

- 36% were board-certified occupational physicians.
- 55% were presently supervising HCPs in their practices.
- 82% stated that some of their professional time was devoted to reviewing problem audiograms.

The majority of those who attended indicated that a full-day seminar or perhaps two days would be necessary to achieve the learning objectives. 70% of these participants responded that they would like to have a certification as a professional supervisor if it were offered in conjunction with this educational program.

The next PS course will be held at the American Occupational Health Conference on Monday, April 26, 1999 in New Orleans {see related article on page 7}. This second course will be a full day (8 hour) seminar and promises to attract an even larger group of occupational physicians than the Fall 1998 meeting.

Ten Most Active CAOHC Course Directors for 1998 Announced

CAOHC is pleased to acknowledge the ten most active Course Directors for 1998. Due to the professional efforts of these Course Directors over 1400 new and recertifying Occupational Hearing Conservationists completed the requirements of a CAOHC course.

John Elmore, MA MBA
Precision Hearing Conservation
San Antonio, Texas

William Wolfe, MA
Environmental Technology Corp
Roswell, Georgia

Melette Meloy, MS CCC-A
Sound Solutions
Birmingham, Alabama

Thomas Thunder, MA CCC-A INCE
Acoustic Associates, Ltd.
Palatine, Illinois

Timothy Swisher, MA CCC-A
Employee Health & Safety
Broomall, Pennsylvania

Pamela Gordon, MS CCC-A
Health Testing Services, Inc.
Danvers, Massachusetts

Robert Rhodes, PhD
Occupational Marketing, Inc.
Houston, Texas

Mary McDaniel, MS CCC-A
Pacific Hearing Conservation
Seattle, Washington

Kathryn Deppensmith
Occupational Marketing, Inc.
Houston, Texas

Rodney Atack, PhD
Hearing & Speech Health Care
Portland, Oregon

An Action Plan for Noise on the Farm

Everyone working in the farming community, male and female, full or part time, should take steps to protect their hearing. A three-level approach to hearing health should be a part of life on the farm.

First — Educate

Information including the effect of noise on hearing, importance and effectiveness of hearing protection, and the early warning signs of noise-induced hearing loss (NIHL) should be provided for farm workers at risk.

Second — Test and Protect

An annual hearing test for farm workers can help stop NIHL early in its progression. Use of effective hearing protection in high noise areas can totally prevent NIHL.

Third — Rehabilitate and Accommodate

Even after some hearing has been lost, life can be made better. Audiologists can work with you to help alleviate the hearing handicap and focus on rehabilitation and coping with hearing loss in everyday life.

Assessment for fitting and dispensing systems like hearing aids or assistive listening devices, and communication training will help farmers with existing hearing loss.

Earplugs and earmuffs worn properly reduce the risk of hearing loss

Fold Here

Peace and Not So Quiet on the Farm

The U.S. Safety Council ranks farming as the most hazardous occupation in this country, and the consequences of farm accidents are almost immediately obvious. However, hearing loss due to noise on the farm has not been considered an important issue by many. After a long workday on the tractor or combine, without realizing that these may be early indications of hearing loss due to noise, farmers may notice:

- ringing in the ears;
- a sensation of "fullness" in the ears;
- some reduction in the ability to understand conversation.

This guide provides information about noise levels on the farm and actions that agricultural workers can take to protect their hearing.

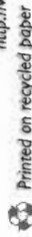
Fold Here

For more information, contact:

NHCA

National Hearing Conservation Association
9101 E. Kenyon Ave., Ste. 3000, Denver, CO 80237
303-224-9022 (VA, 303-770-1812 (F))
nhca@gvccmi.com (E-mail)

<http://www.hearingconservation.org> (Internet)



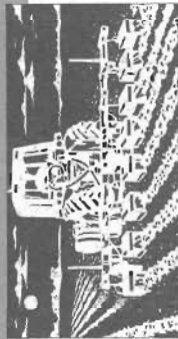
Printed on recycled paper

NHCA thanks James Lankford of Northern Illinois University and Barbara Garrett of St. Luke's Hospital, Cedar Rapids, Iowa, for their contributions to this project.

