



Advocating for Change at OSHA

By Ted Madison

2008 marks the 25th anniversary of the implementation of the OSHA Hearing Conservation Amendment (HCA) to the Occupational Noise Exposure regulation, 29 CFR 1910.95 [OSHA, 1983] It seems like a good time to step back and ask how OSHA is doing with respect to protecting the hearing of America’s workers. In 2007, several widely respected groups did just that, concluding that OSHA is failing to sufficiently reduce the risk of hearing loss due to noise in the workplace.

ISEA

The first group to petition OSHA to toughen its hearing conservation rules in 2007 was the Industrial Safety Equipment Association (ISEA). In a letter dated January 26, ISEA President, Daniel Ship, wrote, “the 90 dBA TWA permissible exposure limit (PEL) and 5 dB exchange rate (ER) are insufficient to protect workers from the effects of workplace noise”. To support their case, ISEA submitted an in-depth report [Suter, 2006] summarizing the evidence which indicates that fewer workers will experience permanent NIHL if the PEL for noise is lowered to 85 dBA and the maximum allowable daily noise dose is calculated using an ER of 3 dB. The report was written by widely respected hearing conservationist, Alice Suter, Ph.D., author of the CAOHC Hearing Conservation Manual. Dr. Suter is also a former OSHA technical expert involved with the development of the existing hearing conservation amendment, who, in the late 1970s and early 1980s, researched and documented the benefits, costs and impact of mandatory federal hearing conservation rules. A complete copy of the Dr. Suter’s report for ISEA is available online at www.hearinglossprevention.org.

AIHA

Joining ISEA in calling for change at OSHA was the American Industrial Hygiene Association (AIHA). In its letter to OSHA, dated March 26, 2007, AIHA urged the agency to unify the action level for hearing conservation and the PEL for noise at 85 dBA and adopt a 3 dB ER. AIHA President, Frank M. Renshaw, PhD, wrote,

“Review of the damage risk estimation upon which the current regulation is based indicates that even a currently compliant hearing conservation program – that is, one where workers are exposed up to 90 dBA TWA with no hearing protection – will yield up to 26% excess risk of material

hearing impairment over the course of a working lifetime. It is unimaginable that any other regulated hazard would permit 20-30% of the exposed population to have material impairment. Lowering the PEL to 85 dBA would reduce the number of workers at risk by at least one-half.”

Dr. Renshaw went on to say, “Lowering the PEL to 85 dBA may also streamline management of hearing conservation programs by adopting a single threshold trigger for all hearing loss prevention activity such as engineering controls, training, hearing protection, and hearing conservation programs.”

AAOHN

The American Association of Occupational Health Nurses (AAOHN) added its voice to the cause on July 9, 2007, with a letter from AAOHN President, Richard J. Kowalski. In that letter, Mr. Kowalski pointed out that there is widespread support in the United States and around the world for lower noise exposure limits and the 3 dB ER.

ASSE

The American Society of Safety Engineers (ASSE) wrote to OSHA on April 2, 2007, in support of the changes proposed by ISEA. ASSE President, David S. Jones, wrote, “Given the advances in our knowledge about how to protect workers from noise, US workers deserve no less than this advancement in OSHA’s standards.”

Background

CAOHC came into existence, in part, because of the overly vague hearing conservation requirements in the years before OSHA implemented the HCA. During that time, CAOHC published the first CAOHC Hearing Conservation Manual [CAOHC, 1978] and was actively educating employers and those in the occupational health professions about best practices in hearing conservation.

In 1972, only 1 year after the OSHA noise rule, 1910.95, was published, the National Institute for Occupational Safety and Health (NIOSH) published, “Criteria for a Recommended Standard, Occupational Exposure to Noise” which recommended best practices for reducing the risk of developing occupational NIHL [NIOSH, 1972]. The

continued on page 5

CONTENT	PAGE
Advocating for Change OSHA	1
Chair’s Message	2
OHC Corner:	3
Spotlight on (CPS/A)	3
Hospital and Noise	4
Hearing Loss Recordability	7
OHC Courses	11



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Chair's Message

By Mary M. McDaniel, AuD CCC-A CPS/A

When I was a young girl in grade school, we asked our friends, teachers, relatives, and anyone else who could hold a pencil to sign our autograph book. Typically a short poem was written along with lots of squiggles and curly-cues above the signer's name. One poem, although a tad corn-ball by today's standards, has always stayed with me:

Good, better, best....Never let it rest....Until the good is better, and the better best!

Now here I am, many years later, and that corny little rhyme is vivid in my mind and it still rings true. Ah the good old days!

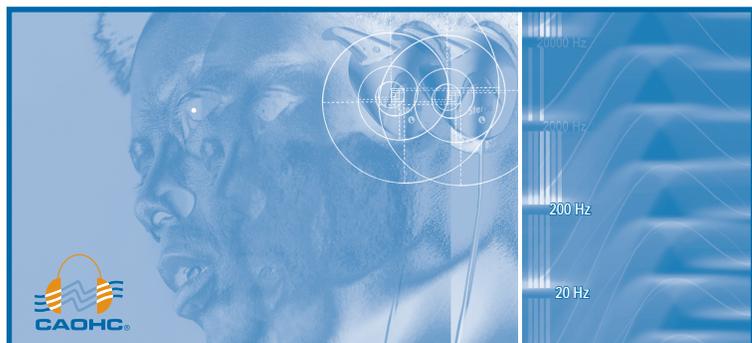
You've heard it here before.....CAOHC - there is no equal. That being said, it's important for you to know that CAOHC is not resting on its laurels. Our goal is to continue to make the good better and the better best!

This past November, in addition to our annual face-to-face board meeting, we conducted a strategic planning session to help us focus our future initiatives. It was an interesting exercise with some valuable outcomes. Most importantly, we agreed that our primary focus continues to be the presentation of excellent educational programming. The two courses that are offered by CAOHC are the Course Director workshop and the Professional Supervisor workshop. These two courses train the individuals who are actually out in the world training OHCs in CAOHC initial and recertification courses, as well as those who are supervising the audiometric testing portion of a company's hearing conservation program.

CAOHC strives to meet and exceed our already high standards for the two workshops it offers and will continue to do so in the future. As a result of our strategic planning session, we are considering distance learning. CAOHC wants to be responsive to the needs of our Course Directors and Professional Supervisors. We value the importance of face time, but also wish to be respectful of time demands on everyone involved in hearing conservation. Therefore, we will be examining how we can continue to maintain our high standards while providing options for delivery. Please stay tuned! It's going to take some time for us to get it right, but we've heard you and more importantly, we've listened.

