



# EHDI E-MAIL EXPRESS

The monthly newsletter of Early Hearing Detection and Intervention Program



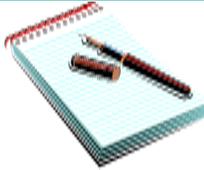
JULY 2013

This is an e-mail communication from the American Academy of Pediatrics (AAP) "Improving the Effectiveness of Newborn Hearing Screening, Diagnosis and Intervention through the Medical Home" project funded through cooperative agreements with the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC), National Center of Birth Defects and Developmental Disabilities (NCBDDD). It is designed to provide AAP Early Hearing Detection and Intervention (EHDI) Chapter Champions with resources and current clinical and other information. The EHDI E-Mail Express is sent on a monthly basis. Please feel free to share the EHDI E-Mail Express with colleagues working on or interested in childhood hearing detection and intervention issues. Distribution information appears on the last page.

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## FROM YOUR CHAIRPERSON



An esteemed colleague, Dr. Steve Epstein, stepped down from his position on the Joint Committee on Infant Hearing last month. In honoring Steve's dedication to the effort of early hearing detection and intervention in this column, I would hope to also honor so many others who have made their own contributions, others who have taken their turn at pulling on the oars and navigating our vessel upstream, adding their strength to a team of players that includes you the reader, of course.

Dr. Epstein is an otolaryngologist. His career has spanned the decades of evolution of Medicine in America, and he has contributed to the health of thousands of children and their families.

And, even since childhood many decades ago, Steve has worn hearing aids. Through primary school, then college, then medical school, and through the years of his storied career, Steve has been sensitively referred to by me and by others as having "hearing loss," then having "hearing impairment," then being "hard of hearing." Over time I have come to think that, to Steve, the evolving labels mattered less than the actions and the product and the results.

Steve served on the Joint Committee on Infant Hearing since its early years, and I am honored to have had the opportunity to sit at that table with him. Most readers of this newsletter are familiar with this committee of fourteen professionals (and additional supporting staff and supporting organizations). The committee has representation from the member groups of the American Academy of Audiology, the American Academy of Otolaryngology, the American Academy of Pediatrics, the American Speech-Language-Hearing Association, the Council on Education of the Deaf, the Alexander Graham Bell Association for the Deaf and Hard of Hearing, and the Directors of Speech and Hearing Programs in State Health and Welfare Agencies (DSHPSHWA).

And, as a member of this committee over those many years, Steve offered wise council, and a sense of history and accomplishment. I remember vividly at one recent meeting of the committee that Steve shared for reflection a photocopy of the committee's first published statement. That early statement represented just three member groups at the time, and was 129 words in length, just four short paragraphs. I am captivated by that very first statement's succinct conclusion: "...Despite our recognition of the urgent need for early detection of hearing impairment, we urge increased research efforts, but cannot recommend routine screening of newborn infants for hearing impairment."

The statement was published in June of 1971. (During that same month, I was beginning a carefree summer after finishing my sophomore year in high school, not a thought in my mind of newborn hearing assessment, not even a thought of a career in medicine.)

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## UPCOMING EVENTS

Event	Date	Location	Details
2014 National EHDI Meeting	April 13-15, 2014	Jacksonville, FL	<a href="#">Web site</a>
Pediatric Audiology Conference: Applications of Evoked Potentials, Boys Town National Research Hospital	August 2, 2013	Omaha, NE	<a href="#">Web site</a>
Genetics and Hearing Loss for EHDI Professionals	September 9- November 15, 2013	Gallaudet University Online Course	<a href="#">Web site</a>

## FROM YOUR CHAIRPERSON (CONTINUED FROM PAGE 1)

And that 1971 statement sadly recommended against routine newborn screening, not because screening was not the right idea in principle, but because screening was crudely performed with noisemakers at the time and not yet proven to be of lasting value.

But that 1971 statement was a harbinger of committee statements to follow, and research and amazing progress to follow. When I learned of newborn hearing screening in 1993 and began my own involvement in our common journey, little did I realize that others like Steve had been hard at work for two decades or more, working the problem and imagining the technology that might solve the puzzle.