1.2.96 version

A practical guide to:

Noise and Hearing in the Farming Community



NHCA

National Hearing Conservation Association

The mission of the National Hearing Conservation Association is to prevent hearing loss due to noise and other environmental factors in all sectors of society.

Some Important Facts About Hearing Loss in the Farm Community

- Hearing loss is always greater among farmers than comparative groups that have had little or no noise exposure.
- The beginning of noise-induced hearing loss has been noted among children and adolescents (ages 6 to 19) living in the farm environment.
- A difference in hearing ability between ears has been noted among farmers, with the left ear showing slightly more loss. This may be a result of firearm use, doors located on the left side of tractor cabs, or head position as a farmer looks over the right shoulder when monitoring equipment on a tractor with no cab.
- While the magnitude of hearing loss in women is not as great as that for men, women in the farming community should be aware of the risk of high noise exposure. Exposure to high noise can start at a very early age on the farm, so all farm workers and families should follow good hearing conservation practices.
- Hearing protection can reduce the risk of exposure to high noise level on the farm.

*Farm noise can
cause permanent
hearing loss*

How Loud Can It Be?

Noise levels of farm equipment indicate that the hearing hazards on the farm are serious and real. Damage to hearing is seen with long-term exposure to sounds above 85 dBA, but even brief exposure to very loud sounds can result in permanent hearing loss. The following list shows some of the noise sources and intensity levels that can occur on the farm.

| | |
|-----------------|------------|
| Tractors | 74-112 dBA |
| Grain Dryers | 85-110dBA |
| Combines | 85-105 dBA |
| Chain Saws | 77-115 dBA |
| Pig Squeals | 85-112 dBA |
| Aerial Spraying | 83-116dBA |

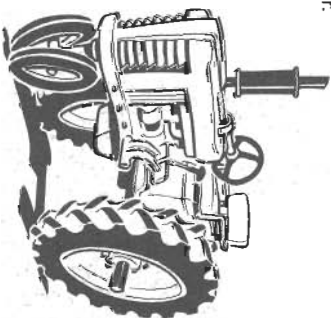
How Did This Happen to Me?

The part of the hearing system that converts sound waves (a physical effect) into nerve impulses for your brain to handle (electrical signal) is called the cochlea. The actual conversion takes place when fluid, excited by sound waves conducted through the ear, sets the hair cells inside your cochlea into motion.

The hair cells in your ear act like the grass in your lawn — walk on them a little, and they recover. Walk on them too much, and the damage is permanent. Repeated and excessive exposure to noise is like walking on the grass too much. Dead hair cells won't let you hear, they won't grow back, and you can't re-seed your ear.

What Farmers Do to Protect Themselves?

- Hearing loss within the farming community is relatively common. The risk of noise exposure, however, can be easily controlled.
- Wear hearing protection in noisy areas. If you must raise your voice to be clearly heard, noise levels may be high enough to damage hearing. Earplugs or earmuffs, properly fitted and used, can reduce the risk of hearing loss due to noise.
 - Make sure that equipment is operated with cabs closed and cab seals intact. Noise from tractors and combines can be reduced by as much as 20 dBA by simply closing the door.
 - Maintain equipment: Noisy mufflers and loose equipment guards can cause significant noise.
 - Protect hearing in off-the-job situations, too. Firearms, tractor pulls, snowmobiles, all-terrain vehicles, concerts, and other noisy/recreational activities contribute to total noise load on the hearing system.
 - Annual hearing tests can provide early warning of noise-induced hearing loss before it becomes debilitating.