The other focused initiative to come from our strategic planning session was in the area of quality assurance. In order for CAOHC to promote excellence, we monitor the quality of the courses that are being provided and subsequently hold the CD responsible for concerns or curriculum violations. We have done this by evaluating the information and feedback provided by the OHC at the conclusion of the course. This system has quirks and we're prepared to tackle the work required to make it better. Again, this will take time, but your comments and input will always be welcomed.

Please contact the CAOHC office and feel free to direct your comments, questions or suggestions to me. I look forward to hearing from you.



NOISE NOISE NOISE NOISE

13th Annual International Noise Awareness Day

April 16, 2008 will be the 13th Annual International Noise Awareness Day sponsored by the League for the Hard of Hearing of New York City. This is a day when all hearing conservation professions have a special opportunity for outreach using the materials that are available from the League.

You and your company, friends, and relatives can observe Noise Awareness Day by:

- Observing a Quiet Diet which according to the League is observing a 60 seconds of silence (no noise—no fans, motors, engines, iPods, etc.) from 2:15 – 2:16 p.m.
- Offering free hearing screening at a local mall.
- Providing hearing protection to your neighbors, relatives, and friends and giving them instructions on how to insert the ear plug.
- Speaking at the local elementary school.

**This is an opportunity for hearing professionals
to have an impact of their communities.
Don't miss it!**

**For additional information on this special day, check out
<http://www.lhh.org/noise/index>**



Lieutenant Colonel
John Elmore

Spotlight Certified Professional Supervisor (CPS/A)

This month, we focus our spotlight on one of the first audiologists to qualify for CAOHC Professional Supervisor Certification. Lieutenant Colonel John Elmore, AuD MBA CCC-A retired from the Air Force in 1997, but he did not retire from his passion of helping people prevent noise-induced hearing loss. As the Consultant to the Air Force Surgeon General, he was responsible for overseeing the programs at 350 Air Force installations with over 250,000 active duty and civilian employees enrolled in the USAF Hearing Conservation Program. Dr. Elmore identified program deficiencies, made appropriate recommendations, and provided on-site consultant services. Since leaving the military, his company, Precision Hearing, has become one of the most widely respected hearing conservation consultant practices in the nation. In a recent interview, Dr. Elmore said: "In the past, considerable attention has been placed on obtaining accurate and reliable hearing tests. Fortunately, this continues today. However, clearly manufacturing and mining companies across the U.S. are placing increased emphasis on the experience level, qualifications, and technical expertise of the professional supervisor. The audiologist or physician responsible for determining STS and especially work-related, recordable hearing loss is being asked to play a more active role in achieving a successful Hearing Conservation Program. Employers no longer

simply rely on a computer generated report after annual hearing testing, but call upon the professional supervisor's expertise on a continued, on-going basis." With over 37 years of experience, Dr. Elmore continues to strive to eliminate noise-induced hearing loss in the workplace.

Spotlight and YOU!

If you would like to nominate yourself or another CAOHC certified individual (OHC, CPS/A, CD) to appear in our feature Spotlight section of the UPDATE, please submit a short summary of why the person should be highlighted, as well as a resume and headshot if available to info@caohc.org.



Hospitals and Noise

By Kim Lefkowitz

Background

Noise in hospitals is a growing problem. In fact, noise has been growing in hospitals at a rate of just under 0.5 dB every year for the last 47 years (West & Busch-Vishniac, 2005). This rate is alarming and, surprisingly, little has been done to reverse it or even slow it.

One of the first champions of hospital noise in the early 1900s was the New York socialite, Mrs. Julia Barnett Rice. Central air-conditioning systems were not common at the time and open windows were the usual method of ventilation. The open windows had an unfortunate side effect of allowing the noise of boisterous children to enter the hospitals. Mrs. Rice partnered with Mark Twain, the famed writer, and together they had school children sign a pledge to be quiet outside of hospitals. This work paved the way for the signs stating "Quiet Hospital Zone" that appeared in the 1950s.

Noise Sources

In addition to community noise, internally generated sources such as HVAC systems now cause significant noise (Hunter, 2004). In fact, the development of new technologies is one of the main reasons for the constant rise in hospital noise since the time of Mrs. Rice's efforts. In addition to the HVAC Systems, overhead paging, moving carts, and a plethora of medical equipment contribute to the yearly rise of the noise levels. Conversation and activity from doctors and nurses also contribute to the overall noise. The real problem with hospital noise is that each of these factors is an essential part of hospital life.

Negative Effects of Noise

Though noise may be a necessary aspect of hospital life, it can still be harmful. The most obvious is that loud noises hinder restful sleep which is essential to healing. Nelson, West and Goodman (2005) reported that children in the pediatric ICU had seriously disturbed sleep patterns compared with children of similar ages. High noise has also been shown to lengthen the recovery process. Both Topf (2000) and Christensen (2005) show the harm that the high noise levels can cause, not only to patients but also to the working staff in hospitals.

Noise Levels

Scientists and engineers at Johns Hopkins have measured noise levels in the Pediatric Intensive Care Unit, where maximum sound levels were as high as 70 dB (Hunter, 2004). These levels can be high enough to inhibit speech intelligibility, which can lead to the misunderstanding of drug orders and can interfere with family and provider communication. Such misunderstandings can even be fatal. (West & Busch-Vishniac, 2005)

In 1963, Goodfriend and Cardinell studied the noise in several established hospitals. This study, funded by the US department of Health Education and Welfare, was used to establish guidelines and suggestions. Since the publication



of that paper, however, very little has been done to utilize any of the suggestions. Most of the suggestions up to this point have been administrative, such as asking doctors and nurses to be quiet in the hallways.