Since that first concise statement in 1971, the Joint Committee on Infant Hearing (JCIH) has published six more updated statements over the years. The latest statement was published in 2007 and, as compared with 129 words in 1971, this latest JCIH statement was 18,600 words in length. And, despite the dramatic increase in length, rather immediately the statement was noted by the committee members and the many readers to be incomplete, requiring the publication of a supplemental statement expanding on the principles of early intervention, published in 2012 and adding another 18,600 words to the committee's latest statement.

From 1971 to 2012, we have evolved... almost three hundred times as many words, it turns out. Have we become wordy? Well, though I have been one of the first to offer that accusation, the truth is that we have also learned so very much, and we have discovered that an apparently simple puzzle has so very many nooks and crannies, new information and new research. Words are important, and Steve and the committee members have continued over the years to do their very best to offer the latest consensus and the latest scientific review to their many colleagues in the field.

Thank you, Steve. And thanks to so many others for their contributions, and to you for yours. 780 words. That's enough for today.

-Albert Mehl, MD

## RESEARCH: DEVELOPMENTAL OUTCOMES IN EARLY SCHOOL-AGED CHILDREN WITH MINIMAL HEARING LOSS

Previous research suggests school-aged children with minimal hearing loss (CMHL) are at-risk for a variety of psycho-educational problems. However, CMHL are a heterogeneous group and the profile of at-risk children is unknown. Data regarding the characteristics of early school-aged CMHL are needed to extend previous findings and determine potential risk-factors associated with psycho-educational difficulties. The results of this study show that at the earliest age tested, CMHL had greater teacher-rated attention difficulties in the classroom than **children with normal hearing**. Differences in the rate of psycho-educational development were not observed between groups. Among CMHL, psycho-educational difficulties were associated with delays in identification of hearing loss and low maternal education. Study authors conclude that classroom attention abilities should be monitored for early school-aged CMHL. Late-identified CMHL and CMHL with low maternal education levels may be in particular need of academic and social support. Continued efforts for early identification of CMHL should be made to improve outcomes for these children.

Source: Porter H, Sladen DP, Ampah SB, Rothpletz A, Bess FH. *Am J Audiol*. 2013 Jul 3. [Epub ahead of print]



## CATCH THE KUDUWAVE

The KUDUwave is a Mobile Clinical Diagnostic audiometer that has been developed especially for conducting hearing tests remotely. It was developed by Dr. Dirk Koekemoer in South Africa with the mission to bring hearing health services to under-served areas. It is small, lightweight, and its key feature, "built-in sound proofing", is designed for testing outside of a sound booth.

As part of efforts to research new ways to increase access to hearing-related services, National Center for Hearing Assessment and Management (NCHAM) staff are conducting a study comparing the results obtained from the KUDUWave to traditional sound booth audiometry. The results of this study are expected to be available in spring, 2013.

Because the KUDUWave requires a behavioral response, it is not useful at this time for infants and toddlers. However, the KUDUWave has potential for use with those preschool age through adulthood who have little or no access to hearing health services. To learn more about the KUDUWave and view the equipment, go to: <http://www.geoaxon.com/index.php/products/kuduwave-audiometer/>

## RESEARCH: EFFECTIVENESS OF TARGETED SURVEILLANCE TO IDENTIFY MODERATE TO PROFOUND PERMANENT CHILDHOOD HEARING IMPAIRMENT IN BABIES WITH RISK FACTORS WHO PASS NEWBORN SCREENING



This study objective was to examine the effectiveness of targeted surveillance for the identification of moderate – profound permanent childhood hearing impairment (PCHI) in babies who pass the newborn hearing screen in England and have risk factors. This retrospective analysis looked at a study sample of 2,307,880 children born from 2006-2009 in England.

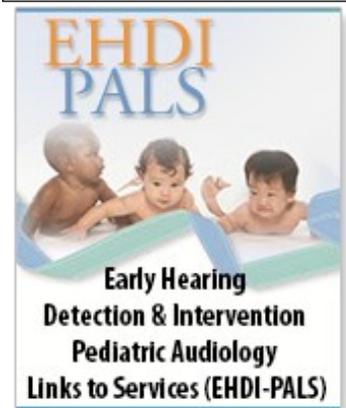
Researchers concluded that the overall prevalence for all PCHI in children with risk factors who pass newborn hearing screening is 1.49/1000. The risk factors with the highest prevalence are (1) syndrome (other than Down's) associated with a hearing loss; (2) NICU with refer in both ears at OAE and pass in both ears at AABR; (3) craniofacial anomaly; (4) Down's syndrome; (5) congenital infection.