Upcoming OHC Certification and Recertification Courses*

Approved as of February 1999

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

| Date | City | Course Director | Phone | Date | City | Course Director | Phone |
|------|----------------------|----------------------------|--------------|------|----------------------|--------------------------|--------------|
| 3/10 | Charleston, WV | Harris, Gary | 304/766-6555 | 5/4 | St. Louis, MO | Bellamy, McKenna | 314/968-4710 |
| 3/10 | Charlotte, NC | Newman, Valerie | 704/525-0999 | 5/5 | Atlanta, GA | Wolfe, William | 770/475-2055 |
| 3/10 | Golden, CO | Kastner-Wells, Laurie | 970/454-1110 | 5/5 | Birmingham, AL | Meloy, Melette | 205/444-9797 |
| 3/10 | Indianapolis, IN | Lyon, Melissa | 765/662-1702 | 5/5 | Columbus, OH | Rink, Timothy | 614/885-2997 |
| 3/11 | Cincinnati, OH | Elmore, John | 800/357-5759 | 5/5 | Fairfield, ME | Giroux, Anne | 207/873-3277 |
| 3/15 | Liberty, MO | Ratliff-Hober, Linda | 800/664-8401 | 5/5 | Syracuse, NY | Hengen, Garth | 508/752-4663 |
| 3/15 | Louisville, KY | Elmore, John | 800/357-5759 | 5/5 | Washington, DC | Brewer, Diane | 202/994-7167 |
| 3/15 | Okinawa | Schulz, Mari | (Navy) | 5/6 | Minneapolis, MN | Elmore, John | 800/357-5759 |
| 3/15 | Spring Hill, TN | Deppensmith, Kathryn | 713/869-6664 | 5/6 | Rye, NY | Rhodes, Robert | 713/869-6664 |
| 3/16 | Anderson, SC | Panhorst Lassiter, Barbara | (Private) | 5/7 | Brooks AFB, TX | Waldo, Tressie | (Air Force) |
| 3/16 | Atlanta, GA | Moore, A.Gregg | 770/953-4699 | 5/10 | Beaufort, SC | Faulkner Gischia, Carole | (Navy) |
| 3/16 | Irvine, CA | McCall, Kirsten | 800/334-5478 | 5/10 | Chicago, IL | Deppensmith, Kathryn | 713/869-6664 |
| 3/17 | Cleveland, OH | Snyderwine, Carol | 216/692-7466 | 5/10 | Des Moines, IA | Elmore, John | 800/357-5759 |
| 3/17 | Portland, OR | Dolan, Thomas | 503/725-3264 | 5/10 | Ft. Sam Houston, TX | Peterson, Cpt. Eric | (Army) |
| 3/17 | Roscoe, IL | Brook, Jane | 815/623-7301 | 5/11 | Atlanta, GA | Moore, A.Gregg | 770/953-4699 |
| 3/17 | Toledo, OH | Greenberg, Herbert | 415/885-3848 | 5/11 | Atlanta, GA | Russell, Charles | 770/754-4415 |
| 3/19 | Dallas, TX | Rhodes, Robert | 713/869-6664 | 5/11 | Greensboro, NC | Juarez, Omar | 919/967-2228 |
| 3/22 | Phoenix, AZ | Deppensmith, Kathryn | 713/869-6664 | 5/12 | Atlanta, GA | Moore, A.Gregg | 770/953-4699 |
| 3/23 | Brooks AFB, TX | Waldo, Tressie | (Air Force) | 5/12 | Dallas, TX | Harris, Dean | 970/586-0702 |
| 3/23 | Edgewood, MD | Ciliax, Don | (Army) | 5/12 | Greensboro, NC | Juarez, Omar | 919/967-2228 |
| 3/23 | Rock Hill, SC | Marett, Benjamin | 803/328-2136 | 5/12 | Houston, TX | Meloy, Melette | 205/444-9797 |
| 3/24 | Cleveland, OH | Wolfe, William | 770/475-2055 | 5/12 | Owensboro, KY | Etienne, Joseph | 502/926-0418 |
| 3/24 | Dallas, TX | Harris, Dean | 970/586-0702 | 5/12 | Toledo, OH | Greenberg, Herbert | 415/885-3848 |
| 3/24 | Greensboro, NC | Juarez, Omar | 919/967-2228 | 5/13 | Boston, MA | Rhodes, Robert | 713/869-6664 |
| 3/24 | LaMirada, CA | Metz, Michael | 949/786-8884 | 5/17 | Houston, TX | Deppensmith, Kathryn | 713/869-6664 |
| 3/24 | Portland, OR | Fairchild, Michael | 503/232-1646 | 5/18 | Brooks AFB, TX | Waldo, Tressie | (Air Force) |
| 3/25 | Bethel Park, PA | Angelelli, Roger | 412/831-0430 | 5/18 | Detroit, MI | Simpson, Thomas | 313/577-6754 |
| 3/25 | Columbus, OH | Elmore, John | 800/357-5759 | 5/18 | Torrance, CA | McCall, Kirsten | 800/334-5478 |