Figure 1 Daytime Hospital Noise Levels (Busch-Vishniac, et. al., 2005)

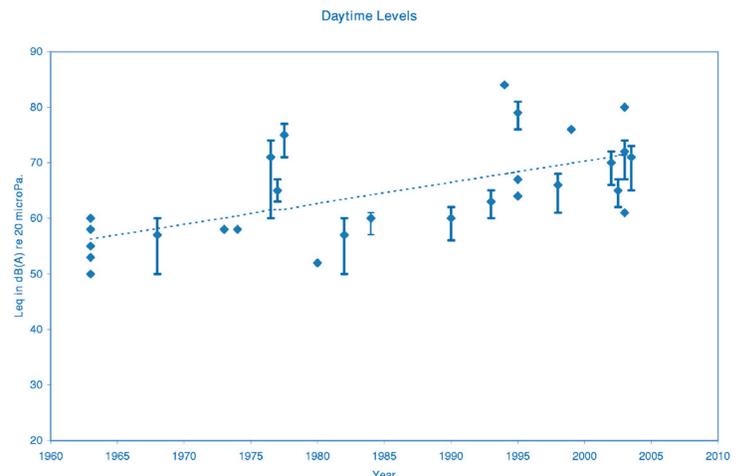


FIG. 1. A-weighted equivalent sound pressure levels measured in hospitals during daytime hours as a function of the year of study publication. Error bars indicate that data were given as a range spanned by the error bar. In these cases, the data point is shown as the logarithmic average of the range extreme values.

Possible Solutions

Recently, James West and Ilene Busch-Vishniac of Johns Hopkins University documented current noise levels and offered some solutions (Hunter, 2004; West, 2005; West & Busch-Vishniac 2005; West, et al. 2006). One study, presented by James West at the 2005 ASA/NOISE-CON meeting described the daytime noise levels as a function of year. He compiled the findings from a number of studies, presented in Figure 1

Noise Limits

The World Health Organization set guidelines for noise levels in patients rooms, 35 dB(A). Yet, in study after study, noise levels have been found to exceed those guidelines. In fact, the sound levels shown in Figure 1 are 20-40 dB higher than the suggested guidelines (Busch-Vishniac, et. al., 2005.)

One of the biggest accomplishments in recent years was a revised set of American Institute of Architects guidelines. Until the new version published in 2006, the AIA Hospital guidelines

Advocating for Change at OSHA.... – continued from page 1

importance of lowering the PEL to 85 dBA was spelled out at that time and re-affirmed in 1998 when NIOSH published its so-called “revised criteria document. [NIOSH, 1998] Although NIOSH recommended an ER of 5 dB in 1972, additional scientific evidence available in 1998 led NIOSH to change its recommendation to a 3 dB ER.

Since 1976, the American Conference of Government Industrial Hygienists (ACGIH) has recommended a Threshold Limit Value (TLV) of 85 dBA [ACGIH, 2000]. Likewise, the U.S. Department of Defense has limited TWA exposures to 85 dBA for many years, including all three branches of the military service [Suter, 2006].

What’s wrong with OSHA 1910.95?

The general consensus seems to be that the essential elements of the OSHA noise rule are good but that the compliance requirements and the enforcement policies are not stringent enough. The exposure limits are too high, the dose calculation is too lenient and the enforcement policies are too lax.

Exposure Limits

The current OSHA scheme, with an Action Level for hearing conservation at 85 dBA and the PEL for noise at 90 dBA, allows employees with exposures between 85 and 90 dBA who have not experienced a Standard Threshold Shift (STS) the option of not wearing hearing protection. This sends the wrong message to employers, namely: “exposures between 85 and 90 dBA are not very hazardous so there is no need for mandatory hearing protection and noise controls.” In fact, there is evidence to suggest that the rate of hearing loss among workers with exposures in the 80-90 dBA range is greater than among workers with exposures between 90 and 95 dBA [Rabinowitz, et al, 2007].

While it may be surprising that higher noise exposures don’t necessarily lead to higher rates of hearing loss, it hardly seems surprising that workers who have the option not to wear hearing protection may not do so and may end up with a hearing loss as a result. After all, those workers are hearing a conflicting message, “we’ll offer you hearing protectors but you don’t have to wear them unless you start to lose your hearing.” That’s like telling your kids, “we have seat belts for you but, since we’re not driving that fast, you only have to wear them after you hit the windshield once.”

Implementing the ISEA recommendation to unify the Action Level and PEL at 85 dBA would help send a more consistent message that exposures over 85 dBA are hazardous and should be reduced using all feasible methods, including hearing protection.

Exchange Rate

In her report for ISEA, Suter (2006) argued that, “it is fair to say that the origins and development of the 5-dB ER do not support its validity.” She asserted that the use of a 5 dB ER has led employers to underestimate the harm caused by noise, allowing an unacceptable number of workers to be overexposed. “This may help to explain why workers continue to lose their hearing, despite some 35 years since the time of OSHA’s first noise regulation, and 25 years since the promulgation of the hearing conservation amendment,” Suter concluded.

The ISEA recommendation that OSHA adopt a 3 dB ER is hardly a radical idea. The TLVs for noise established by ACGIH [2000] have been based on a 3 dB ER since 1994. Every other major industrialized country, the US Department of Defense, the EPA and NIOSH have all examined the evidence and concluded that, with few exceptions, increasing continuous noise exposure by 3 dB amounts to a doubling of the noise hazard for a given period of time.

Enforcement

The effectiveness of any occupational health and safety regulation depends as much on how it is enforced as on the specific requirements in those regulations. For example, OSHA 1910.95 states that employers can be cited for failing to implement feasible engineering and administrative noise controls along with hearing conservation measures to reduce noise exposures down to the PEL [OSHA, 1983]. However, OSHA enforcement policy for the last 25 years has allowed employers with noise exposures below 100 dBA to more-or-less disregard the noise control requirements so long as the hearing conservation program is “effective” [OSHA 1983]. Essentially, this policy encourages (or at least condones) the practice of relying on only one method, the HCP, to reduce noise exposures instead of using all available methods, including engineering and administrative noise controls.

If, in fact, a large percentage of HCPs in small and mid-sized companies are inadequate, as asserted in the ISEA report, then OSHA’s relaxed enforcement policy should be reconsidered. As Suter [2006] observes, “...the Agency should realize that incomplete and ineffective HCPs cannot be substituted for engineering controls”

Are Changes Likely?

Given that adoption of the ISEA recommendations is likely to result in a higher number of employees being identified as having exposures over the PEL (Seixas, Neitzel, Sheppard, and Goldman, 2005; Daniell et al, 2006) OSHA may be reluctant to act; fearing that doing so will increase the up-front cost of compliance for employers.