As a result of this study, the criteria for targeted surveillance in the newborn hearing screening program in England have been revised to include only the five risk factors that have the highest predictive value for identification of PCHI. According to the authors, "whilst implementing this change it is important to emphasize to parents and professionals the importance of remaining alert to the possibility of later onset hearing loss and ensuring prompt referral for audiological assessment in the event of any professional or parental concern. This strategy will be appropriate for programmes and countries where the prevalence and natural history of PCHI are similar to those in the UK. Targeted surveillance would not be a good investment in hearing healthcare. For programmes where there are data that suggest a different pattern in terms of family history or other factors then even more careful consideration should be given to starting or ceasing targeted surveillance."

Source: Wood S, Davis A, Sutton G. *International Journal of Audiology* 2013; 52: 394–399

## NOW ON U-TUBE

It is likely you are familiar with TED videos featuring dynamic, energizing talks by leaders from a vast array of fields. TED X USU featured Utah State University's researchers and their cutting-edge discoveries. Karl White, Director, National Center for Hearing Assessment and Management (NCHAM) offered an inspiring presentation entitled "Establishing a Sound Beginnings for Children who are Deaf or Hard of Hearing." To view the video on You Tube, go to <http://www.youtube.com/watch?v=bfN1RPVuzlQ> Be sure to "like" it if in fact you find it valuable.



## NEW! LOST TO FOLLOW-UP MATERIALS RELEASED

The American Academy of Pediatrics (AAP) Task Force on Improving Newborn Hearing Screening, Diagnosis, and Intervention (EHDI Task Force) has developed five tools/resources for medical home providers to improve care around early hearing detection and intervention, including reducing loss to follow-up/documentation. An article announcing the availability of the materials will be in the August issue of *AAP News*. Once publically available ([www.aap.org/pedhnic/ehdi](http://www.aap.org/pedhnic/ehdi)), we encourage you to communicate the availability of these tools with colleagues and others through communications and venues available via your chapter.

## CENTER FOR CHILDHOOD DEAFNESS NUTS & BOLTS LECTURE SERIES

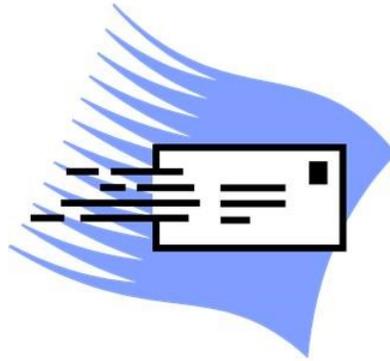
The Center for Childhood Deafness at Boys Town National Research Hospital recently announced pre-registration for its 2013-2014 *Nuts & Bolts* lecture series. The *Nuts & Bolts* series includes one-hour presentations on topics related to educating children who are deaf or hard of hearing. The presentations are designed for audiologists, educators, and parents with a basic knowledge of childhood hearing loss. Lectures can be viewed in real time through a live web stream or downloaded from the Video-on-Demand page on Center for Childhood Deafness Web site. For more information on *Nuts & Bolts* or to register for an upcoming session, contact [ACRN@boystown.org](mailto:ACRN@boystown.org). Consider sharing information about this lecture series with colleagues and parents with whom you interact!

## WORDS OF INSPIRATION...



*When a man has done his best, has given his all, and in the process supplied the needs of his family and his society, that man has succeeded.*

~Mack Douglas



**Distribution Information:**

The AAP EHDl Program implementation staff send this e-mail update to the Academy's EHDl Chapter Champions, other interested AAP members, staff and state EHDl coordinators. For additional information on hearing screening and to access previous editions of the EHDl E-mail Express, click on the following link <http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/PEHDIC/Pages/Early-Hearing-Detection-and-Intervention.aspx>. Previous e-mail updates are available upon request from Faiza Khan, [fkhan@aap.org](mailto:fkhan@aap.org) or (847) 434-4924. If you would like to unsubscribe to the update, please notify staff by responding to this e-mail.