| 3/29 | Fort Hood, TX | Johnson, Jennifer | (Army) | 5/19 | Chapel Hill, NC | Stewart, Andy | 919/967-2228 |
| 3/29 | Naples | Meltmar, LT Phillip | (Navy) | 5/19 | Hattiesburg, MS | Oshrin, Stephen | 601/266-5216 |
| 3/30 | Shelton, CT | Sochrin, Phyllis | 203/735-4327 | 5/19 | Orlando, FL | Elmore, John | 800/357-5759 |
| 4/5 | Indianapolis, IN | Lyon, Melissa | 765/662-1702 | 5/19 | Pittsburgh, PA | Swisher, Timothy | 412/367-8690 |
| 4/5 | Portland, OR | Atack, Rodney | 503/614-8465 | 5/19 | Portland, OR | Fairchild, Michael | 503/232-1646 |
| 4/6 | Chapel Hill, NC | Stewart, Andy | 919/967-2228 | 5/19 | Torrance, CA | McCall, Kirsten | 800/334-5478 |
| 4/6 | Greensboro, NC | Juarez, Omar | 919/967-2228 | 5/21 | Fairfield, ME | Giroux, Anne | 207/873-3277 |
| 4/7 | Boca Raton, FL | Greenberg, Herbert | 561/750-2100 | 6/2 | Bellevue, WA | McDaniel, Mary | 425/746-0735 |
| 4/7 | Grand Rapids, MI | Elmore, John | 800/357-5759 | 6/2 | Lake Charles, LA | Rhodes, Robert | 713/869-6664 |
| 4/7 | Valley Forge, PA | Swisher, Timothy | 412/367-8690 | 6/3 | Boise, ID | Bowman, Rick | 208/376-3591 |
| 4/8 | Portland, OR | Deppensmith, Kathryn | 713/869-6664 | 6/3 | Houston, TX | Elmore, John | 800/357-5759 |
| 4/10 | Cleveland, OH | Elmore, John | 800/357-5759 | 6/7 | Baltimore, MD | Doyle, Mary Lynette | 301/776-4053 |
| 4/12 | Fort Stewart, GA | Grantham, Cpt Marjorie | (Army) | 6/7 | Kansas City, MO | Ratliff-Hober | 816/482-5470 |
| 4/12 | Tulsa, OK | Rhodes, Robert | 713/869-6664 | 6/7 | Omaha, NE | Norris, Thomas | 402/391-3982 |
| 4/13 | Oakbrook Terrace, IL | Thunder, Thomas | 847/359-1068 | 6/7 | Portland, OR | Atack, Rodney | 503/614-8465 |
| 4/13 | Springfield, MA | Gordon, Pamela | 781/891-9124 | 6/8 | Oakbrook Terrace, IL | Thunder, Thomas | 847/359-1068 |
| 4/14 | Birmingham, AL | Meloy, Melette | 205/444-9797 | 6/9 | Birmingham, AL | Rhodes, Robert | 713/869-6664 |
| 4/14 | Brookfield, WI | Hase, Meredy | 414/547-2227 | 6/9 | Boca Raton, FL | Greenberg, Herbert | 561/750-2100 |
| 4/14 | Oakbrook Terrace, IL | Thunder, Thomas | 847/359-1068 | 6/9 | Harrisburg, PA | Swisher, Timothy | 412/367-8690 |
| 4/15 | Miami, FL | Rhodes, Robert | 713/869-6664 | 6/9 | Oakbrook Terrace, IL | Thunder, Thomas | 847/359-1068 |
| 4/16 | Cleveland, OH | Snyderwine, Carol | 216/692-7466 | 6/9 | Portland, OR | Dolan, Thomas | 503/725-3264 |
| 4/19 | Brooks AFB, TX | Waldo, Tressie | (Air Force) | 6/10 | Bethel Park, PA | Angelelli, Roger | 412/831-0430 |
| 4/19 | Liberty, MO | Ratliff-Hober, Linda | 800/664-8401 | 6/10 | Brooks AFB, TX | Waldo, Tressie | (Air Force) |
| 4/20 | Indianapolis, IN | Jerome, James | 317/841-1065 | 6/14 | Guam | Johnson, Jennifer | (Army) |
| 4/21 | San Francisco, CA | McCall, Kirsten | 800/334-5478 | 6/14 | Santa Fe, NM | Rhodes, Robert | 713/869-6664 |
| 4/21 | St. Paul, MN | Cary, Carolyn | 651/736-2089 | 6/15 | Atlanta, GA | Moore, A.Gregg | 770/953-4699 |
| 4/22 | New Orleans, LA | Deppensmith, Kathryn | 713/869-6664 | 6/15 | Charlotte, NC | Newman, Valerie | 704/525-0999 |
| 4/23 | New Orleans, LA | Elmore, John | 800/357-5759 | 6/15 | Portsmouth, NH | Gordon, Pamela | 781/891-9124 |
| 4/26 | Piscataway, NJ | Kelly, Ellen | 732/238-1664 | 6/16 | Charlotte, NC | Newman, Valerie | 704/525-0999 |
| 4/30 | New Orleans, LA | Chiarello, Joseph | 610/667-1711 | 6/16 | Cleveland, OH | Wolfe, William | 770/475-2055 |
| 5/4 | Greenville, SC | Guryan, Stephen | 864/235-9689 | 6/16 | Ontario, CA | McCall, Kirsten | 800/334-5478 |