However, by failing to act, OSHA may burden employers with even greater, avoidable costs; the costs associated with work-related permanent NIHL and compensation of those workers who develop NIHL in present and future years. Even worse, OSHA’s refusal to adopt best practices amounts to an admission on their part that it is acceptable for a significant number of workers to lose their hearing even when their employers comply with a regulation designed to protect those workers.

After more than 6 months of review and analysis, OSHA responded in writing to the issues that were raised. In a letter to ISEA dated August 15, 2007, Edwin G. Foulke, Jr., Assistant Secretary for Occupational Safety and Health, acknowledged OSHA’s concern about occupational hearing loss and the effects it has on workers. In regard to the position paper submitted by ISEA, he wrote, “The overarching point Dr. Suter makes is that an unacceptable prevalence of occupational noise-induced hearing loss exists and that by harmonizing the action level,

continued on page 6

Advocating for Change at OSHA..... – continued from page 5

PEL, and exchange rate with much of the rest of the world, OSHA can greatly reduce the occurrence of this disability.”

In response to Dr. Suter’s recommendations that OSHA conduct in-depth studies of exposure risk criteria, noise controls, and enforcement strategies, Foulke agreed that, “These suggestions have merit and deserve careful exploration”. However, he cautioned that the process of conducting those studies and making major revisions to the regulation would require significant OSHA resources and take many years to accomplish.

Although Assistant Secretary Foulke promised that the agency will “continue to deliberate on the issues” raised by ISEA and the other organizations, he would not commit to a date for beginning the process of rulemaking, noting that OSHA, “has several major rulemaking projects underway.”

Similarly, in a letter to the National Hearing Conservation Association (NHCA) dated October 2, 2007, Foulke seemed to downplay the likelihood that OSHA will take action soon when he advised that, “Dr. Suter’s paper reveals several important issues that the Agency would have to resolve if it decided to proceed with a rulemaking to revise its Occupational Noise Exposure standard.”

What Can Hearing Conservationists Do?

CAOHC-certified OHCs, Course Directors, and Professional Supervisors have a long track record of advocating for best practices in hearing conservation. The letters and petitions sent to OSHA in 2007 are the direct outcome of concerned hearing conservationists within professional and trade associations taking a stand and urging their organizations to publicly support changes to the OSHA noise rule. Although we may not succeed in convincing OSHA to revise 1910.95 by writing letters and publishing reports, it’s safe to say that the odds of success are even worse if we don’t.

Ted Madison is an audiologist in Saint Paul, Minnesota, where he works as a Regulatory Affairs Specialist for the 3M Occupational Health & Environmental Safety Division. He is also a CAOHC-certified course director at the Midwest Center for Occupational Health and Safety at the University of Minnesota. Ted one of two representatives appointed to CAOHC by the American Speech-Language-Hearing Association (ASHA), and currently serves as Chair of the CAOHC publications committee and Editor of its newsletter, Update. He can be reached by e-mail at tkmadison@mmm.com

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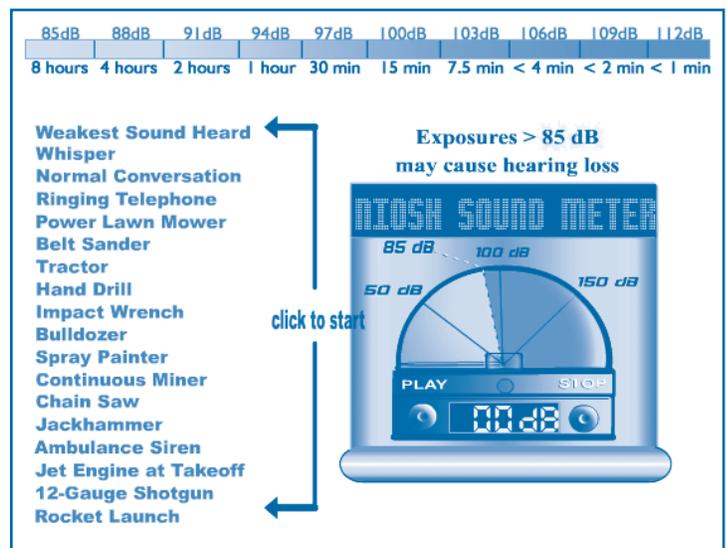
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Noise Meter

The NIOSH interactive noise meter (available at <http://www.caohc.org/publications/meter.php>) is a wonderful tool for communicating about noise levels from different types of sources. Numerous examples of sounds are given, ranging from the “Weakest Sound Heard” (0 dB) to Chain Saws (110 dB), 12-Gauge Shotgun (165 dB) and Rocket Launch (180 dB). The meter gives representative values for the sound level of the different sources. Note the exposure bar uses the 3-dB trading rule rather than the OSHA 5-dB trading rule. The actual sound level experienced by the listener is not the value shown on the meter!





Hearing Loss Recordability – 2006 Update

By: Lee D. Hager

More information about the scope and scale of hearing loss in industrial hearing conservation programs (HCPs) is coming to light now that OSHA-recordable hearing loss results from 2006 have been published.

According to the OSHA Recordkeeping Rule, 29 CFR 1904, the event that triggers recording of occupational noise-induced hearing loss (ONHIL) on OSHA’s Form 300, column m5, is a confirmed, work-related standard threshold shift (STS) relative to baseline that results in average hearing thresholds of 25 dB or worse relative to audiometric zero at the STS frequencies of 2000, 3000, and 4000 Hz. The requirement that recordable cases meet both criteria, STS and at least a 25 dB hearing loss, was initiated in 2003, with a separate column for hearing loss being added to the form in 2004. Data on hearing losses occurring in 2004 were posted November 2005, and data from 2005 were posted in November 2006.

It’s important to keep in mind that the annual report is not a direct summary of all Form 300 results reported to the Bureau of Labor Statistics (BLS), the agency responsible for collating and reporting occupational illnesses and injuries. Instead, the BLS chooses what they feel is a representative sample of about 176,000 private industry establishments and extrapolates this information statistically to represent US employers as a whole. The sample represents about 0.6% of all US employers, and about 3% of those employers who report having employees.

Data for mines is managed separately by the Mine Safety and Health Administration (MSHA), and data for railroad engineers is managed by the Federal Railroad Administration (FRA). The survey specifically excludes self-employed workers, workers on farms with 10 or fewer employees, private household workers, and federal, state, and local government workers.

It’s also important to bear in mind that, in the words of BLS, “... the sample used is one of many possible samples, each of which could have produced different estimates.”

The number of recordable hearing losses compared to the total number of recordable illnesses for the years 2003-2006 is shown in Figure 1.

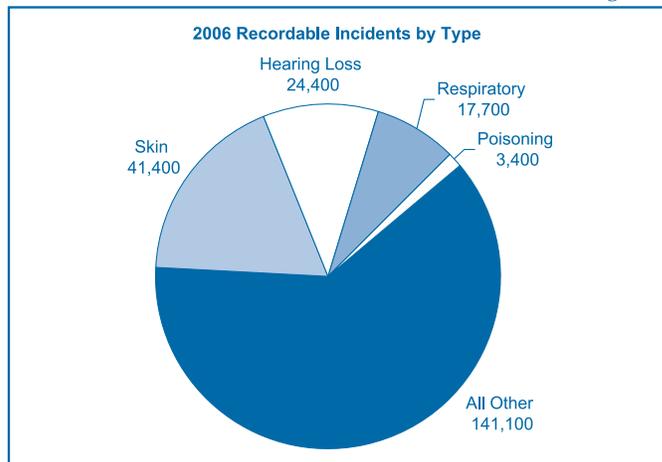


Figure 1

In 2005, the BLS reported about one-half million sprains and strains. This was more than 19 times the number of hearing loss cases reported for that year.

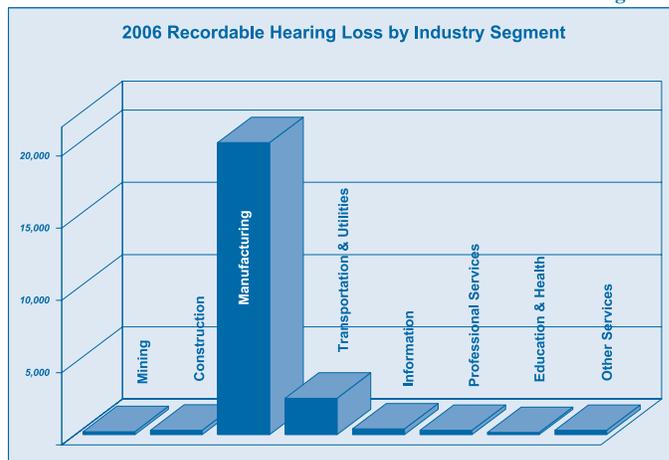
The 24,400 cases of recordable hearing loss in 2006 represented about 11% of the total illnesses reported, and was the second highest number of reports for a specific illness as reflected in the Figure 2.

Figure 2



Over 80% of hearing losses reported in 2006 were from the manufacturing sector, as shown in Figure 3, with most of those generated by the primary metal, transportation equipment, fabricated metal, and food manufacturing groups.

Figure 3

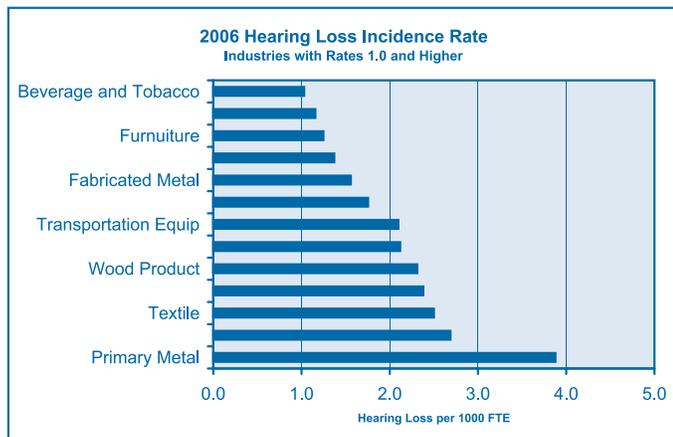


Since these sectors typically employ more people than some others, it’s also important to look at incidence rates. Figure 4 shows the number of recordable hearing losses per 1000 full-time equivalent (FTE) employees for those industries reporting an incidence rate of 1 hearing loss or more per 1000 workers.

continued on page 8

Hearing Loss Recordability.... – continued from page 7

Figure 4



The overall rate dropped from 1.7 cases per 1000 FTE in 2004 to 1.4 cases per 1000 FTE in 2006.

While questions may linger about the accuracy of the BLS reports, provision of data by North American Industry Classification System (NAICS) codes allows a comparison of individual plant performance to the industry as a whole.

More information about the recordkeeping requirements is available at <http://www.osha.gov/recordkeeping/new-osha300form1-1-04.pdf> and <http://www.osha.gov/recordkeeping>.

Explanation of the BLS approach and the statistics themselves are at <http://www.bls.gov/iif/home.htm>, and a description of the NAICS system and list of codes is at <http://www.census.gov/epcd/www/naics.html>.

Lee Hager works as a hearing loss prevention specialist for Aearo Technologies and Sonomax Hearing healthcare, Inc. and has been active in hearing conservation since 1986.

Hospitals and Noise – continued from page 4

have not featured any information on acoustics or noise. Because these guidelines are seen by many institutions as codes, acoustics will finally be considered in the design phase of new hospitals. In addition to the noise problem, these codes address the added problem of speech privacy (Sykes, Tocci, & Cavanaugh, 2006).

Balancing Quiet and Privacy

Can a hospital be too quiet? This brings up another important point that noise control engineers must consider. It would be against HIPAA regulations to be able to hear privileged information being discussed in the next room. This is one reason the noise problem is so difficult to solve; it is a delicate balance between privacy and excessive noise (Sykes, Tocci, & Cavanaugh, 2006).

Methods for Reducing Hospital Noise

A significant challenge for noise control engineers working on hospital noise problems are the extensive sanitation requirements. (Hunter, 2004)

Although it may be effective to install porous, sound absorbing materials on the ceiling, these materials have the potential for harboring bacteria. Unfortunately, most surfaces that are easily cleaned are also acoustically reflective. West et. al. (2006) wrapped various porous materials so that they would remain sanitary but not lose their acoustic properties. This had some success and received positive feedback from patients.

Conclusions

Noise is a problem that permeates every aspect of our lives. For the sick and wounded, however, this impact can be much greater and much less under their control. It is everyone's responsibility, especially those of us who are working in the health care profession and can see the effects first hand, to help make people aware of this growing

problem. In the next 47 years, it is hoped that noise levels in hospitals will decline to a safe and healthy level so that those who need rest the most can get it.