Please contact the CAOHC office at 414/276-5338 for additional course availability. Publication dates may have precluded some course dates.



Council for Accreditation in
Occupational Hearing Conservation
611 East Wells Street Milwaukee, WI 53202-3816

Address Service Requested

BULK RATE
U.S. POSTAGE
PAID
MILWAUKEE, WI
PERMIT NO. 5438



<http://www.caohc.org>

or e-mail our office
at info@caohc.org

CAOHC Council Members and Their Represented Organizations

Chair

Susan Cooper Megerson, MA CCC-A
American Speech-Language-Hearing Association
U.S. HealthWorks
Kansas City, MO

Vice Chair

COL Richard W. Danielson, PhD CCC-A
Military Audiology Association
Army Audiology & Speech Center
Walter Reed Army Medical Center
Washington, D.C.

Secretary-Treasurer

Robert A. Dobie, MD
American Academy of Otolaryngology
Head & Neck Surgery
University of Texas Health Science Center
San Antonio, TX

James D. Banach, MBA

American Industrial Hygiene Association
Quest Technologies, Inc.
Milwaukee, WI

Elliott H. Berger, MS INCE, Brd. Cert.
American Industrial Hygiene Association
E•A•R Hearing Protection Products
Indianapolis, IN

John Erdreich, PhD

Institute of Noise Control Engineering
Ostergaard Acoustical Associates
West Orange, NJ

Linda Frye, COHN-S MPH RN

American Association of Occupational Health Nurses
E.I. DuPont DeNemours & Co.
Richmond, VA

Merrie L. Healy, RN MPH

National Safety Council
Sedgwick of Minnesota, Inc.
Eden Prairie, MN

Michael G. Holthouser, MD MPH

American College of Occupational & Environmental Medicine
Alliant Health System
Louisville, KY

Sara Joswiak, MPH

National Safety Council
Itasca, IL

Stephen I. Roth, PE

Institute of Noise Control Engineering
Roth Acoustical Associates
Pittsburgh, PA

Lt. Col. Theresa Y. Schulz, USAF, PhD MA BS CCC-A

Military Audiology Association
Aberdeen Proving Ground, MD

Myrna M. Stephens, PhD

American-Speech-Language-Hearing Association
Audiology Consultants, Inc.
Davenport, IA

Constance M. Tatman, MS RN CCM COHN-S

American Association of Occupational Health Nurses
Arvada, CO

Peter C. Weber, MD

American Academy of Otolaryngology
Head & Neck Surgery
Medical University of South Carolina
Charleston, SC