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Kim Lefkowitz is a consultant at CSTI where she specializes in analyzing noise and vibration problems and designing control measures for new industrial facilities. A physics graduate of Vassar and an Acoustics graduate of Penn State University, she is working on her doctorate at Penn State in Acoustics Specializing in Sonic Boom Noise.

Thank You to Retiring Council Members and Past Chair

The Council for Accreditation in Occupational Hearing Conservation expressed its thanks to outgoing council members Elliott Berger and Dick Danielson at its meeting on November 1, 2007. The council also thanked Jim Banach as he completed his term as Council Chair.

Mr. Berger represented the American Industrial Hygiene Association (AIHA) from 1997-2007, serving as Editor of the UPDATE newsletter and the 4th Edition of the Hearing Conservation Manual and as Chair of the Publications Committee. He also was a CAOHC representative to ANSI S12 and a member of the nominating Committee. Berger led the effort to strengthen the hearing protection curriculum for OHCs, teaching at CD workshops throughout his term.

Dr. Danielson represented the Military Audiology Association (MAA) from 1994-2001 and represented the



Elliott Berger left and Dick Danielson right, retiring council members



Jim Banach, outgoing chair and Mary M. McDaniel, incoming council chair

American Academy of Audiology (AAA) from 2003-2007. He held numerous leadership positions including Council Chair, and Chair of the Screening and By-Laws committees. Danielson was also Chair and a member of the faculty for CAOHC CD and Professional Supervisor workshops.

Mr. Banach continues on the Council in 2008 representing AIHA in the position of Immediate Past Chair. Since his term began in 1997, he has held several leadership posts including Council Chair, Vice Chair and Treasurer. He too has helped teach CD Workshops for many years, along with serving on the Finance Committee, Quality Assurance Committee and Screening Committee.

Each of these gentlemen, individually, has contributed significantly to the betterment of CAOHC. As a group, their combined contributions are truly remarkable.

CAOHC Approved 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 Office, can conduct an occupational hearing conservation course that leads to CAOHC certification or recertification. 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

Hearing Conservation Quiz Question

What is the sound level of an ambulance siren, according to the NIOSH sound meter?

a) 97 dB c) 120 dB
b) 110 dB d) 149 dB

Go to the CAOHC website for the answer!
www.caohc.org/publications/meter.php

2008 Course Director Workshops Offerings

These one-day workshops are required for certification of new and recertifying Course Directors. The Council will conduct two Course Director Workshops in 2008:

Date: Tuesday, February 19, 2008
Location: Portland Marriott Downtown Waterfront Hotel, Portland, OR

Date: Friday, November 7, 2008
Location: Sheraton Gateway Suites, Rosemont, IL

The Course Director (CD) is the individual responsible for planning and conducting training courses for OHCs. The Director is responsible for ensuring that specific CAOHC guidelines are followed and for determining the qualifications and competence of participating faculty members. Course Director certification and recertification is granted for a five-year period.

For more information and to register for a CD workshop visit us online at www.caohc.org/workshop/

2008 Professional Supervisor Course Offerings

These one-day courses are aimed at audiologists or physicians seeking instruction in the role and scope of practice of the professional supervisor of the audiometric monitoring component of hearing conservation programs. The Council will conduct two professional supervisor courses in 2008.

Date: Wednesday, April 19, 2008
Location: Charlotte Convention Center, Charlotte, NC
Prior to the AAA - Audiology NOW! 2008 Conference

Date: Saturday, November 8, 2008
Location: Sheraton Gateway Suites, Rosemont, IL

The Professional Supervisor of the Audiometric Monitoring Program in a Hearing Conservation Program may be an audiologist, otolaryngologist, or other physician. This professional supervisor plays a critical role in ensuring the effectiveness of a hearing conservation program; working in conjunction with other professionals, including Occupational Hearing Conservationists (OHCs), Industrial Hygienists, Safety professionals, employers, and employees and their representatives.

Individuals seeking national certification by CAOHC as a Professional Supervisor (CPS/A) must complete an application, on-line exam and submit a test case within 30 days of the course completion.

For more information and to register for a PS Course, visit us online at www.caohc.org/professional_supervisor/course.php

CAOHC Welcomes Two New Council Members



Laurie L. Wells



Lee D. Hager

The Council for Accreditation in Occupational Hearing Conservation (CAOHC) approved two new Council Members on their board of directors. New Council Members who joined the Council at the November 2007 board meeting held in Rosemont, IL include, Laurie L. Wells, AuD FAAA CPS/A and Lee D. Hager.

Dr. Wells has been appointed as the American Academy of Audiology (AAA) representative. She has replaced Dr. Richard W. Danielson, who has recently completed his final term on the Council. Dr. Wells is the Manager of Audiology for Acoustics in Associates, Inc., a professional consulting firm, specializing in hearing loss prevention through occupational audiology, noise measurement and noise control efforts. Dr. Wells promotes hearing loss prevention programs and performs audiometric database management and analysis, work-related determinations, assessment of

hearing protection devices and employee/employer education. In addition, she conducts area noise surveys and employee noise exposure assessments. Dr. Wells also teaches hearing loss prevention seminars and offers certification courses for the Council for Accreditation in Occupational Hearing Conservation (CAOHC).

Mr. Hager has been appointed as the American Industrial Hygiene Association representative (AIHA). He has replaced Elliott H. Berger, MS INCE. Bd. Cert., who has recently completed his final term on the Council. Mr. Hager has over 20 years of experience in hearing conservation and protection, including Hearing Loss Prevention Consultant for Sonomax Hearing Healthcare, a leading provider of new technology in hearing protection devices. He has served on a variety of Hearing Conservation Boards and committees. Mr. Hager has also conducted training sessions on noise measurement, hearing conservation program effectiveness, and best practices in hearing protection. He has also published in many safety publications and in the AIHA Journal.

CAOHC welcomes Dr. Wells and Mr. Hager and look forward to their contributions to the Council.

UPCOMING OHC CERTIFICATION AND RECERTIFICATION COURSES* 2008

*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 March 2008 The list provided below is a sample of OHC Courses and is not meant to be extensive. Please visit our website for a current and complete list at www.caohc.org.

Begin Date	State	City	Course Director	Phone	Begin Date	State	City	Course Director	Phone
04/02/2008	NJ	Newark	Robert Rhodes	800-869-6783	06/04/2008	OH	Columbus	James Jerome	317-841-9829
04/02/2008	TN	Nashville	Melette Meloy	678-363-9897	06/04/2008	PA	Bethlehem	James Robertson	610-868-8606
04/02/2008	WI	Milwaukee	James Jerome	317-841-9829	06/05/2008	IA	Des Moines	Laura Kauth	563-355-7712
04/03/2008	NJ	Newark	Robert Rhodes	800-869-6783	06/05/2008	MD	Baltimore	Robert Rhodes	800-869-6783
04/03/2008	PA	Pittsburgh	Roger Angelelli	412-831-0430	06/05/2008	NC	Greensboro	Cheryl Nadeau	336-834-8775
04/03/2008	TN	Nashville	Melette Meloy	678-363-9897	06/05/2008	OH	Columbus	James Jerome	317-841-9829
04/03/2008	WI	Milwaukee	James Jerome	317-841-9829	06/05/2008	PA	Pittsburgh	Roger Angelelli	412-831-0430
04/04/2008	PA	Pittsburgh	Roger Angelelli	412-831-0430	06/06/2008	PA	Pittsburgh	Roger Angelelli	412-831-0430
04/07/2008	NC	Charlotte	John Elmore	800-357-5759	06/09/2008	FL	W Palm Beach	Herbert Greenberg	678-352-0312
04/08/2008	MA	Auburn	Steven Fournier	508-832-8484	06/10/2008	FL	W Palm Beach	Herbert Greenberg	678-352-0312
04/08/2008	NC	Charlotte	John Elmore	800-357-5759	06/11/2008	AL	Birmingham	Georgia Holmes	205-934-7178
04/09/2008	AL	Birmingham	Georgia Holmes	205-934-7178	06/11/2008	MO	St Louis	Robert Rhodes	800-869-6783
04/09/2008	MN	Minneapolis	Ted Madison	651-575-5575	06/11/2008	MO	St Louis	John Elmore	800-357-5759
04/09/2008	TX	Dallas	Johnny Sanders	800-869-6783	06/11/2008	NC	Greensboro	Cheryl Nadeau	336-834-8775
04/10/2008	AL	Birmingham	Georgia Holmes	205-934-7178	06/12/2008	AL	Birmingham	Georgia Holmes	205-934-7178
04/10/2008	MN	Minneapolis	Ted Madison	651-575-5575	06/12/2008	MO	St Louis	Robert Rhodes	800-869-6783
04/10/2008	NC	Greensboro	Cheryl Nadeau	336-834-8775	06/12/2008	MO	St Louis	John Elmore	800-357-5759
04/10/2008	TX	Dallas	Johnny Sanders	800-869-6783	06/17/2008	MA	Auburn	Steven Fournier	508-832-8484
04/14/2008	FL	W Palm Beach	Herbert Greenberg	678-352-0312	06/18/2008	NC	Morrisville	Thomas Cameron	919-459-5255
04/15/2008	CA	Ontario	Kirsten McCall	425-254-3833	06/18/2008	NY	Amherst	David Nelson	716-633-7210
04/16/2008	AZ	Phoenix	Kathryn Deppensmith	800-869-6783	06/18/2008	OR	Portland	Thomas Dolan	503-725-3264
04/16/2008	CA	Ontario	Kirsten McCall	425-254-3833	06/19/2008	NY	Amherst	David Nelson	716-633-7210
04/16/2008	IL	Chicago/Schaumburg	Thomas Thunder	847-359-1068	06/19/2008	OR	Portland	Thomas Dolan	503-725-3264
04/16/2008	IL	Chicago/Schaumburg	Thomas Thunder	847-359-1068	06/20/2008	SC	Charleston	Stuart Cohen	843-797-0275
04/16/2008	NC	Greensboro	Cheryl Nadeau	336-834-8775	06/21/2008	SC	Charleston	Stuart Cohen	813-797-0275
04/16/2008	VA	Glen Allen	Thomas Cameron	919-459-5255	06/24/2008	IL	Chicago/Schaumburg	Thomas Thunder	847-359-1068
04/17/2008	AZ	Phoenix	Kathryn Deppensmith	800-869-6783	06/25/2008	IL	Chicago/Schaumburg	Thomas Thunder	847-359-1068
04/17/2008	VA	Glen Allen	Thomas Cameron	919-459-5255	06/25/2008	TX	Houston	John Elmore	800-357-5759
04/22/2008	MA	Marlboro	Pamela Gordon	860-526-8686	06/26/2008	TX	Houston	John Elmore	800-357-5759
04/23/2008	FL	Tampa	Harvey Abrams	727-686-0532	07/09/2008	IL	Rockford	Charles Russell	815-964-5445
04/23/2008	MA	Marlboro	Pamela Gordon	860-526-8686	07/09/2008	NV	Las Vegas	John Elmore	800-357-5759
04/23/2008	PA	Pittsburgh	Timothy Swisher	412-367-8690	07/09/2008	WI	Madison	James Jerome	317-841-9829
04/23/2008	TX	San Antonio	John Elmore	800-357-5759	07/10/2008	IL	Rockford	Charles Russell	815-964-5445
04/23/2008	TX	San Antonio	John Elmore	800-357-5759	07/10/2008	NV	Las Vegas	John Elmore	800-357-5759
04/24/2008	FL	Tampa	Harvey Abrams	727-686-0532	07/10/2008	WI	Madison	James Jerome	317-841-9829
04/24/2008	PA	Pittsburgh	Timothy Swisher	412-367-8690	07/14/2008	GA	Atlanta	Herbert Greenberg	678-352-0312
04/24/2008	TX	San Antonio	John Elmore	800-357-5759	07/15/2008	GA	Atlanta	Herbert Greenberg	678-352-0312
05/06/2008	GA	Atlanta	Michele Alexander	336-834-8775	07/16/2008	IA	Davenport	James Jerome	317-841-9829
05/06/2008	MA	Auburn	Steven Fournier	508-832-8484	07/16/2008	LA	Kenner	Michael Seidemann	504-443-5670
05/06/2008	MS	Gulfdom	Jim Guillory	337-233-3955	07/16/2008	LA	Kenner	Michael Seidemann	504-443-5670
05/07/2008	CA	Sacramento	Kathryn Deppensmith	800-869-6783	07/16/2008	NC	Greensboro	Cheryl Nadeau	336-834-8775
05/07/2008	GA	Atlanta	Michele Alexander	336-834-8775	07/16/2008	TX	Houston	Johnny Sanders	800-869-6783
05/07/2008	MO	St Louis	James Jerome	317-841-9829	07/16/2008	TX	San Antonio	John Elmore	800-357-5759
05/07/2008	MS	Gulfdom	Jim Guillory	337-233-3955	07/17/2008	IA	Davenport	James Jerome	317-841-9829
05/07/2008	OH	Cleveland	Carol Snyderwine	216-491-6104	07/17/2008	TX	Houston	Johnny Sanders	800-869-6783
05/07/2008	TX	Houston	Johnny Sanders	800-869-6783	07/17/2008	TX	San Antonio	John Elmore	800-357-5759
05/07/2008	TX	Wichita	John Elmore	800-357-5759	07/18/2008	NC	Morrisville	Thomas Cameron	919-459-5255
05/08/2008	CA	Sacramento	Kathryn Deppensmith	800-869-6783	07/22/2008	MO	North Kansas City	Linda Ratliff-Hober	816-221-3230
05/08/2008	MO	St Louis	James Jerome	317-841-9829	07/23/2008	GA	Atlanta	Robert Rhodes	800-869-6783
05/08/2008	OH	Cleveland	Carol Snyderwine	216-491-6104	07/23/2008	MO	North Kansas City	Linda Ratliff-Hober	816-221-3230
05/08/2008	TX	Houston	Johnny Sanders	800-869-6783	07/24/2008	GA	Atlanta	Robert Rhodes	800-869-6783
05/08/2008	TX	Wichita	John Elmore	800-357-5759	07/30/2008	OH	Dayton	Chris Pavlakos	937-436-1161
05/12/2008	GA	Atlanta	Herbert Greenberg	678-352-0312	08/01/2008	OH	Dayton	Chris Pavlakos	937-436-1161
05/13/2008	GA	Atlanta	Herbert Greenberg	678-352-0312	08/06/2008	AL	Birmingham	Georgia Holmes	205-934-7178
05/13/2008	MO	North Kansas City	Linda Ratliff-Hober	816-221-3230	08/06/2008	FL	Jacksonville	Nancy Green	904-880-1710
05/14/2008	DE	Dover	Timothy Swisher	412-367-8690	08/06/2008	IN	Indianapolis	James Jerome	317-841-9829
05/14/2008	IL	Chicago/Oak Park	Robert Beiter	708-449-7171	08/06/2008	OR	Portland	Kathryn Deppensmith	800-869-6783
05/14/2008	LA	Shreveport	Jim Guillory	337-233-3955	08/06/2008	TX	Dallas/Ft Worth	John Elmore	800-357-5759
05/14/2008	MO	North Kansas City	Linda Ratliff-Hober	816-221-3230	08/07/2008	AL	Birmingham	Georgia Holmes	205-934-7178
05/15/2008	DE	Dover	Timothy Swisher	412-367-8690	08/07/2008	FL	Jacksonville	Nancy Green	904-880-1710
05/15/2008	IL	Chicago/Oak Park	Robert Beiter	708-445-7171	08/07/2008	IN	Indianapolis	James Jerome	317-841-9829
05/15/2008	LA	Shreveport	Jim Guillory	337-233-3955	08/07/2008	NC	Greensboro	Cheryl Nadeau	336-834-8775
05/16/2008	OH	Cincinnati	John Elmore	800-357-5759	08/07/2008	OR	Portland	Kathryn Deppensmith	800-869-6783
05/17/2008	OH	Cincinnati	John Elmore	800-357-5759	08/07/2008	TX	Dallas/Ft Worth	John Elmore	800-357-5759
05/19/2008	KS	Lenexa	Diane Bachman	913-748-2063	08/11/2008	FL	W Palm Beach	Herbert Greenberg	678-352-0312
05/19/2008	KY	Louisville	John Elmore	800-357-5759	08/12/2008	FL	W Palm Beach	Herbert Greenberg	678-352-0312
05/20/2008	KS	Lenexa	Diane Bachman	913-748-2063	08/12/2008	GA	Atlanta	Michele Alexander	336-834-8775
05/20/2008	KY	Louisville	John Elmore	800-357-5759	08/12/2008	MA	Auburn	Steven Fournier	508-832-8484
05/20/2008	MI	Farmington Hills	Thomas Simpson	313-577-1339	08/13/2008	CO	Greeley	Laurie Wells	970-593-6339
05/21/2008	MI	Farmington Hills	Thomas Simpson	313-577-1339	08/13/2008	GA	Atlanta	Michele Alexander	336-834-8775
05/21/2008	WI	Green Bay	Paul Kurland	920-499-6366	08/13/2008	MI	Detroit	Robert Rhodes	800-869-6783
05/22/2008	WI	Green Bay	Paul Kurland	920-499-6366	08/14/2008	MI	Detroit	Robert Rhodes	800-869-6783
05/28/2008	DC	Washington	Diane Brewer	202-994-7167	08/15/2008	CO	Greeley	Deanna Meinke	970-351-1600
05/28/2008	NC	Morrisville	Thomas Cameron	919-459-5255	08/20/2008	FL	Orlando	Robert Rhodes	800-869-6783
05/29/2008	DC	Washington	Diane Brewer	202-994-7167	08/20/2008	MI	Detroit	John Elmore	800-357-5759
06/02/2008	NE	Omaha	Thomas Norris	402-391-3982	08/20/2008	NC	Morrisville	Thomas Cameron	919-459-5255
06/03/2008	PA	Bethlehem	James Robertson	610-868-8606	08/21/2008	FL	Orlando	Robert Rhodes	800-869-6783
06/03/2008	WA	Monroe	Mary McDaniel	206-706-7352	08/21/2008	MI	Detroit	John Elmore	800-357-5759
06/03/2008	WA	Monroe	Mary McDaniel	206-706-7352	08/27/2008	IL	Chicago/Schaumburg	Thomas Thunder	847-359-1068
06/04/2008	IA	Des Moines	Laura Kauth	563-355-7712	08/27/2008	IL	Chicago/Schaumburg	Thomas Thunder	847-359-1068
06/04/2008	MD	Baltimore	Robert Rhodes	800-869-6783					
06/04/2008	NE	Omaha	Thomas Norris	402-391-3982					

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Winter/Spring 2008

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